

PORTRAITURES

Dr. Warren W. Buck III: Physicist, Professor, Chancellor, Sailor, and Activist

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The portraiture of Dr. Warren W. Buck III describes the legacy of a man born during the period of segregation, but against all odds, would go on to study, teach, and become a leader in mathematics and physics at both Predominantly White Institutions (PWIs) and Historically Black Colleges and Universities (HBCUs). This article highlights the importance of Black leaders in STEM education, and illustrates the influence of mentorship, support and encouragement in inspiring and developing rising scholars. Known for his work as a Physicist, Professor, Chancellor, Sailor, and Activist, his life's work resonates with the aims of the Journal of STEM Leadership and Broadening Participation, which is focused on amplifying and promoting the work and leaders of HBCU scholars and faculty within STEM.

Author's Note

There aren't many people who take the leap from professor to college president or chancellor without any other administrative experience. However, there are also not many people as innovative, savvy, and adventurous as Dr. Warren Wesley Buck, III – a physicist, professor, program architect, university chancellor, artist, sailor, and social justice activist.

I met Dr. Buck at Hampton University in 1993 as a second year Ph.D. student. In the early 1980s, after receiving a master's degree in statistics at a predominantly white institution, I was accepted into the Ph.D. program. Upon completing the required courses for my program and passing the qualifying exam, I sought out a dissertation advisor which proved to be a difficult task. The department denied tenure to the only female professor and none of the male professors had an interest in taking me on as a student. I was told by the department chair to go home and raise my son. The only other woman enrolled in the program had the same experience. We both had no choice but to leave the program.

I subsequently took a job as lecturer in mathematics at Hampton University, a Historically Black College and University (HBCU). When the university started its first Ph.D. program in 1992 in the discipline of physics, I applied to and was accepted to the program. Early in my second year of study, I walked into Dr. Warren Buck's office and told him that I wanted to work on a problem in theoretical particle physics that required no work with a computer. He did not blink an eye, asked me to join him in a classroom

with a big board, and proceeded to lecture for over two hours on what my topic would be. He became my dissertation advisor, advocate, and we have remained friends to this day. I had a strong background in mathematics with a mediocre background in physics; yet he encouraged me to stay the course at every step. Not only was Warren encouraging, but also was every professor in the department. The difference in how I was received as a Ph.D. student from the previous experience could not have been starker. Warren's support and that of the other faculty enabled me to finish my Ph.D. and be among the first four students to receive a Ph.D. from Hampton University in 1998.

I often thought about the support and influence that Dr. Buck had on my life and that of many other students, as well as the support of Black faculty at HBCUs in general. This led me to conduct a series of interviews with Black HBCU physics faculty during the Fall of 2016 while on a granted sabbatical from the National Science Foundation. I wanted to learn more about these faculty who have been working to dispel the myth that HBCUs are second-rate institutions. In addition, I wanted to highlight how faculty at HBCUs flourished at institutions that have been historically underfunded, have low endowments, and thus often lack important resources. These scientists and engineers not only conducted research and contributed to the building of knowledge, but also established science and engineering departments that offered advanced degrees, as well as major research centers.

Historical Context

Warren Buck was born at a time when racial segregation was still fully legalized through a system of laws upheld constitutionally by the US Supreme court in the 1896 decision *Plessy vs Ferguson*. The even though "separate but equal" doctrine was overturned by the Supreme Court in 1954 in *Brown vs the Board of Education*, de facto segregation remained in existence in many parts of the South. Efforts to provide equal educational and other opportunities to Black Americans were hampered by various forms of institutional racism. In the southern states, young Black people who wanted to study beyond high school could only attend HBCUs, institutions that were established separate from white ones, but not equal in terms of receiving funding.

