

College of Pharmacy

BLACK WOMEN IN HIGHER EDUCATION: THE HOWARD UNIVERSITY EXPERIENCE



OMOTOLA OGUNDIPE

NO. 21

NOVEMBER 2023



1867

**HOWARD
UNIVERSITY**

CENTER FOR
**WOMEN,
GENDER
& GLOBAL
LEADERSHIP**



The Center for Women, Gender and Global Leadership

The Center is an interdisciplinary program with a vision to be a Center of Excellence for Black women and Black feminist consciousness, activism, and global leadership. The Center aims to meet this vision through programming that promotes transformational leadership, global engagement, research, service learning, and building impactful partnerships. The mission of the Center is to promote global excellence for Black women and gender issues, feminist activism, and transformational leadership through global engagement, research, service learning, and impactful partnerships.

The GWGGL Working Paper Series examines issues related to women, gender, and sexuality with a particular focus on the Black experience. It provides a platform for scholars working on issues from all disciplines to share research on a broad range of topics such as science and technology, health, politics and public policy, law, social justice, business and entrepreneurship, medicine, environmental justice, and climate, diversity and inclusion, arts and the humanities.

Black Women in Higher Education: The Howard University Experience is a special edition of the Working Paper Series (WPS) of the Center for Women, Gender and Global Leadership. The reports in this series form part of the Women in Leadership: A Storytelling Project, which uses oral narratives to document the experiences and journeys of women leaders at Howard University. The storytelling project is available on the Center's YouTube page.



CENTER FOR
WOMEN,
GENDER
& GLOBAL
LEADERSHIP

Black Women in Higher Education: The Howard University Experience

A Special Edition of the Working Paper Series by the Center for Women, Gender and Global Leadership

The historic launch of the Howard University Center for Women, Gender and Global Leadership on October 4, 2020, was the culmination of many years of women and feminist organizing and activism at Howard University. The Center stands as an homage to the women and men who have advocated for, advanced, and established programs, initiatives, courses and other forms of activism for women and gender issues in the long history of Howard University.

Howard is known as a place of many firsts, yet the history of women remains largely in the archives. For example, women have established or led seven centers in areas ranging from the Center for Sickle Cell Disease to the Center for Women and Global Leadership. The contributors have also identified notable women faculty, students and staff from the Howard University archives that have not received much attention in existing literature on Howard's history.

Howard's administration has made recent strides in cultivating Black women leaders as deans and leaders in critical administrative positions. Still, there has been little analysis of how gender equity is practiced among faculty, the board of trustees, and executive leadership. The election of Kamala Harris, a Howard alumna, as the first woman vice president of the United States in 2020 reinvigorated Howard University's position as a leading Historically Black College and University (HBCU) in the United States and abroad. Howard University has produced several pioneer Black figures and leaders in the United States, including a Supreme Court judge, members of Congress, leaders of big companies and movie stars. Yet, we know little about the women and men faculty who teach, train and develop these leaders.

Black Women in Higher Education: The Howard University Experience is the culmination of a two-year research project designed by J. Jarpa Dawuni, Ph.D., and Anita Plummer, Ph.D., and carried out by graduate students and faculty that documents the past and present status of women faculty, students, and administrators at Howard University. Each working paper provides historical and contemporary data and case studies of women at the institution in areas ranging from their role in leadership positions, faculty rank, salary, retention, post-graduate work, exposure to violence and discrimination, and more. The data reveal a complex story of individuals and groups of women addressing gender inequity spanning the University's over 150-year history.

As a center focused on global leadership, this project draws on the United Nations Sustainable Development Goals (goal number five) which calls on nations and institutions to work towards achieving gender equality. Equally, goal number four (#4) calls for quality education. Recent efforts to promote diversity, equity, inclusion and access (DEIA) require data and informed research to provide a baseline for assessing where progress has been made and where more work needs to be done. This Working Paper Series (WPS) provides the needed baseline for further research on the topic of women's representation at institutions of higher education—specifically within HBCUs.

Collectively, the working papers document critical areas of women's experiences in different academic departments, colleges, and schools. In 2022, women students comprised 74% of the student body at Howard. It is well documented that women today have more access to education than at any other point in history. *(Continued)*

PREFACE

Persistent gender inequality and inequity point to institutional failures at Howard and in higher education broadly. In 2019-2020, women comprised 55% of the faculty at Howard; however, when divided by rank, 66.81% of full professors and 53.27% of associate professors are men (College Factual, 2020). Lectureships, assistant professors, instructors, and adjuncts are predominantly held by women. Education is viewed as an equalizer, and this working paper series examines how women at the institution that graduates the highest number of Black professionals in medicine, dentistry, pharmacy, engineering, nursing, law, social work, and education fare in ensuring women are equally represented in those fields at Howard and beyond.

Representation in administrative leadership and faculty is essential in understanding the story of women's evolving roles at Howard University. Each paper focuses on three aspects of women's roles at the institution. It begins with a microhistory of each college or school, followed by an analysis of women's intellectual contributions in their disciplines over the institution's history. The second area focuses on contemporary data (up to the year 2020) on gender in administrative, faculty, and non-faculty teaching positions. The final part of each paper examines the societal and institutional practices and culture contributing to gender inequality and provides policy recommendations that may help address disparities in Black women's representation in higher education leadership.

Significance and Contribution

The role and experiences of Black women in higher education have been documented in the literature, especially in Predominately White Institutions (PWIs).

