

African-American *T.L.C.* in Ethics, History, Medicine, and Science at John's Hopkins Hospital



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May 29, 2012

An Interpretive History of African-Education from 1950-Present

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John's Hopkins is a university and hospital founded in 1889 in Baltimore, Maryland. It is known as one of the world's greatest hospitals. It was founded on a bequest from philanthropist Johns Hopkins. It is known for founding many of the medical ideas and terms used today such as; "rounds", "residents", and "house staff". It is also known for founding medical specialties including neurosurgery, urology, endocrinology, pediatric cardiology and child psychiatry. With all of this important medical facts and history there is another history of John's Hopkins hospital I want to bring forth and study; and that is great African-American T.L.C. it received from Vivien Thomas, Henrietta Lacks, and Dr. Ben Carson. All three of these ground-breaking African-Americans made educational, medical and science history at John's Hopkins Hospital. Their legacies should be studied, appreciated and remembered for not only African-American history but for all of American history. I will now discuss further each of the important figures of the John's Hopkins T.L.C.

Vivien Thomas

Vivien Thomas was born on August 29, 1910 in New Iberia, Louisiana, but soon after birth moved to Nashville, Tennessee. He attended Pearl High School in Nashville in the 1920's there he found the passion for medicine while going to his family physician and wanted to pursue a medical education after graduation. Those dreams were destroyed though in 1930 because Vivien lost all of the money he was saving to pay for his education in a bank crash caused by the Stock Market crash of the same year 1930. After dropping out of college and with work hard to come by Vivien took a job at Vanderbilt University Hospital in Nashville sweeping floors. After working for some time at Vanderbilt a doctor took notice of Vivien and saw much more potential than just a janitor. That doctor was Dr. Alfred Blalock who recognized Vivien's passion and

talent for medicine and hired him as a surgical assistant. This began a decades-long friendship and association that would help create the “golden age” of heart surgery.

During this “golden age” Vivien helped Dr. Blalock work on the surgery to help treat and cure the “blue-baby” syndrome. Their ground-breaking work saved many a children’s lives, but Dr. Blalock and another surgeon Dr. Helen Taussig received all of the international acclaim for this breakthrough even though it was a lot of Vivien’s tireless work and research that assisted in the breakthrough he did not receive any credit or acknowledgement until decades later. Vivien never did stop doing work and research with Dr. Blalock and was finally acknowledged and given the position of supervisor of surgical research laboratories at John’s Hopkins and trained hundreds of surgeons, but still he himself was never allowed to operate on a human. In 1976 Vivien was awarded an honorary doctorate by John’s Hopkins and portrait of him hangs in the lobby of the hospital. His successful life ended on November 26, 1985

Even though it took decades for Vivien to receive his just credit for his work on the “blue-baby” surgery breakthrough he did get posthumous movie about his life and career called “Something the Lord Made”, which is a phenomenal movie that discusses the career and life of a great African-American man who lived through the Great Depression and endured a lot of professional racism to achieve a great deal of success. The success is something that should be appreciated and serve as motivation for other Americans to work hard and become successful. That was the T in the T.L.C. next to the L. Mrs. Henrietta Lacks.

Henrietta Lacks

Henrietta Lacks is the most important woman in medical and scientific research that almost no one has heard of. She was born on August 1, 1920, in Roanoke Virginia. Her birth name was Loretta Pleasant later changed to Henrietta Lacks and no one is sure why. After her mother passed away after giving birth to her tenth child, Henrietta was taken along with the rest of her

siblings to Clover, Virginia to live with her grandfather because her father could not handle ten children. In Roanoke Henrietta was a tobacco farmer and married her first cousin David Lacks on April 10, 1941. After some economic trouble in the business of tobacco farming Henrietta and David moved to Maryland so David could work at a steel mill. It is there where her medical contributions and history began.

After giving birth to her fifth child Henrietta had felt a knot inside her and then began to bleed abnormally. In January 1951 Henrietta went to John's Hopkins hospital to find out what was wrong. John's Hopkins was the only hospital she could go to because they were the closest hospital that would treat blacks. It was there that they discovered that she had stage one cervical cancer. After receiving some radium tube treatments, Henrietta was told to go home and come back a couple of weeks later for some X-ray treatments. During her radium treatments doctors took samples of the healthy portion of her cervix as well as the cancerous portion without her permission. During her X-ray treatments Henrietta continued to get worse and doctors were treating her with antibiotics because she had neurosyphilis and they believed that it was hampering her recovery, but on August 8th 1951 Henrietta came to the hospital for a treatment and asked to be admitted. She would remain hospitalized until her death on October 4, 1951 at 12:30 A.M.