It was not until 1964 that the *Civil Rights Act of 1964* was enacted to supersede all state and local laws requiring segregation of schools, housing, transportation, employment, and other areas of life. During the 1950s and 1960s, as Warren grew up, the civil rights movement, a struggle for Black Americans to gain equal rights under the law, was at its height. History tells of the courageous women and men participating in this struggle, many of whom were students. It is in this historical context that Warren's life story unfolds.

Biographical Information

Warren Wesley Buck, III was born in 1946 at Freedman's Hospital in Washington D.C. to Mildred G. and Warren W. Buck, Jr. He grew up in Washington, DC, where his parents had moved after living in Missouri. His father worked at the Weather Bureau and his mother was one of the first Head Start teachers in the country. Warren, his brother, and parents lived in an all-Black community. He graduated from Spingarn High School in 1963.¹ Spingarn High School was established in 1952 as the last segregated public high school to be built in D.C. Even after desegregation, the high school student body remained predominantly black.²

As was expected by his family, Warren wanted to attend college and study mathematics. He chose Lincoln University in Missouri for the reasons stated below and was awarded a partial track scholarship in 1963.

*"And the reason I went to Lincoln University of Missouri is because that's where my parents went, and several aunts and uncles also went to college. So, I'm not a first-generation student at all, maybe the second, certainly, almost third generation. And I went there, to Lincoln, because my mother and father met in a calculus course. And they had this calculus professor I had heard about since I was knee-high to a crab: Dr. Talbot. And the thing about him, he had gotten a PhD from Pitt at something like twenty-one or twenty-two years old, in mathematics. And he could write with two hands simultaneously. And I never believed it, my parents would swear by it, but I had never seen anybody do that. And so, I was kind of curious, and so anyway, my chance came at college and I went there."*³

Support for Success

Dr. Walter Talbot, born in 1909, was the fourth African American to earn a Ph.D. in mathematics, in geometric group theory, from the University of Pittsburgh in 1934.⁴ However, when Warren arrived on the campus of Lincoln University, Dr. Talbot was no longer there. Buck explained to me that the only thing he was successful at during his first two years at Lincoln was running on the track team; academically he did not do that well. *"I was just not focused there at all, it was a.... it was, it didn't fit me."*⁵ After his sophomore year, he thought of dropping out of college altogether. He returned to D.C. and worked for a while as a waiter and dishwasher. During

¹ Rankins, C. (2016, September 13)

² Spingarn High School, Washington D.C. Opens (1952, October 26) - African American Registry.

³ Rankins, C. (2016, September 13)

⁴ Connor, J.J. and Robertson, E.F. (2019, November)

⁵ Rankins, C. (2016, September 13)

that time, he received a draft notice, but did not want to join the military. He was not only ready to go back to college to study, but he also saw attending college to be granted a deferral from military service. Time was of the essence. He needed to be admitted to college before his draft date.⁶ As luck would have it, Dr. Talbot had moved to Morgan State University, an HBCU in Baltimore, MD, not far from where Warren's parents lived. After a discussion between Mildred Buck (Warren's mother) and Dr. Talbot, Warren was accepted into the mathematics department at Morgan State despite his less than stellar performance as a freshman and sophomore.⁷

During my conversation with Warren, he did not elaborate on his move to Morgan State University. He just simply shared that Dr. Talbot “got him in” and that he realized “*not going to college was not an option*.”⁸ It was a differential equations class during which Warren witnessed for himself what he had only heard about from his parents. He described Professor Talbot's well-known ambidextrous writing as nothing short of remarkable. He explained,

“... he wrote on the board, started from right hand over here to the end of the equation, left hand at the beginning of the equation, and wrote backwards with his right hand, and the hands met in the middle at the equal sign.”⁹

Besides Professor Talbot, Buck also credits his classmates, with whom he formed study group support systems, for his success at Morgan State University. Warren enjoyed his mathematics courses. But at some point, during his undergraduate years, he was drawn into the field of physics by Dr. Robert Dixon, a nuclear physicist, who taught Introduction to Physics. It was Dixon who mentored, taught, and encouraged Buck to stay the course and pursue a dual major in mathematics and physics.