This WPS extends the literature by highlighting the following areas:

- The historical evolution of Black women faculty, administrators and students at Howard University.
- The formal institutional barriers Black women administrators and faculty encounter and the strategies used to address them.
- The informal cultural challenges faculty and administrators experience.
- Feminist theoretical perspectives that specifically focus on gender and race as critical dimensions to framing Black women in higher education.
- Highlights the broader implications of inequality and inequity on women in underrepresented sectors, especially in science and medicine.

This working paper series is the first project that shines a light on the role of women academics and administrators at Howard University. Each paper provides policy recommendations that can help Howard University and similar institutions advance gender equality and inclusion on campus. This project will contribute to existing scholarship on Black women in higher education by using Howard University as a case study.

J. Jarpa Dawuni, Ph.D. (Editor-in-Chief)

Founding Director, CWGGL

Associate Professor of Political Science

Anita Plummer, Ph.D. (Associate Editor)

Associate Director for Research & Faculty Engagement, CWGGL

Associate Professor of African Studies

Mouhamadou Moustapha Hoyeck (Managing Editor)

Outreach Coordinator, CWGGL

ACKNOWLEDGEMENTS

We are grateful to the many Howard University community members who contributed to this project: Dean Oluwaranti Akiyode, Dr. Mario Beatty, Dr. Helen Bond, Dr. Melanie Carter, Dr. John Cotman, Dr. Emily Cramer, Dean Sandra Crewe, Dr. James Davis, Lakeiya Dulcio, Camryn Edwards, Dr. Earl Ettienne, Dr. Farhana Ferdous, Dr. Ruby Gourdine, Weslyn Harmon, Dr. Kathy Marshall, Dr. Celia J. Maxwell, Anita Schmied, Kobii Spruill and Dr. Grant Warner. We recognize the valuable contributions of the late Dr. Ruby Gourdine, a trailblazer in social work and an esteemed mentor and colleague.

Black Women in Higher Education: The Howard University Experience The College of Pharmacy¹

Omotola Ogundipe
Howard University
Omotola.ogundipe@bison.howard.edu

This draft: January 2023

ABSTRACT

The Howard University College of Pharmacy has two departments, Clinical and Administrative Pharmacy Sciences (CAPS) and Pharmaceutical Sciences Departments. The College plays a unique role in equipping students with the knowledge, skills, and attitudes necessary to deliver contemporary pharmaceutical care and advanced training to become pharmaceutical scientists. Pharmacy as an academic discipline has become a viable career option for women as they enter the various sub-fields of the discipline. The College of Pharmacy has progressed in gender equity compared to other pharmacy schools nationwide. For example, the College had ten deans between 1942 and 2021; half were women. Most of the assistant and adjunct professors in the College are women. However, in 2022 the Pharmaceutical Science Department had only one female faculty member who is at the rank of assistant professor. The significant increase in female pharmacy faculty members in the College could be attributed to the rising number of female pharmacy students. To continue and further improve this trend, the author suggests that women in the College should not be reluctant to pursue development and be hopeful about their future possibilities. Administrators should continue to encourage women to achieve their full potential and prioritize the employment of women in Pharmaceutical Sciences.

INTRODUCTION

The 1800s birthed the pharmacy profession in America. The century also witnessed the emergence of women who made significant contributions to the field of pharmacy. Among these women were Elizabeth Gooking Greenleaf, the first female pharmacist, and Elizabeth Marshall, the second female pharmacist in the United States (Garza, 2020). Another woman on this roll of honor was Susan Hayhurst, who was the first woman to receive a degree in pharmacy in the United States (from Philadelphia College of Pharmacy) in 1883 (Schudel, 2005).

¹This work was financially supported by the Center for Women, Gender and Global Leadership.

The Philadelphia College of Pharmacy was the first pharmacy college in the United States (US) in 1822. Other major cities followed Philadelphia's lead, establishing the Colleges of Pharmacy which offered training programs and professional associations (Schudel, 2005). In Washington city of the District of Columbia, Howard University College of Pharmacy came into existence in 1868 as a division of the Medical Department, and the pharmacy program was for two years (Dyson, 1929). At the commencement of 1887, a white woman was the pharmaceutical class valedictorian (COP, 2020a). As of January 2022, there are 142 colleges and schools of pharmacy in the US with accredited professional degree programs and two schools with pre-candidate status. Of the American Association of Colleges of Pharmacy member colleges and schools of pharmacy, 72 colleges and schools are in private institutions, while 70 are in publicly supported universities (American Association of Colleges of Pharmacy, 2021).

BACKGROUND

Following the establishment of Howard University in 1867, a committee of four (Dr. S. L. Loomis, Dr. Hiram Barber, Dr. Robert Reyburn, and Dr. Joseph Taber Johnson) came up with a plan for the organization of its Medical Department on March 2, 1868. The Department was to be made up of a Medical School with nine professorships, a Pharmaceutical School with four professorships and a General Hospital with surgical, medical, and obstetrical wards, and a dispensary. On November 9, 1868, with five teachers, the Medical Department of Howard University opened for instruction (Dyson, 1929). During this time, the pharmacy program was held in the evening, and the students were taught 'Knowledge of the Art and Science of Pharmacy' (Howard University, 1967). In 1870, Dr. Charles B. Purvis was elected as a Professor of Materia Medica; Dr. G. S. Palmer as Professor of Pharmacy; and Dr. S.L. Loomis as a Professor of Chemistry. In June 1871, the trustees added to this faculty Mr. Oscar Oldberg, a druggist of Washington, D.C. as a lecturer on 'Practical Pharmacy' and Mr. William H. Seaman, as a lecturer on Botany. The first graduate of the pharmacy program, James Thomas Wormley, received a Doctor of Pharmacy degree from the Medical Department in 1870. During the same year, the pharmaceutical program was differentiated from the medical program, and by 1882, the Medical Department consisted of the College of Medicine, the College of Pharmacy, and the College of Dentistry (Dyson, 1929).

