Credit Overdue:

The Life and Work of Vivien T. Thomas

During the American Civil Rights period and the preceding years many men of African American decent made huge impacts on American life. We take time to remember many of these people as great Americans and we teach about them in our schools. However, from time to time a story falls through the cracks, and credit is not given where it is due because of the social order of the time, and men who did great things are overlooked by the history books. One such person is a man by the name of Vivien Thomas. Vivien Thomas was an assistant to the famous surgeon Dr. Alfred Blalock, but he was also much more. Although Thomas was instrumental in the work that Dr. Blalock did on shock, the first heart surgery, and "blue baby" syndrome, he has been left out of many textbooks. The purpose of this paper is to bring to light the achievements of Vivien Thomas, and show that due to the segregationist society in which he lived and worked much of his accomplishments have been overlooked. Because Thomas was an African American working in a white profession during a segregated time in American History, his work also takes on multiple roles. Not only did he make breakthroughs in the field of medicine and surgery, but also in the realm of civil rights.

The historiography of Vivien Thomas and his work are vital to the importance of the subject. Vivien Thomas's story is important not only because it sheds light on a time in which African-Americans were underappreciated, but also because it is highly relevant to surgical and medical history. It is a unique and inspiring story that can be used as an example of the times. While Thomas may have been one person whose achievements are under recognized, it begs the question "how many others?" It is an injustice that Thomas did not receive the recognition he

deserved when he was Dr. Blaclock's assistant, but it was never about the fame for him. Often times such quiet revolutionaries can be forgotten and it would be a shame to let this particular story remain untold. While Thomas is now recognized at John Hopkins University for his achievements, the story still has had little exposure to the public or even other medical professionals. In very recent years the story of Vivien Thomas has had some small amount of public exposure. Before his death Thomas completed an autobiography entitled "*Partners of the Heart: Vivien Thomas and his work with Alfred Blalock"* which was adapted into a documentary film by the Public Broadcasting Service (PBS). While a few people in recent years may have learned of Vivien Thomas, it is important to tell the story from a historical perspective and to explore the many impacts, aside from those in the field of surgery, of his work on other aspects of history such as civil rights. There are very few papers in the way of professional historical writings and presentations on Vivien Thomas, and I hope that my research may actually add to the current analysis of the subject. By researching Thomas and his work I hope to spread the story to others, learn more about this remarkable story myself, and answer questions about the role and impact of Thomas in both medical and civil rights history as well as how his roles in each are interconnected.

In order to understand Vivien Thomas's adult life, it is important to understand his youth and background. Thomas was born near Lake Providence, Louisiana on August 29, 1910. The son of a carpenter, during his youth his family was by no means wealthy but was stable. Thomas received a high school education at Pearl High School - now known as Martin Luther King, Jr. Magnet School – in the 1920s. While at the time the school was part of a segregated education system, Thomas received a good education. Growing up Thomas was taught that through education and hard work he could create a better life for himself. After school Thomas found

work at Fisk University following his father's footsteps by taking up trade as a carpenter. His goal was to save enough money to attend college and eventually medical school to become a doctor, as he had wanted to since he was a young boy. Thomas writes in his autobiography:

> *"Although very much impressed by what he was showing me and telling me about his work, I was reluctant to accept the starting pay of $12 a week. To me, the job was a stop gap measure to get me through the cold winter months. When warm weather arrived in the spring, I intended to go back to the Fisk maintenance crew or out on my own to earn enough money to start school in the fall."*[1]

Unfortunately, with the stock market crash of 1929 and the following Great Depression Thomas soon lost his job and his savings. In an amazing twist of fate Thomas found himself in the laboratories of Vanderbilt University applying for a job as a janitor. Although the new job only paid a third of what Thomas earned as a carpenter, it was steady work in a time when such a thing was rare. It is in these laboratories Thomas met his mentor Dr. Alfred Blalock. While working as a janitor for Dr. Blalock his talent for surgery was quickly noticed. As Dr. Blalock's research on hypovolemic shock and crush syndrome grew, so did Thomas's responsibilities. Thomas would fashion surgical tools, such as the Blalock clamp, which will be discussed later, for Dr. Blalock and the doctor would teach Thomas about scientific procedure. This would be the beginning for Vivien Thomas in his medical career, and would show itself to be the molding from which the rest of Thomas's career would follow.