Upon receiving Henrietta's tissue samples Dr. George Otto Gey found out something amazing that Henrietta's cancer cells could survive in a medium but also replicate themselves in astounding fashion. Her cells would double every twenty-four hours. With these kinds of human cells so much research could be done to help further research and cure many diseases that were killing thousands of Americans daily and that is what exactly happened. The cells became famously known as HeLa cells (the first two letters of Henrietta's first and last name) have helped research and find cures and treatments for such diseases as polio, acquired

immune deficiency syndrome (A.I.D.S.) and some forms of cancer. The magazine *Popular Science* calls her the most important woman in medical history for the following reasons:

- 1. Before HeLa cells, scientists spent more time trying to keep cells alive than performing actual research on the cells. An endless supply of HeLa cells freed up time for discovery.**
- 2. In 1952, the worst year of the polio epidemic, HeLa cells were used to test the vaccine that protected millions.**
- 3. Some cells in Lacks's tissue sample behaved differently than others. Scientists learned to isolate one specific cell, multiply it, and start a cell line. Isolating one cell and keeping it alive is the basic technique for cloning and in-vitro fertilization.**
- 4. A scientist accidentally poured a chemical on a HeLa cell that spread out its tangled chromosomes. Later on, scientists used this technique to determine that humans have 46 chromosomes—23 pairs—not 48, which provided the basis for making several types of genetic diagnoses.**
- 5. It was discovered that Lacks's cancerous cells used an enzyme called telomerase to repair their DNA, allowing them, and other types of cancer cells, to function when normal cells would have died. Anti-cancer drugs that work against this enzyme are currently in early clinical trials.**

Even though her cells have done so much for medicine she still has not received the proper acknowledgment for her cells contribution to the medical world. Her descendants have never received any compensation or royalties and did not even know that the cells existed until decades after her death. There have been several articles written about her but the real breakthrough of her story was a book written by Rebecca Skloot called *The Immortal Life of Henrietta Lacks*. The book details the story of Henrietta's life and family. Her family has been through many financial and personal struggles, but the only real recognition that they want is for John's Hopkins and the rest of the medical world is to let people know who their mother was and give her and her cells credit for the medical history they made. There is much education, history and ideas that can be learned from her story and we can apply to our educational lives today. The story is amazing and one that all students should hear and discuss. That was the L. now on to the C. Dr. Ben Carson.

Dr. Ben Carson

Dr. Benjamin Solomon "Ben" Carson Sr. was born on September 18, 1951 in Detroit Michigan.

In his early life Ben was a troubled and struggling student throughout his early childhood and elementary school days. Ben really found his stride in middle and high school where he graduated with honors and attended Yale University where he received his Bachelor's Degree in Psychology. Upon graduation from Yale Ben entered the University of Michigan School of Medicine where he finished and received his medical degree. After leaving Michigan Dr. Carson became a neurosurgery resident at John's Hopkins in Baltimore Maryland. There he started off as an adult neurosurgeon, but later became very interested in pediatric neurosurgery. He enjoyed children more because he said of children "you see what you get" and from that point forward he became the youngest department director in John's Hopkins history.

During his time at John's Hopkins Dr. Carson has performed surgeries on thousands of children and even help separate conjoined twins that were joined at the back of the head. Currently he still performs about three hundred pediatric surgeries a year but has been slowed by an occurrence of prostate cancer that was caught in early stages and treated. He has written four books including *Gifted Hands: The Ben Carson Story*. There has been a PBS documentary made about him and also a feature film based on Gifted Hands and it stars academy award winner Cuba Gooding Jr.