The College of Pharmacy became a member of the American Association of Colleges of Pharmacy in 1927 (Dyson, 1929). The student branch of the American Pharmaceutical Association (APhA), the first national pharmaceutical organization, was founded in America in 1852 to represent, defend, and promote pharmaceutical interests. The scientific, educational, commercial, ethical, and legal aspect was established in 1942. The branch aimed to formulate and present educational programs to increase student interest, develop ethical and professional conduct, develop inter and intra-professional responsibility, and educate the public about the professional nature of pharmacy (Howard University, 1962). In October 1967, the Howard chapter of the American Pharmaceutical Association hosted

the Annual Region II Convention with representatives from Maine to Georgia (Howard University, 1967).

The pharmacy program, which began in 1868 as a two-year course, became a three-year course in 1904 - 1905. It was extended for four years in, 1922 - 1923. The enrollment at the beginning was minimal. The College of Pharmacy graduated one student each in 1870 and 1872 and none until 1880 (Dyson, 1929). By 1925 - 1926, the College of Pharmacy had graduated 406 pharmacists (1925 - 1926: Catalog of the Officers and Students of Howard University, 1925). The College transitioned from a four-year to a five-year program in 1960 (Howard University, 1964). Today, the College offers a four-year professional entry-level program leading to the Doctor of Pharmacy (Pharm.D.) degree, a five-year Pharm.D./MBA dual degree program, and a B.S./Pharm.D. program with 12 feeder institutions. The College also offers a non-traditional Pharm.D. degree program to registered pharmacists who wish to further their professional knowledge and skills; as well as, the Master of Science (M.S.) and Doctor of Philosophy (Ph.D.) degrees in Pharmaceutical Sciences to applicants with a Bachelor of Science (B.S.) degree (COP, 2020a).

During its long history, the College has graduated over 3,424 men and women, comprised of 2,202 with B.S. degrees in Pharmacy, 1,182 with Pharm.D. degree, 19 with Hospital Pharmacy Residency, 13 with a Ph.D. degree, 1 with M.S. degree, and 7 with fellowships (COP, 2021a). Dr. Chauncey Ira Cooper was the first African-American Dean of the College of Pharmacy. He occupied the position for over three decades (Worthen, 2006). According to the HU Institutional Research and Assessment (IRA) 2018-2021 data, the College of Pharmacy has had 16 full-time assistant professors, 15 full-time associate professors, 7 full professors, and 14 part-time adjunct professors, of which 58% are tenured (Fig 1a & 1b).

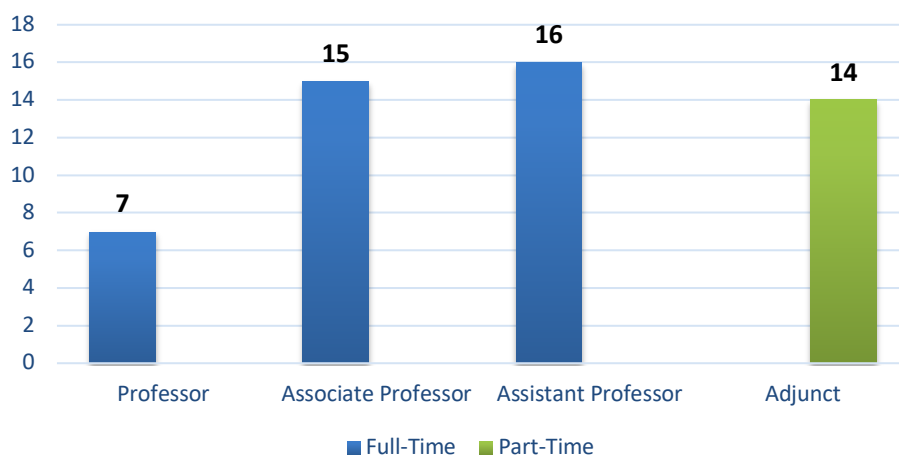


Figure 1a: HU College of Pharmacy faculty profile by Integrated Postsecondary Education Data System (IPEDS) rank and full-time/part-time (2018-2021)