Back in Vanderbilt Thomas quickly became Dr. Blalock's research assistant rather than his janitor. In 1941 Dr. Blalock received the position of Chief of Surgery at Johns Hopkins

University Hospital. In a surprise move he requested that Thomas accompany him to Baltimore. The move to Baltimore for Vivien, which was made with his now wife Clara, and young daughter June, would be rough on his family who was now moving away from the security of family and home. It is in Baltimore that Thomas would for the first time in his work with Dr. Blalock encounter the racism and segregation of the workplace. At Johns Hopkins Thomas was not allowed to enter in the front of the hospital, but rather had to punch in from the back along with the other colored staff (who primarily filled janitorial and maintenance positions). Thomas was also discouraged from wearing his white lab coat in public around the hospital. One of the greatest injustice that would be thrown Thomas's way however was that in the inequity of his pay. Thomas was forced to work odd jobs around his apartment building in order to receive a break on his rent so that he could afford his home. When Thomas learned that he was being paid the same amount as a Janitor, when he was actually a lab assistant with a large amount of independence and discretion in Blalock's research, he was not only upset, but also felt cheated and disappointed. It was not until Thomas complained to Blalock that Blalock personally stepped in to have Thomas promoted to an entirely new position of Surgical Technician. With an extra 20 dollars a month Blalock expected that Thomas could now devote more time to his work in the lab rather than doing handy work around his apartment building.

With his new career as a Surgical Technician in full swing it was finally time for Thomas to make a resounding mark on the medical community. In 1943 Dr. Blalock was approached by Dr. Helen Taussig, a Pediatric Cardiologist who was interested in work on blue baby syndrome - a condition where not enough blood flow to the lungs is present in newborns, causing a lightish blue tint in the skin and especially the face and lips. Her idea was that by rerouting blood to the heart and lungs, oxygen flow could be increased throughout the body. Up until this point, heart

surgery had been undeveloped at best and a death sentence for the patient at worst. Many still believed that the heart could not be successfully operated on. While some attempts at heart procedures had been attempted as far back as Napoleon's doctors, every patient had died soon thereafter. Such a revolutionary surgery would require new tools, and new procedures. Thomas was tasked with creating the blue baby syndrome in a dog, so that the condition could be studied and then corrected. After attempting to create the condition on 200 dogs, Thomas finally succeeded in recreating the blue baby condition in a dog (this dog named Anna is the only animal to have a portrait hanging on the walls at Johns Hopkins). At this point a whole new procedure needed to be developed to fix the condition, and Thomas was tasked with creating a new clamp that would fit into the subclavian area and clamp off the artery for anastomosis, or the fusing of two arteries. Vivian Thomas with the help of William Longmire fashioned a clamp from supplies provided by the local surgical company Murray Baumgartner & Co. that could clamp an artery at a ninety-degree angle. Although the device was created by Thomas, it retains the name "Blalock Clamp" after Dr. Blalock and is still in use to this day. Not only is Vivien Thomas's name left out of the Blalock clamp, but also from the Blalock-Taussig shunt, the name for the procedure to reroute blood to the lungs that was used to help correct blue baby syndrome. It would turn out that not receiving credit for research in which Vivien was a key player would become a quite common theme in Thomas's life.

The relationship between Blalock and Vivien was a strangely unique one, affected largely by Thomas's race in some situations and not at all in others. While working for Blalock early on as an assistant at Vanderbilt, Thomas fell victim to one of Blalock's famous outbursts of anger. According to Thomas's autobiography the language used by Blalock would have "made a sailor proud." A few minutes after remaining silent through Blalock's outburst Vivien approached him

and told him that he had not been raised to take that kind of language, and that he was leaving. As Vivien walked out the door Blalock came out and apologized, promising that he would never repeat his actions. According to Vivien's autobiography, in the following 34-year partnership and friendship, Blalock never did become cross again. This moment seems to be a turning point in the respect that Blalock has for Vivien, and is indicative of how the two would work together for the rest of their careers. Although Blalock and Thomas's relationship in the lab was one of colorblindness – one where segregation and racism did not exist, the world outside still had its own rules.