Among his awards and achievements that he has received sixty-one honorary doctorate degrees, a membership in the Yale Corporation and he also sits on several board of directors for companies like the Kellogg Company and America's Promise. But probably his greatest award was the honor of receiving the Presidential Medal of Freedom (the highest honor for a civilian in the United States) in 2008 from President George W. Bush. Even with all of the accomplishments he still gives back to the community he started the Carson Scholars Fund to

help future students with great academic talent and community service. Dr. Carson is a successful African-American man who is a great example for not only young African-Americans but all Americans. That was the C. now to sum up the T.L.C.

Summation

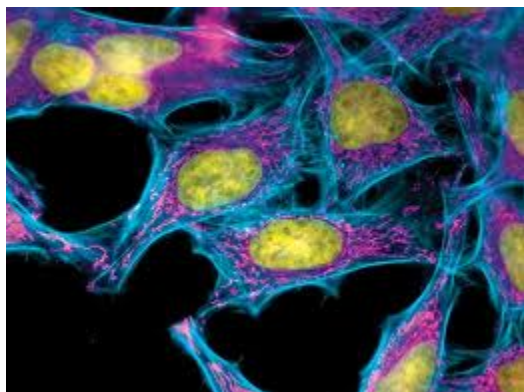
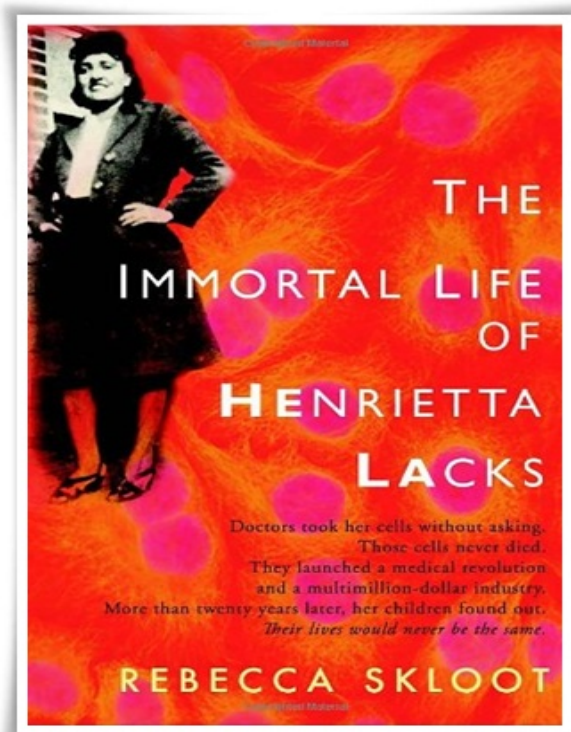
The preceding information is just an overview of three great African-Americans who have made history at John's Hopkins. Their stories serve as some great motivation to all students that anyone can make history no matter the odds or situation. I believe that if students take time to go in depth with any one if not all three of their stories they can find some universal and personal insights on what it takes to become a great student and human being. The struggles and success of all three serve as a reminder that we all can be educated, accomplish goals and make history we just have to have knowledge, passion and drive to move forward no matter the obstacles or situations that we are in. I am grateful for the opportunity to pass on these stories of John's Hopkins and The Historical African-American T.L.C.

Activities

Activity 1

Read the book “The Immortal Life of Henrietta Lacks”

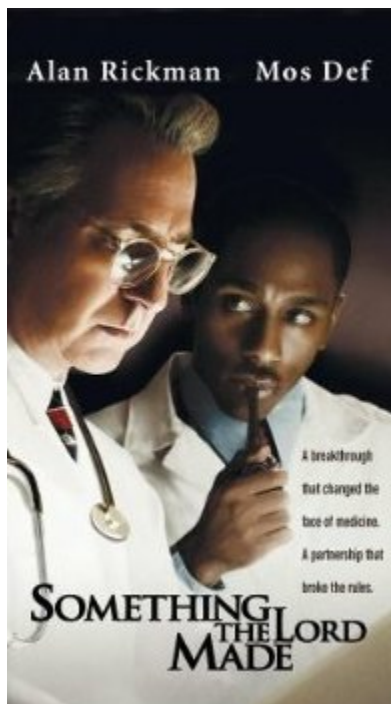
Discuss student perspectives on the racism, ethics, medicine and science presented in the book. Take information learned and/or perform further research to do a formal presentation about Henrietta or as a part of a timeline of the history of African-Americans at John’s Hopkins.