Source: <https://ira.howard.edu/dashboards>

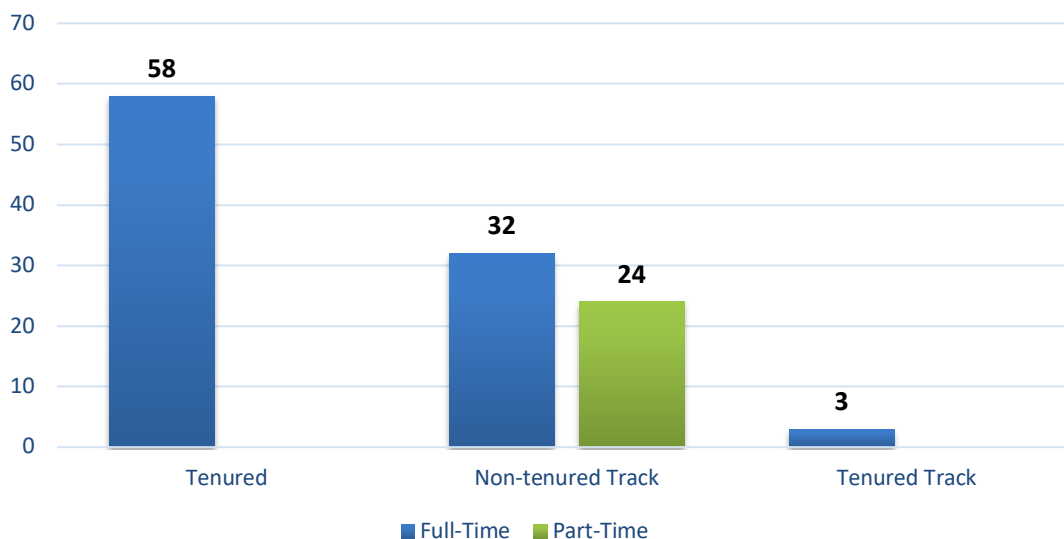


Figure 1b: HU College of Pharmacy faculty profile by tenure status (2018-2021)
Source: <https://ira.howard.edu/dashboards>

Description of the Different Units within HU College of Pharmacy

The College of Pharmacy has two departments, Clinical and Administrative Pharmacy Sciences (CAPS) and Pharmaceutical Sciences Departments. CAPS Department has two major disciplines - Pharmacy Practice and Social and administrative Pharmacy Sciences; and also manages the Experiential and External Programs. CAPS Department is responsible for the training of personnel for a Ph.D. program in social and administrative disciplines and has developed a closer relationship with the Howard University Hospital Pharmacy Department. Also, the Department teaches about 70% of the College's curriculum (COP, 2021b).

The Department of Pharmaceutical Sciences plays a unique role in equipping students with the knowledge, skills, and attitudes necessary to deliver contemporary pharmaceutical care and advanced training to become pharmaceutical scientists. Faculty members in the Department teach courses in the Pharm.D. program, offer instruction to Ph.D. students, and collaborate with CAPS when an interdisciplinary approach is possible. The faculty in the Department comprises experts in medicinal and computational chemistry, natural products, physical pharmacy, pharmaceutical and cosmetic product formulation and development, drug delivery science, biopharmaceuticals, and pharmacokinetics. Research is an essential aspect of the Department's work, and it has research facilities for cell culture, drug synthesis, drug product formulation, and pharmacokinetic studies (COP, 2021b).

According to *US News & World Report 2020*, Howard University College of Pharmacy is the 75th best in pharmacy program in the US and the first-ranked HBCU with a College of Pharmacy. This ranking was based on 67 evaluation factors, the '*Best Pharmacy Schools*'

in 2018 ranked Howard University pharmacy program in the top 100 in the US and the only Pharmacy School in the District of Columbia. In 2018, *hbcu-colleges.com*, a source of facts about Historically Black Colleges and Universities (HBCUs) in the USA, carried out a ranking review of five HBCU pharmacy schools in the United States. It stated that, among the HBCU schools, Howard University has the best pharmacy program with a five-star rating for curriculum and teaching.

GENDER REPRESENTATION IN THE COLLEGE

At present, HU College of Pharmacy (HUCOP) has a total of 32 faculty members (9 and 23 in the departments of Pharmaceutical Sciences and CAPS, respectively) (Howard University, 2021; COP, 2021c). Over 80% of the faculty members at the CAPS Department are female while Pharmaceutical Sciences Department has only one female faculty (Table 1).

Table 1: Current women representation among HUCOP faculty

Faculty rank	Clinical and Administrative Pharmacy Sciences Department (F)	Pharmaceutical Sciences Department (F)
Professor (full)	4(3)	4(0)
Associate professor	8(4)	4(0)
Assistant professor	12(12)	1(1)
No rank	1(1)	0
Total faculty number	23	9

*Figures in brackets represent the number of female faculty members

Source: <https://profiles.howard.edu/>; <https://pharmacy.howard.edu/departments/faculty-and-staff>

A look into Howard University's *'The Bison'*, a compilation of HU yearbooks, revealed that between 1950 and 1963, only about 11% of the total faculty present at HUCOP were women, with the highest being 37.5% (Fig 2). Generally, HUCOP has fewer women occupying higher faculty ranks than men (Fig 3). For instance, over 80% of the assistant professors are female, while over 70% of the total full professors are male.