“At that point, I just completely fell in love with physics. I mean, I was head over heels. So much so that my then-wife, Francine, thought I was having an affair somewhere, and I wasn't. I told her, it's my books. I'm in love with my books. It was hard for her to understand that.”¹⁰

Buck was married undergraduate student, who in addition to his studies, he held down a job. Warren holding steady in pursuing his degree in physics with the encouragement of Robert Dixon is not a unique story. Dr. Dixon is

⁶ Zierler, D. (2021, March 2)

⁷ Rankins, C. (2016, September 13)

⁸ Rankins, C. (2016, September 13)

⁹ Rankins, C. (2016, September 13)

¹⁰ Rankins, C. (2016, September 13)

among the unsung HBCU faculty heroes who teach, research, and encourage students without getting much recognition. A story in *Science Magazine*, tells of his successes and struggles working at several HBCUs and quotes Warren,

*“Bob Dixon has probably trained more African American physics undergraduates than anyone else in the country,” says Warren Buck, a Black physicist and former chancellor of the University of Washington (UW), Bothell. “He’s underrated because he doesn’t look for glory. But he’s very effective,” adds Buck, a former chair of the physics department at Hampton University, an HBCU in Virginia.*¹¹

I got to know Dr. Dixon quite well when he became my successor as dean of the School of Science at Hampton University in 2009. He could be best described as mentor and program architect – mentor to countless Black students whom he encouraged to pursue degrees in physics, and program architect of successful undergraduate physics programs at Morgan State University, Morehouse College, and Grambling State University.

Student to Scholar

After graduating from Morgan State University with a degree in mathematics and physics in 1968, Buck enrolled a master’s program at the College of William & Mary (William & Mary).¹² This year is described as one of the most tumultuous in American history and saw the heights of the fight of Black people for civil rights. It was the year Dr. Martin Luther King, Jr. was assassinated. Warren was focused on attending graduate school to obtain a master’s degree but had no funds to attend. He was advised by Dr. Talbot to write and ask for a fellowship, which was ultimately awarded to him. Buck enrolled in the master’s program in physics with no ambition or thoughts of obtaining a Ph.D. Buck explained:

*“I was going to come for a master’s degree, I felt all I could do was get a master’s. I didn’t think... my level of confidence in myself was not about a PhD, but I just thought that I could get a master’s. And I’ve had several uncles and aunts who had master’s.”*¹³

At the time he began his studies, Buck was not politically involved and was solely focused on his studies. He was unaware for quite a while that there were few Black students on the campus of William & Mary. He blames his lack of initial awareness on being totally involved in his physics studies and

¹¹ Mervis, J. (2022, March 3)

¹² Bolt, C. (2017, April 17)

¹³ Rankins, C. (2016, September 13)

the rather friendly environment in the department. Warren describes how his colleagues responded when his wife felt unhappy about the house they were living in and called it dingy. He mentioned it to one of his professors.

"And he said oh, that's too bad. And then about a week or so later, one of the professors, Bob Welsh, who's still living here, he's also one of my mentors, organized. He came up to me and said we're going to come over and paint your house. And so, on a Saturday a couple of professors and graduate students showed up with paint in hand and, you know, we worked up colors before they came, and so we all jumped in and painted the inside of the house. And I thought what a wonderful thing. You know, I was just like... So that was within the first, probably the first two months of being here, and so I felt completely welcomed. It was incredible".¹⁴

Warren enjoyed his studies. *"My heart was full of love for physics. I mean, it really truly was love, and it is still now. Just, the language is so incredible. And I just get overjoyed by playing with the language, and the concepts of the language of expressing our living condition in a different way".¹⁵* Eventually Buck realized just how hostile the overall climate was at William & Mary.