Activity 2

Watch the movie “Something the Lord Made”

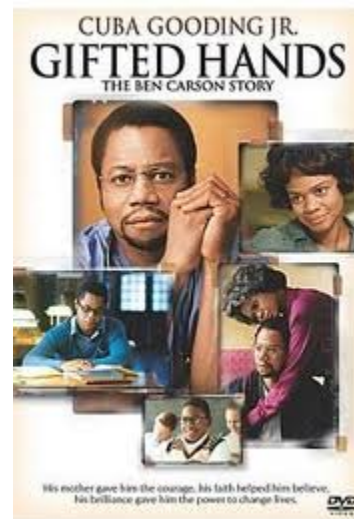
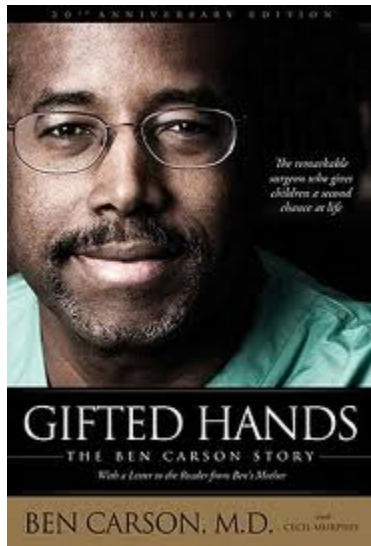
Discuss the movie and how Vivien Thomas overcame racism and contributed to medical history and how his role and relationship with Dr. Alfred Blalock made a difference in John’s Hopkins hospital history. Also discuss themes and personal revelations that may be applied today in the realm of education and motivation of students. Students may also do further research for a presentation or further addition to a timeline highlighting John’s Hopkins history.



Activity 3

Read the book and watch the movie “Gifted Hands: The Ben Carson Story”

Read the book and watch the movie and discuss how Dr. Ben Carson overcame learning disabilities and a troubled youth to become a successful surgeon at John’s Hopkins hospital. Also do further research about Dr. Carson for presentation or timeline of John’s Hopkins history.



Activity 4

Have students create their own timeline, report, or presentation of John’s Hopkins hospital and the three influential African-Americans presented; Vivien Thomas, Henrietta Lacks, and Dr. Ben Carson.

The students will be able to create their own timeline, report or presentation with facts ideas and other areas of the remarkable lives and legacies of these three important African-Americans and their contributions to John’s Hopkins hospital history and Legacy. And what these great African-Americans stories meant to them. Also read and research about other African-Americans who played a role in the history of Johns Hopkins Hospital.



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Wyckoff, Edwin Brit. *Heart Man: Vivien Thomas, African-American Heart Surgery Pioneer*. New Jersey, Enslow Elementary Press, 2007.

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Media and Electronic Resources

Vivien Thomas: http://en.wikipedia.org/wiki/Vivien_Thomas

Footprints Through Time: Vivien Thomas (1910-1985):
http://www.pbs.org/wgbh/amex/partners/legacy/l_colleagues_thomas.html

Vivien T. Thomas, L.L.D., Supervisor of Surgical Research Laboratories:
<http://www.medicalarchives.jhmi.edu/vthomas.htm>

Vivien Thomas: <http://www.baltimoresun.com/features/bal-blackhistory-thomas,0,833906.story>

Vivien Thomas: A Surgical Assistant with Hands Blessed by God:
http://scienceheroes.com/index.php?option=com_content&view=article&id=269&Itemid=240

Almost A Miracle: Vivien Thomas and Alfred Blalock: Their story has made physicians weep and teenagers cheer, and this month it comes to television:
http://www.hopkinsmedicine.org/dome/0301/close_up.cfm

Something the Lord Made: Movie, Home Box Office, May 30, 2004.

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Five Reasons Why Henrietta Lacks is the Most Important Woman in Medical History: <http://www.popsoci.com/science/article/2010-01/five-reasons-henrietta-lacks-most-important-woman-medical-history>

Ben Carson: http://en.wikipedia.org/wiki/Ben_Carson

Ben Carson: <http://www.biography.com/people/ben-carson-475422>

Dr. Ben Carson: A Healer Beyond the Operating Room: <http://afam.nts.jhu.edu/people/Carson/carson.html>

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