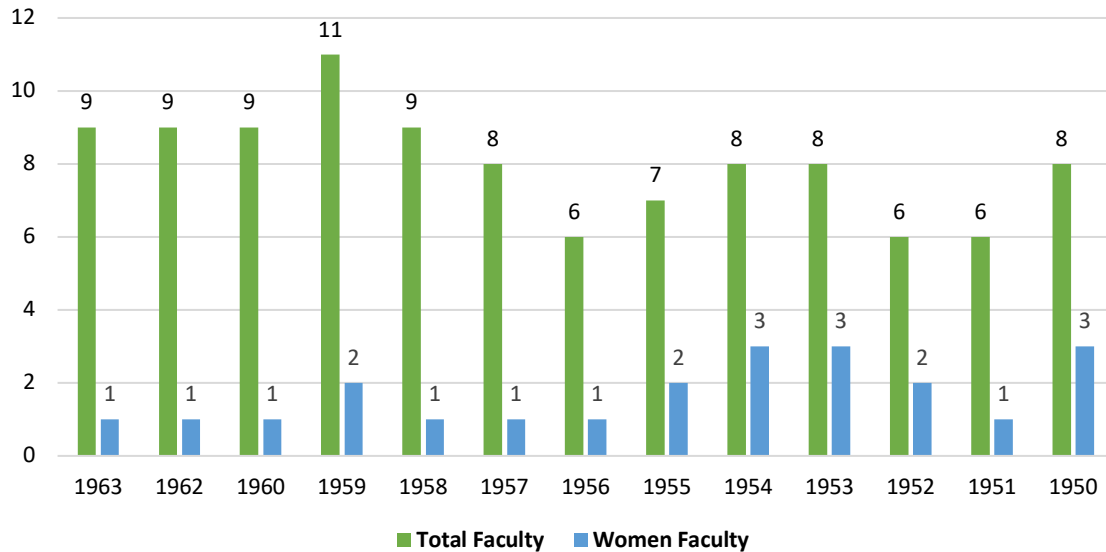


Figure 2: Gender distribution of faculty members at HUCOP from 1950 – 1963

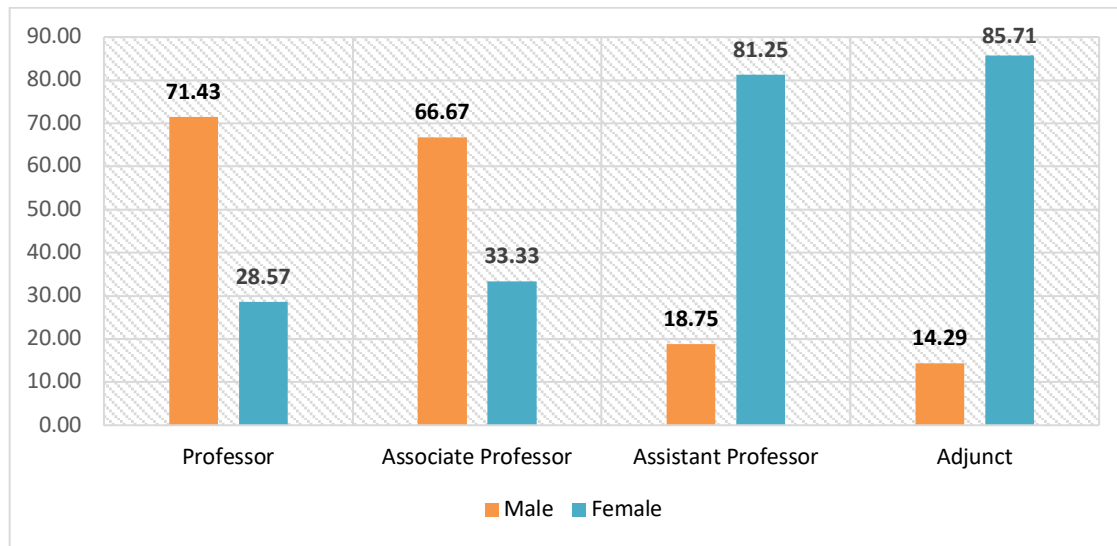


Figure 3: HUCOP faculty by IPEDS rank and gender (%) between 1950 and 1963
 Reproduced from <https://ira.howard.edu/dashboards>

Gender and Leadership within HUCOP

According to the HUCOP 2019-2020 Annual Report, the College leadership is shared among 14 individuals (42.9% female and 57.1% male; Table 2). Also, an assessment of the pictures of the graduating class sets between 1942 and 2019 (available in the College of Pharmacy building) showed that the College had 10 deans, half of whom were women (Fig 4). Other leadership roles such as assistant deans, associate deans, and graduating class set advisors were also taken up by women in the College over these years till date (Fig 4). According to these sources, the first female dean of the College was Dr. Eucharia Nnadi-Okolo in 1995, followed by Dr. Cecile Edwards (served from 1997-1998) and Dr. Beatrice

Adderley-Kelly (served from 2006-2011) and Dr. Toyin Tofade (served from 2016-2022) and the current Dean Dr. Oluwaranti “Ranti” Akiyode (started in 2022).

The first female assistant dean was Dr. Daphne Bernard in 2011. She was also an associate dean from 2013 to 2015, after which she served as interim dean in 2016. Dr. Daphne Bernard, from her position as interim dean, transitioned to associate provost for Institutional Accreditation and Assessment. Here, she worked on a number of projects such as institutional accreditation, implementation of recommendations from accrediting bodies, as well as development and implementation of assessment activities throughout the University (Howard Magazine, 2016). In 2022, Dr. Akiyode was appointed Dean of the College and previously served as director and assistant dean since 2013.

Table 2: HUCOP leadership by gender and roles

Female	Male
Dean	Associate Dean for academic affairs
Assistant Dean for student affairs & director of PPD	Assistant Dean for external programs & non-traditional doctor of pharmacy program
Chair, CAPS department (This position was eliminated as of 2022).	
Director of experiential programs	Chair, Pharmaceutical Sciences Department
	Vice-chair, CAPS Department (This position was eliminated as of 2022).
Director of international experiences & engagement	Director of assessment
	Director of recruitment and admissions
	Director of graduate programs and industrial partnerships

PPD - Professionalism and professional development; CAPS - Clinical and administrative pharmacy sciences

Source: https://pharmacy.howard.edu/sites/pharmacy.howard.edu/files/2020-12/HU-Pharmacy_AR_Hires-rgb%5B6001%5D.pdf