"The president at that time, Davis Paschal, was really assigned to William & Mary because of his work with the Department of Education and segregation. You know, William & Mary was a reward for him for being so successful in segregating the schools in the state. And I didn't know all that until afterwards, but it was not a very friendly place. The physics department was very friendly. It was a completely different culture there. I mean, it was just unbelievably different".¹⁶

By now, Buck was becoming a more politically active student. He was instrumental in forming the Black Student Association (BSA) in 1969 and was its founding president.¹⁷ Buck tells the story of one particular action the BSA took that he is particularly proud of. At every football game, the William & Mary band would play Dixie. For many white Southerners, Dixie, like the [Confederate flag](#), is a symbol of Southern heritage and identity¹⁸ and thus is and was offensive and hurtful to Buck and other Black students. He and members of the BSA declared that they would burn confederate flags if the band played Dixie at yet another football game. He recalled the game between William & Mary and the Citadel in 1969, in which this promise was to be

¹⁴ Rankins, C. (2016, September 13)

¹⁵ Rankins, C. (2016, September 13)

¹⁶ Bolt, C. (2017, April 17)

¹⁷ Bolt, C. (2017, April 17)

¹⁸ Abel, E. Lawrence (2000).

fulfilled. The university administration did not know what to do and had asked the physics department faculty to “stop this nonsense”. The faculty did the opposite and supported Buck.¹⁹ At the game, there was a large contingent of state troopers who were called in to arrest anyone violating open fire laws in public, in this case burning a confederate flag. “Every state trooper in the state seemed to be at the stadium. And they were going to arrest us. If we burned the flags, they were going to arrest us for violating open fire laws in a public setting...” However, as Buck recalls, “the band never played. They never played Dixie, and I don’t think they’ve played it since. So that part was successful. That was a successful nonviolent act that we could stand up to.”²⁰

Buck earned a master’s degree in plasma physics in 1970. It was the first physics degree and second in a science discipline to be awarded to a Black student at William and Mary.²¹ After graduation, he took a teaching position at Bowie State University for a year where he was deeply involved in civil rights issues. However, the strain of navigating the hostile campus climate of William & Mary had taken its toll. Additionally, the killings of the students at Kent State University and Jackson State University during that tumultuous time weighed heavily on Warren. He said, “*My heart was actually broken*”. His marriage ended in divorce, and he told me that he was tired and exhausted.²²

After a year of reflection and soul-searching, Buck was ready to come back to study physics. Remembering the friendly department, he decided he would pursue his Ph.D. at William and Mary.

“So, I remember calling Rolf Winter, who was still chair of the department of physics. I said, ‘Rolf, I want to come back.’ And Rolf said, ‘Your fellowship is still here waiting for you. So, I came back. And this time I finished my physics, I did my physics. I came back and did that and was very happy with that and made good friends. But I didn’t do much civil rights at that point.’”²³

When asked about his activism during his years as a Ph.D. student, he said:

“Yeah, I picked up on some things, but I was being lured to help, and I just didn’t want to. I felt I’d done my piece of the activism to get some things going, but I had to look after what Warren Buck really wants to do. And so there are times when, you know, you can do a lot of things, but you don’t have to do them all, okay? There’s no rule that says you have to do them. So even if you

¹⁹ Bolt, C. (2017, April 17)

²⁰ Bolt, C. (2017, April 17)

²¹ Rankins, C. (2016, September 13)

²² Buck, W. (2016, September 13)

²³ Buck, W. (2016, September 13)

can do them, even if you can do it easily, you don't have to do it. And I wanted to get my degree in physics. One of my professors, Hans von Baeyer, told me during the 1970s, before I dropped out, he says, you know, Warren—and I was thinking about dropping out of physics—and he says, you know, a radical is one thing, but a Ph.D. in physics radical is another one. And so, I remembered that and I think that helped me come back and finish off the thing I really wanted to do.”²⁴

Mr. Buck developed a life-long friendship with his advisor, Dr. Franz Gross. During my interview and other interviews, Buck talks extensively and with great passion about the research he conducted during his time as a PhD student and his interaction with other theoretical nuclear physicists. He also fondly remembers dinners at his advisor's home and meeting notable physicists, including Nobel prize recipient Hans Bethe.