Often times while working late in the lab Thomas and Blalock would share a drink and have a discussion about medicine or their work, while at the same time outside the lab the two could not use the same water fountain. The racial divide between the two would only worsen with the move to Baltimore. Vivien writes in his autobiography:

> "*The hunt for a place to live was disheartening. In Nashville we had a lawn and tress. Here such homes were "unavailable" to Negroes. Many apartments I looked at were hardly fit for human habitation."* [2]

This invisible barrier between Blalock and Thomas also carried over to the workplace in many different aspects. According to hospital records Blalock's salary was ten times that of Thomas. The two men who would perform the first blue baby surgery elbow to elbow were not even allowed to eat at the same lunch table. Ultimately Thomas was utterly disheartened to find that the almost mythological center for progress that was Johns Hopkins was in actuality so intolerant. At the workplace Blalock would defend his choice of Thomas as an assistant, against

criticisms of Thomas's race (a black assistant, clearly, being unheard of at the time). One of the only photographs featuring both men is in the operating room (OR) of one of the first blue baby operations. It features Dr. Blalock performing the surgery with Thomas cut out by the edge of the photograph. According to some of the people observing this first surgery, Blalock demanded that Thomas be present in the OR since, while Blalock and only practiced the entire surgery once at Johns Hopkins, Thomas has done it hundreds of times on the dogs. Despite their cooperation in the lab Blalock was not always so understanding in matters of race. Although he respected Vivien he was not opposed to the hospital's segregation. It was not so much that Blalock was unsympathetic to the race issue, but rather he was preoccupied with his research and he saw the race issue as an annoyance rather than something that should be dealt with. It was almost to the point where Blalock was not acknowledging the difficulties faced by Thomas because he didn't want it to get in the way. Thomas would sometimes become frustrated with Dr. Blalock for this. There was even one instance where on Blalock's 60th Birthday celebration, with Blalock approaching the end of his life, Thomas was not allowed into the dinner hall to celebrate his friend and colleague because at the time the Southern Hotel in Baltimore was still segregated. Instead of attending the party as a regular guest like his white counterparts, Vivien snuck into the event where he watched from the back – he never spoke of the incident to Blalock. Although his time in Vanderbilt and new life in Baltimore were not easy, and not always pleasant one of Thomas's most remarkable characteristics was that he was driven inwardly towards the work he did. He was not concerned with the fame or the money, but rather in helping people, and in scientific discovery.

Two years after the first blue baby operation the procedure was now standard for Blalock and scores of medical doctors were invited to observe the surgery. With the success of the blue

baby operation the Johns Hopkins surgical department had achieved world fame, and the program grew exponentially. With the new size of the department came new responsibilities for Thomas. Thomas was made the director of surgical research laboratories and was in charge of training some surgeons who would become famous in their fields. Dr. J. Alex Haller, Jr., who would become chief of pediatric surgery at Johns Hopkins, was among Vivien's students. He describes Vivien's method of teaching by breaking down procedures into small steps that could be easily memorized and repeated as so simplistic that anyone could learn it. Other famous doctors who would learn from Thomas include Dr. William Longmire, who would develop the first procedure for replacement of the esophagus and Dr. Denton A. Cooley who would perform the first successful heart transplant in the United States in 1968. In these ways Vivien Thomas did not influence just a small part of the medical community, but rather impacted the American medical community and field as a whole. His works and the works of those he taught are still in use to this very day. Even with his new position, however, Thomas was still fighting against prejudice. Thomas would work at cocktail parties held by Dr. Blalock as a bartender because he needed extra income. This would lead to situations where Thomas would serve drinks to the very men he had earlier that day taught a surgical procedure to.

In September of 1964 Blalock died at the age of 65 of cancer, and Thomas lost one of his best friends and colleagues of 34 years. Thomas had this to say in his autobiography about the death of Blalock:

> *"It was so unfortunate that his time was cut off. His mind was still so keen on research. We fought all the time but I think we both thrived on it."* [2]

Up until even the year of Blalock's death, Johns Hopkins had separate facilities for all white and colored employees. After Blalock's death Thomas went into a depression and for six years did not take on any major research. It was not until the following year that Thomas found a new project – to guide the first generation of African American students through what would undoubtedly be a rough ride at Johns Hopkins.