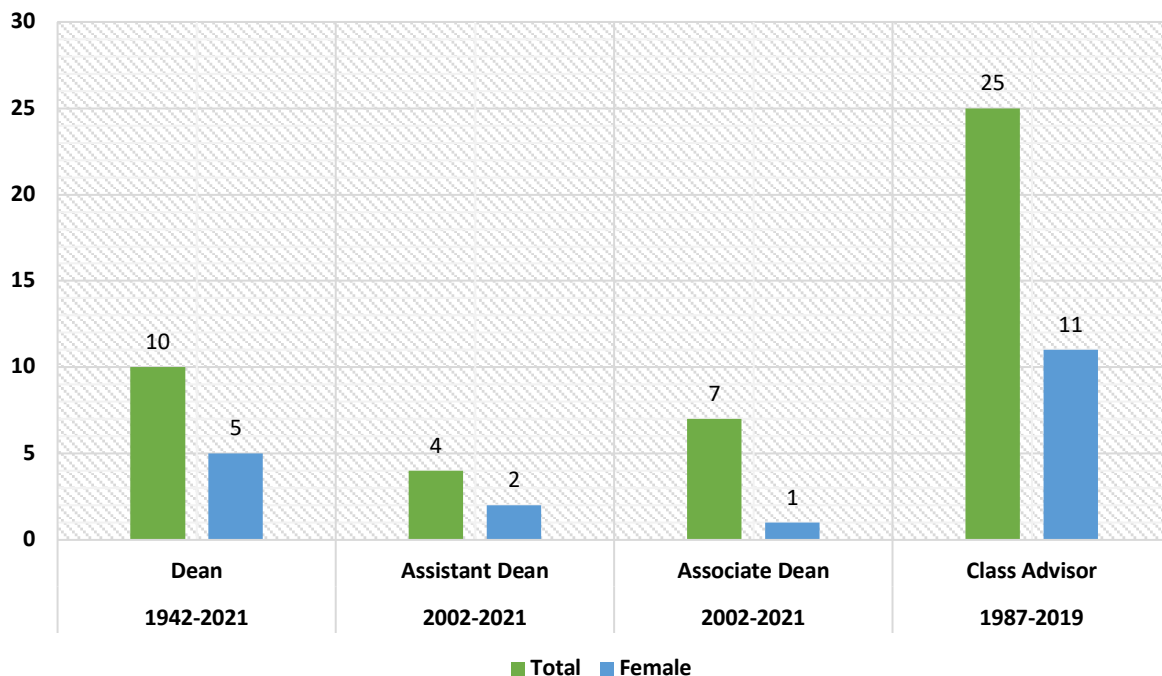


Figure 4: Leadership roles by women at HUCOP between 1942 and 2021

The College’s Female Deans

Dr. Eucharia Nnadi-Okolo became the first female dean of the College of Pharmacy in 1995. Shortly after, Dr. Cecile Edwards was announced by Howard University President, H. Patrick Swygert, as the interim dean for the 1997/1998 session. Before her appointment, she had served in roles of increasing responsibility at Howard University such as the deans of the Schools of Human Ecology and Continuing Education (Schudel, 2005).

Dr. Daphne Bernard became well-known in 2011 when she was selected as the College’s inaugural female assistant dean. During her tenure from 2013 to 2015, she held the distinction of being the sole female associate dean at the College. In a 2016 article titled 'Howard Woman' in 'Howard Magazine,' Dr. Daphne Bernard was recognized for her comprehensive involvement in pharmacy, from education to governmental regulation. While in a leadership role at the College of Pharmacy, Dr. Bernard also assumed the position of chairwoman on the District of Columbia Board of Pharmacy. Additionally, she acted as director for the Anticoagulation Management Service at Howard University Hospital and was key in establishing regulations and policies. As chairperson of the District of Columbia Board of Pharmacy, she set an influential example for many colleagues.

Dr. Toyin Tofade was the next dean and a tenured professor of the College. According to the *Howard Newsroom’s* 2018 publication, she was announced as a fellow of the International Pharmaceutical Federation (FIP) at the World Pharmacy Congress in Glasgow, Scotland in September 2018. Her work with FIP was stated to have contributed towards a vision that promotes and disseminates continuing professional development

strategies to educate, develop, and prepare pharmacists in the ever-changing professional landscape.

In December 2022, Dr. Oluwaranti “Ranti” Akiyode, Pharm.D., was appointed as the College of Pharmacy dean by Wayne A. I. Frederick. Dr. Akiyode has over two decades of experience as a faculty member, with 16 years dedicated to clinical pharmacy practice. She holds board certification in pharmacotherapy and is recognized as a specialist in diabetes care and education. Notably, she played a founding role at the Howard University Hospital Diabetes Treatment Center, where she successfully implemented medication therapy and diabetes management services through collaboration with endocrinologists, nurses, and dieticians between 2007-2017. In 2016, she was honored with the Professionalism Recognition Award for Clinical Faculty, followed by the Faculty Preceptor of the Year Award in 2017 and the HU Pharmacy Alumni Association Distinguished Faculty of the Year Award in 2018. She has actively mentored junior faculty members and oversees the mentoring program for new faculty at the College of Pharmacy. Additionally, she successfully finished a prestigious one-year American Association of Colleges of Pharmacy Academic Leadership Fellows Program in 2021 aimed at cultivating future leaders within pharmacy education across the nation.

FACULTY GENDER REPRESENTATION

Even though available data (1950-1963) showed fewer women occupy faculty positions (11% for most years (Fig 2), the 2018-2021 data reported to IPEDS by the IRA of Howard University showed a departure from such trend (Fig 3). Currently, the majority of assistant and adjunct professors at HUCOP are women (81.23% and 85.71%, respectively). This is unsurprising as Holmes in her 2016 publication on “Shattering the Glass Ceiling of Academia” stated that women earned more than 50 percent of all doctoral degrees in the United States between 2006 and 2016 and that women outnumber men in the number of master’s degrees, bachelor’s degrees and associate degrees received in this period.