After receiving his Ph.D. in 1976 in theoretical relativistic nuclear physics, Buck was awarded a postdoctoral fellowship at Stony Brook University. It was followed by an appointment as staff scientist at the nuclear physics lab of the University of Paris in Orsay. During this time, Buck worked on theoretical models and calculations for matter-antimatter, specifically nucleon-antinucleon interactions, as well as for weak interactions.

After returning from France, Buck decided to take a break from physics and from everyday life and its demands and set out to sail on a non-motorized boat from Massachusetts to the Bahamas. Buck had learned to sail while he was at Bowie State University, and sailing became a life-long passion. His wife, the artist Linda Horn, accompanied him. They lived on the trimaran boat for three years. Linda and Warren sailed and painted, perfecting a technique of painting under water in oil colors.²⁵ They made a modest living selling their artwork. Warren's lifelong passion of painting was born during his time. When Dr. Gross heard about this extended trip away from physics, he felt that Buck was “*wasting his life and needed to do more*”.²⁶ Gross wrote him a letter, general delivery in the Bahamas, as Buck had no permanent address, asking him to return to a life in physics and informing him that the Department of Energy (DOE) was planning to build an accelerator facility in Newport News, Virginia, in proximity to the College of William & Mary. Buck acknowledges this letter to be pivotal in his life and credits his former advisor with being more than a good friend, a father figure even. Taking Gross' advice, Buck accepted a part-time visiting assistant professor position at William & Mary, expecting that a great opportunity to do cutting edge physics would present itself at the nearby DOE accelerator facility.

²⁴ Bolt, C. (2017, April 17)

²⁵ Buck, W. Horn, L. (1998, January).

²⁶ Rankins, C. (2016, September 13)

Scholar to Program Architect

Once he returned to his alma mater, Warren was troubled by the lack of Black students in science. In particular, he wondered what he could do to get more Black students excited about physics. He decided to visit the physics department at nearby Hampton University to see if a full-time position was available. The department at that time, in 1984, offered the bachelor's and master's degree in physics and was staffed by three faculty members, Dr. Donald Whitney, Dr. Kwang Soo Han, and Dr. Demetrius Venable, chair of the department.²⁷ Venable, at the time an assistant professor, aspired to take the department to the next level and have it become the first at the university to offer the Ph.D. degree.

Buck convinced Venable that Hampton's physics department could grow significantly and benefit from the nearby planned DOE facility and was subsequently hired as assistant professor at Hampton University in 1984. In anticipation of the establishment of the DOE facility, at the time called Continuous Electron Beam Accelerator Facility (CEBAF), Buck joined the original group of scientists who formed a user group and advised the design and development team.²⁸ Construction began at CEBAF in 1987 and the first beam was delivered in 1994. In 1996, CEBAF was renamed Thomas Jefferson National Accelerator Facility (Jefferson Lab or JLab).²⁹ JLab is a particle accelerator facility designed to probe the most basic building blocks of matter, to understand these particles and the forces that bind them.

Meanwhile, Hampton University had its first Ph.D. program approved by the State of Virginia and began enrolling students in the program in 1992. JLab was closely linked to propelling the physics department at Hampton University to becoming a major producer of Black Ph.D.s in Physics.³⁰ Buck was instrumental in building a scientific program in nuclear and high energy physics at Hampton University. In 1990, he had become the founding director of the Nuclear/High Energy Physics (NuHEP) Research Center of Excellence. This center was funded by the National Science Foundation (NSF), DOE, JLab, and NASA. The unique partnership with JLab with four joint faculty positions offered by NuHEP and Jefferson Lab, allowed Hampton University to attract world class theoretical and experimental nuclear and particle physicists.