It was at this point in Thomas's career, almost 20 years after Thomas had come to the hospital, that Johns Hopkins began the process of desegregation. Thomas was a man of the 1940s, and it was not until his successors at Johns Hopkins who were men of the 60s and 70s that the walls of segregation truly began to be torn down. Having been exposed to such civil rights activists and Dr. Martin Luther King, Jr. these students were naturally enthusiastic about the changes occurring at Johns Hopkins. It was Thomas, however, who was always conservative with his advice, urging his students such as the now Associate Dean of School of Medicine at Hopkins Dr. Levi Watkins, Jr. to "wait for the right time."

Thomas also taught many members of Blalock's "Old Hands Club"; a group of former residents who worked under Blalock during his time at Johns Hopkins, these men would eventually commission the portrait of Thomas in 1971 which now hangs in the halls of Johns Hopkins which almost 30 years earlier Thomas was not allowed to walk through. This was perhaps one of the first public and true recognitions of Vivien's accomplishments since the beginning of his career with Dr. Blalock. In the speech given at the ceremony to celebrate him Thomas said:

> *"People in my category are not accustomed to being in the limelight as most of you are. Being placed in the position I find myself now makes me feel quite humble. But at the same time, just a little proud."* [2]

Approaching the age of 60 Thomas was for the first time beginning to receive the recognition that had eluded him so long. In May of 1979 Vivien Thomas was awarded an honorary doctorate from Johns Hopkins University. One interesting fact, however, is that because of restrictions he was not allowed to receive an honorary doctorate in medicine, so instead Thomas became the recipient of an honorary degree in a doctorate of law. After 37 years of work at Johns Hopkins Vivien Thomas was recognized as a teacher and finally appointed to the medical school's staff. Later that year Thomas retired to his home in Baltimore. Within the next four years minority enrollment in Johns Hopkins quadrupled and even Thomas's nephew Koco Eaton, M.D. attended Hopkins. In an interview with PBS Eaton describes the last years of Vivien's life and how he felt that he was just beginning to understand the importance of his uncle's work and role both for medicine and for the opportunities now afforded to African American doctors, but the tragedy being that he came to understand this so late in his uncle's life. It is in this way that the tragedy of Thomas's overdue credit is seen - that he did not receive recognition until after Blalock's death, and so near to the end of his own. On November 26, 1985 Thomas died after falling victim to a stroke just a short time before. Just days after Thomas's death his autobiography was published.

One thing that is unique about Vivien Thomas and his story is not that his impact was just on the field of medicine, nor was it just on the scene of civil rights, but rather his accomplishments are multifaceted. His medical achievements are vast and his influence resounds

in the men who are teaching today's medical students. He was the first surgical technician, and that profession continues on as an important component of a surgical team. He helped to develop tools such as the Blalock clamp and methods such as the Blalock-Taussig shunt. Recently the name of this invention came under scrutiny and many proposed that the Blalock-Taussig shunt should be renamed the Thomas shunt. The device was eventually renamed the Blalock-Thomas-Taussig shunt (though still frequently referred to as the Blalock-Taussig shunt) and I would argue that Thomas would have preferred the Blalock-Thomas-Taussig name choice. He viewed himself as partners with those he worked with and he never directed his frustration at his co-workers for his lack of recognition from the public or the medical community. Thomas understood that he was living before his time, but he accepted this and did his best anyway.

Thomas's career however took on many roles, and his race did play a large part in why he did not receive the credit he was due at the time, as well as how he will be remembered. I think that throughout his career the most amazing characteristic of Vivien Thomas was that he was able to deal so well with the racism and prejudices thrown his way. Although few people in Baltimore would insult Thomas to his face, he was always aware of the obstacles that stood in his way. Whether it was an issue of pay, credit, or respect Thomas did not concern himself with these things, but rather on his research, and on his work. Thomas did not work in a time when he was simply in the minority, but rather in a time when he was the only person doing what he was doing. One thing that impresses me about Thomas was that he did not let his race define who he was or what he was going to do. Thomas was not a black surgical technician; he was a surgical technician who happened to be black. To each other in the confines of their lab, race held no bearing. They valued each other based on the other's talents and character, not on titles and pay grades. Thomas opened doors to African Americans so that they could live out the one dream

that eluded him his entire life – to become a physician. For a brief stint in 1947 Thomas went to Morgan State University to apply for admission. Even with his advanced knowledge he would have had to enter as a freshman and earn a bachelor's degree, attend medical school, and complete a residency. By the time he would be done he would have been 50 years old. With a family and children to support Thomas ultimately had to let go of his dream of becoming a doctor – he had come as far as he could.