When it comes to holding key leadership positions in academia in the U.S, women are underrepresented as women make up only 26% of the nation’s College and University presidents, and within the Council of Colleges of Arts and Sciences, only about one-third of deans are women (Johnson, 2016). That is, deanships and other high-level educational leadership roles have fewer women, even though a majority of those entering the profession are female (Gershman, 2021). Women represented only 15% to 16% of pharmacists in the mid-1960s and there were more men in leadership roles in pharmacy. By 2000, there were 82 pharmacy schools in the United States and only 15% of them were led by a female dean. As of October 2020, there were 143 pharmacy schools, 25% of which had a female dean. The percentage of women leading Pharmacy schools is odd, according to Dr. Debra Parker, who is the only female dean among the 7 pharmacy schools in Ohio and the first female pharmacy school dean in the state (Cryts, 2021; Stubbs, 2015). Holmes (2021) referred to Howard University as one of the universities in America bucking that trend. As of 2022, eleven of the fourteen academic deans at Howard University were women.

Howard University is bucking the trend, and HUCOP is not left out. Of the seven deans the College has had between 1942 to 2022, four have been male and three female. This does not include interim deans. Three women, Dr. McCants, current chairwoman of the District of Columbia Board of Pharmacy, Dr. Daphne Bernard and Dr. Beverly C. Mims, the two immediate past chairpersons, hailed from the College (COP, 2020b). While Dean Adelaide Thomas was the first woman dean of an American School of Pharmacy in 1988 (Hamm, 2017), Howard University College of Pharmacy installed its first female dean in 1995. Just as suggested by Dr. Debra Parker, the passage of the Civil Rights Act in 1964 and the Equal Pay Act in 1963, which made it illegal to pay women a lower wage than their male colleagues when the decision is based on their sex, might have been responsible for change women experienced in professional roles, including pharmacists (Cryts, 2021). Spivey et al. (2009) and Chisholm-Burns et al. (2012) hypothesized that the increase is due to access to an expanded pipeline, as the percentage of women compared to men earning pharmacy degrees increased dramatically between 1971 and 1981, from 18% in 1971 to 43% in 1981 and today hovers around 65%. Svarstad et al. (2004) suggested that increased number of female faculty members serving as role models and catalysts for women to enter academic pharmacy; flexible work schedules; availability of non-tenured faculty positions; increased number of faculty positions because of numerous new colleges and schools of pharmacy and added faculty numbers at existing colleges; and greater job satisfaction as the contributing factors.

DISCUSSION

From data provided to IPEDS by IRA of Howard University, for 2018-2019, 2019-2020, and 2020-2021; 33.33%, 28.57%, 28.57% faculty full professors are women, 33.33%, 35.71%, 33.33% of faculty associate professor are women, 80.00%, 90.91%, 78.57% of faculty assistant professor are women and 80.00%, 89.89%, 80.00% of faculty adjunct professor are women. Simulating this data using the 'Forecast Linear' function in excel, there will be a sharp decline in the percentage of women full professors in the College, and by 2030, the forecast states that fewer women (3.98%) will be full professors in the College (Fig 5). Although a decline was also observed for assistant professors, the reduction was gradual and by 2030, a significant number (75.30%) of assistant professors in the College are still expected to be women. The trend for associate professor and adjunct professor is quite constant, maintaining 34.12% and 83.30%, respectively for seven years (Fig 5). According to Cryts (2019), 67% of American Pharmacists Association members are women. As of fall 2019, 64% of pharmacy students were women, a metric that has been steady for 20 years. Since the industry is forward to welcoming many more women into its ranks in the future coupled with Howard University bucking the trend, the future outcome for the HU College of Pharmacy is expected to be much better than this projection, with more women as full professors and associate professors.