The efforts of these faculty resulted in collaborations and opportunities for faculty and students at particle accelerator facilities such as the European Organization for Nuclear Research (CERN) in Switzerland, the German Electron-Synchrotron (DESY) in Germany, and the High Energy Accelerator

²⁷ Venable, D. (2016, September 20)

²⁸ Rankins, C. (2016, September 13)

²⁹ Timeline and History of Jefferson Lab.

³⁰ Venable, D. (2016, September 20)

Research Organization (KEK) in Japan.³¹ However, it can be argued that the success of research at Hampton University in this regard was due in large part to the work of Warren Buck. More importantly, his work led to some of the most innovative models of physics education programs, which are still being replicated today.

With modest funding from the city of Newport News, in 1985, Buck started the Hampton University Graduate Studies (HUGS), a now prestigious summer school for graduate students in experimental and theoretical nuclear and particle physics. HUGS, to this day, has drawn graduate students globally and world-class speakers to Hampton University and Jefferson Lab. The program eventually received funding from the Department of Energy and is internationally acclaimed.

Later, in 1993, Buck founded a Research Experiences for Undergraduates summer program, the Undergraduate Institute in Physics (UnIPhy), which was initially funded by the DOE, later by NSF. This program provided summer research opportunities for students from across the country, many of whom attended HBCUs, and was one of the first such programs to involve high school students and college freshmen. By 1998, this program had served over 75 undergraduates in physics, and NuHEP had evolved and grown to six faculty, four postdoctoral fellows, over 20 graduate and undergraduate students, and four staff members. That year, Hampton University awarded the first Ph.D. degrees in its history. Three of the degrees were awarded to students in optical physics, and one to a NuHEP student in theoretical nuclear and particle physics, Warren Buck's advisee, to Claudia Rankins.

In 1998, Dr. Buck was honored with the American Physical Society Fellowship. The citation reads:

*For creating a Ph.D. program in physics at Hampton University, pioneering several model programs to attract diverse students into physics, and involving minority educational institutions in physics research,*³²

Among the many awards and honors bestowed on Warren Buck, he is proudest of being named a *Giant in Science* in 2001 by the Quality Education for Minorities (QEM) Network, and for being a *Way Cool Scientist* on the Bill Nye the Science Guy television show entitled "The Atom".³³

Program Architect to Administrator

Dr. Buck had no intention of leaving Hampton University. However, in 1999, he was invited by a colleague, Roxanne Springer, to give a talk at the Institute for Nuclear Theory of the University of Washington. He recalls

³¹ Venable, D. (2016, September 20)

³² APS Fellow Archive

³³ Rankins, C. (2016, September 13)

giving a talk on the pion form factor. Separately, Lillian McDermott, a leader in the field of physics education, asked Buck to present another talk on what he termed the ‘Hampton Experiment’.³⁴ Buck was surprised by how many administrators were in attendance. After the talk, the assistant dean of the graduate college gave him a tour of the campus during which he was introduced to the dean of the graduate school, Marsha Landolt. He was invited to stay for a few days and “connect with people”. It finally occurred to Warren that this was more than an invitation to give a talk. It turns out that Lillian McDermott had set up this visit as an interview for Warren as a candidate for the position of chancellor at the University of Washington – Bothell campus.

Dean Landolt was chair of the search committee. Eventually, Buck decided to officially apply for the position but found it difficult to leave his NuHEP group.

“I came back, talked to the group, and said, ‘You know, I think I’m going to apply for this job.’ And it was a bit of a shock for folks. And I told them it wasn’t because I wanted to leave folks, you know, I didn’t want to leave them.”³⁵

Dr. Buck was selected as Chancellor of the University of Washington-Bothell, a fledging new UW campus at the time, which was established in 1989 with just 12 faculty to offer courses to local students. During his six-year tenure as Chancellor, the institution grew into a 4-year institution that accepted freshmen on its campus for the first time in 2006. Buck oversaw the completion of the construction of the campus, the establishment of an administrative structure, and the design of academic curricula. Just before retiring from University of Washington - Bothell, Buck led the effort to create the School of STEM that included a new physics degree program.