After reading Thomas's writing and doing research I look at the title of this paper and wonder how Thomas felt about his "credit overdue". It is clear that his public accreditation, especially from Johns Hopkins, was not given until it was long overdue, but I think now that that was only icing on the cake for Thomas and that his true sense of accomplishment came from inside, where nobody could take it away from him. No matter his skin color, his pay grade, the name of an instrument, or whether or not he was allowed to wear a white lab coat at an institution that did not appreciate him – I think that Thomas still received his sense of accomplishment before ever earning an honorary doctorate in law. That is not to say that these things didn't make him proud, as they would for anyone undoubtedly, but that Thomas was a true medical professional, driven by the desire to help other people. Thomas undoubtedly realized that Blalock and he were truly "*partners* of the heart".

Works Cited

American Experience - Partners of the Heart. Dir. Bill Duke & Andrea Kalin. DVD. PBS, 2003. The PBS documentary adapted from Thomas's autobiography. It features on camera interviews with colleagues of Thomas's as well as family members and friends.

Ayd, Mary A. "Almost a Miracle." DOME Feb. 2003. 14 Apr. 2006 <http://www.hopkinsmedicine.org/dome/0301/close_up.cfm>. DOME a publication at Johns Hopkins University does a feature on the work of Vivian Thomas focusing mainly on how Thomas's legacy has endured.

"Blalock's Clamp." 26 Apr. 2006 <http://www.whonamedit.com/synd.cfm/2287.html>. A description of and information on the Blalock clamp.

"Employee Records." Johns Hopkins Human Resources. Johns Hopkins University. 20 Apr. 2006. Employee records from Johns Hopkins used to show the salary difference between Blalock and Vivien Thomas.

"Pediatric Cardiologist, Helen B. Taussig." Johns Hopkins University. 14 Apr. 2006 <http://www.medicalarchives.jhmi.edu/tausbio.htm>. Information from the Johns Hopkins archives on the work of Dr. Helen Taussig, who worked closely with Thomas on the research on 'blue baby' syndrome.

Public Broadcasting Service. 26 Apr. 2006 <http://www.pbs.org/wgbh/amex/partners/early/e_decisions_pop_01_02.html>. Page from PBS's website on Partners of the Heart. Features quote used in the paper.

"Surgeon Alfred Blalock." Johns Hopkins University. 14 Apr. 2006 http://www.medicalarchives.jhmi.edu/blbio.htm. Information on the life and work of Dr. Alfred Blalock, Vivien Thomas's friend and mentor, from John's Hopkins university archives.

"Surgical Technician, Vivien T. Thomas." Johns Hopkins Medical Institute Archives. Johns Hopkins University. 20 Apr. 2006 <http://medicalarchives.jhmi.edu/vthomas.htm>. John's Hopkins archive's official website dedicated to preserving the life and work of Vivien Thomas. Includes information on his employment at Hopkins as well as his recognitions.

"Texas Medical Center NEWS." Texas Medical Center. 21 Apr. 2006 <http://www.tmc.edu/tmcnews/02_01_02/page_15.html>. Page from the Texas Medical Institute which discusses the work of one of Thomas's protégés.

Thomas, Vivien T. Partners of the Heart: Vivien Thomas and His Work with Alfred Blalock. Reprint edition. Pennsylvania: University of Pennsylvania Press, 1998. Vivian's autobiography. Used as a one of the main primary sources for research on the events of Thomas's life.

Endnotes

[1] Public Broadcasting Service. 26 Apr. 2006 <http://www.pbs.org/wgbh/amex/partners/early/e_decisions_pop_01_02.html>. (1).

[2] American Experience - Partners of the Heart. Dir. Bill Duke & Andrea Kalin. DVD. PBS, 2003.