After retiring from the University of Washington, in 2020, Dr. Buck decided to take on an active role at one of his alma maters, the College of William & Mary, where he currently serves as special advisor for equity in the 21st century to President Katherine Rowe. Buck works with university leadership and the board on how the university can reckon with its racist past, from slavery to the era of Jim Crow to the present time, while moving to advance equity.³⁶

Conclusion

Warren Buck has been a leader at every stage of his career, not only as chancellor and advisor to a president. As faculty in the Department of Physics at Hampton University, he took leadership in establishing the

³⁴ Rankins, C. (2016, September 13)

³⁵ Bolt, C. (2017, April 17)

³⁶ Rowe, K. (2020, June 8)

nuclear and particle physics program, which to this day is at the forefront of such programs. The lasting legacy of this program is not only the world class research it has produced, but moreover the numerous students from undergraduates to Ph.D. recipients who are now researchers, professors, administrators, teachers, and policy makers.

The above-mentioned citation naming Dr. Buck as a Fellow of the American Physical Society (APS) quotes his work to attract “diverse students into physics”, and that is certainly a lasting legacy. The citation, however, does not mention his scientific contributions and publications in leading physics journals in several areas in theoretical nuclear and particle physics.³⁷ Surely, this was an oversight on behalf of the APS.

Dr. Buck’s work as a social activist leader began during the time of desegregation and the struggle of Black Americans for civil rights when he was a graduate student and came full circle about 50 years later during the time when some universities in the South began to reckon with their racist past.

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³⁷ Buck, W. Resume of Warren W. Buck

References

- Abel, E. L. (2000). *Singing the New Nation: How Music Shaped the Confederacy, 1861–1865*. Stackpole Books.
- APS Fellow Archive. (n.d.). <https://www.aps.org/programs/honors/fellowships/archive-all.cfm?year=>
- Bolt, C. (2017, April 17). *Living the Legacy – Warren W. Buck III*. <https://oh.libraries.wm.edu/collection/living-the-legacy/item/warren-w-buck-iii>
- Buck, W. (n.d.). *Resume of Warren W. Buck*. <http://faculty.washington.edu/wbuck/Resume.pdf>
- Buck, W., & Horn, L. (1998, January). *Diving to Paint*. <http://faculty.washington.edu/wbuck/UnderwaterColors.pdf>
- Connor, J. J., & Robertson, E. F. (2019, November). *Walter Richard Talbot*. https://mathshistory.st-andrews.ac.uk/Biographies/Talbot_Walter/
- Mervis, J. (2022). Black Colleges Can't Do It All. *Science*, 375(6584), 960–963. <https://doi.org/10.1126/science.ada1659>
- Rankins, C. (2016, September 13). *Interview with Warren* [Personal communication].
- Rowe, K. (2020, June 8). *Message from President Katherine A. Rowe*. <https://www.wm.edu/about/history/reconciliation/standing-together/2020-06-08-katherine-rowe/index.php>
- Spingarn High School, Washington D.C. Opens. (1952, October 26). African American Registry. <https://aaregistry.org/story/spingarn-high-school-washington-d-c-opens/>
- Timeline and History of Jefferson Lab*. (n.d.). <https://www.jlab.org/about/visitors/history>
- Venable, D. (2016, September 20). *Interview. Conducted by Claudia Rankins* [Personal communication].
- Zierler, D. (2021, March 2). *AIP interview Oral History Interviews Warren W. Buck American Institute of Physics*. <https://aip.org/history-programs/niels-bohr-library/oral-histories/47040>