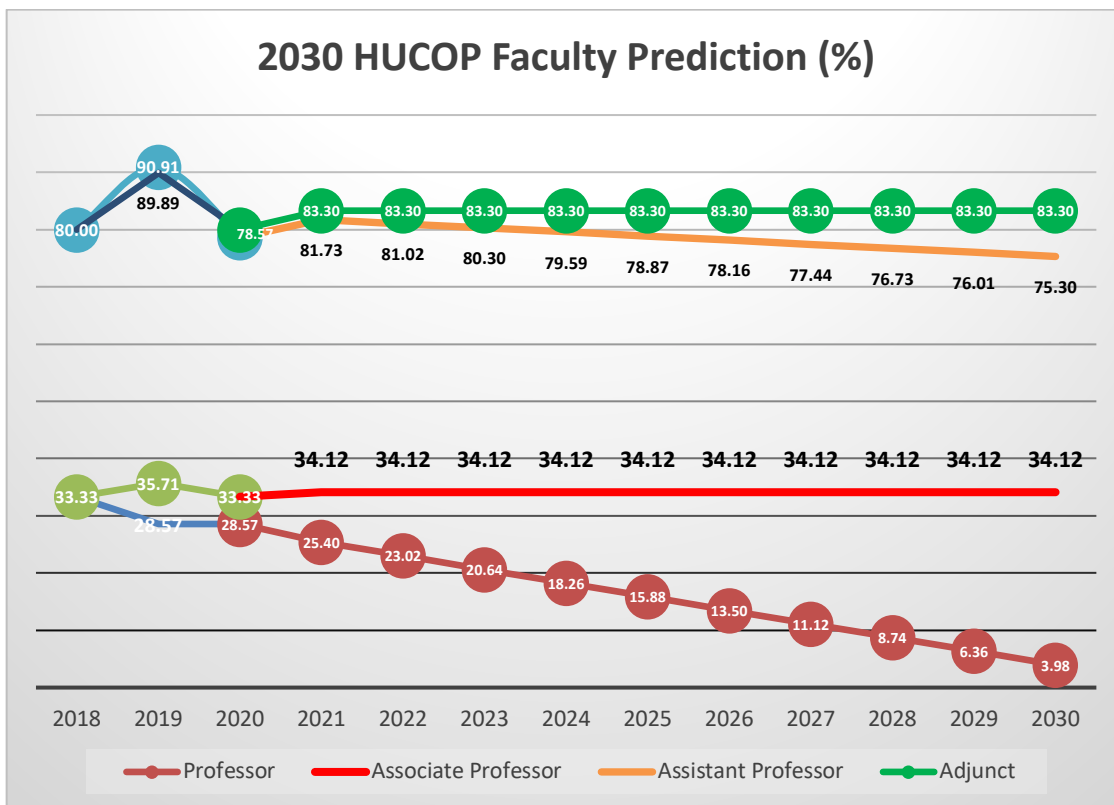


Figure 5: 2030 HUCOP faculty projections using the 'Forecast Linear' function in Microsoft Excel

CONCLUSION

Recruiting and retaining women in academic pharmacy has become a viable career option for women as they are as capable as men of contributing to academic pharmacy. HU College of Pharmacy has made desirable progress when compared to other pharmacy schools in the nation. For example, the College had ten deans between 1942 and 2021, and half of them were women. In 1995, Dr. Eucharia Nnadi-Okolo became the first female dean of the College. Dr. Daphne Bernard happened to be the first female assistant dean (year 2011), associate dean (2013 to 2015), and interim dean (2016). According to IPEDS data from 2018-2021, the majority of the assistant and adjunct professors in the College are women. However, the Pharmaceutical Science Department has only one female faculty member (assistant professor). The large increase in female pharmacy faculty members could be attributed to the rising number of female pharmacy students. To continue and further improve this trend, the author suggests that women in the College should not be reluctant to pursue development and be hopeful about their future possibilities. Administrators should continue to encourage women to achieve their full potential and prioritize the employment of women in Pharmaceutical Sciences. Women's place in HU College of Pharmacy is assured.

REFERENCES

- American Association of Colleges of Pharmacy. (2021). Academic Pharmacy's Vital Statistics. <https://www.aacp.org/article/academic-pharmacys-vital-statistics>
- Best-Pharmacy-Schools.com. (2018). Pharmacy Ranking 2018: Howard University. *Best Pharmacy Schools*. <https://best-pharmacy-schools.com/howard-university>
- Cryts, A. (2021, March 9). Women in Pharmacy Making Strides to Close the Leadership Gap. Drug Topics. <https://www.drugtopics.com/view/women-in-pharmacy-making-strides-to-close-the-leadership-gap>
- Chisholm-Burns, M. A., Spivey, C. A., Billheimer, D., Schlesselman, L. S., Flowers, S. K., Hammer, D., Engle, J. P., Nappi, J. M., Pasko, M. T., Ross, L. A., Sorofman, B., Rodrigues, H. A., & Vaillancourt, A. M. (2012). Multi-institutional study of women and underrepresented minority faculty members in academic pharmacy. *American journal of pharmaceutical education*, 76(1), 7. <https://doi.org/10.5688/ajpe7617>
- College of Pharmacy (COP). (2020). *Student Handbook 2021*. Howard University College of Pharmacy. <https://pharmacy.howard.edu/>
- College of Pharmacy (COP). (2020b). Howard University Pharmacy Professor Selected as DC Board of Pharmacy Chair. Howard University College of Pharmacy. <https://pharmacy.howard.edu/articles/howard-university-pharmacy-professor-selected-dc-board-pharmacy-chair>
- College of Pharmacy (COP). (2020c). 2019-2020 Annual Report. Howard University College of Pharmacy. https://pharmacy.howard.edu/sites/pharmacy.howard.edu/files/2020-12/HU-Pharmacy_AR_Hires-rgb%5B6001%5D.pdf
- College of Pharmacy (COP). (2021a). About Howard University College of Pharmacy. <http://www.huhealthcare.com/education/colleges/pharmacy>
- College of Pharmacy (COP). (2021b). About Howard University College of Pharmacy. <https://pharmacy.howard.edu/>
- College of Pharmacy (COP). (2021c). Faculty and Staff. <https://pharmacy.howard.edu/departments/faculty-and-staff>
- Dyson, W. (1929). *Founding of the School of Medicine of Howard University*. Digital Howard @ Howard University. https://dh.howard.edu/hu_pub/5/
- Gershman, J. P. (2021, March 8). *Gender Gap Still Exists in Pharmacist Leadership*. Pharmacy Times. <https://www.pharmacytimes.com/view/gender-gap-still-exists-in-pharmacist-leadership>
- Hamm, N. (2017, March 10). *Women in Pharmacy: A Look Back*. Drug Topics. <https://www.drugtopics.com/view/women-pharmacy-look-back>
- Hbcu-Colleges.com. (2018). *HBCU Schools Offering Pharmacy Programs - 2018 Ranking*. HBCU Colleges. <https://hbcu-colleges.com/pharmacy>
- Holmes, E. T. (2021). Shattering the Glass Ceiling of Academia. *Howard Magazine*. <https://magazine.howard.edu/categories/features/shattering-glass-ceiling-academia>
- Howard Magazine. (2016). *The Howard Woman*. Howard University. <https://magazine.howard.edu/categories/features/howard-woman>
- Howard Magazine. (2016). New Appointment: Daphne Buchanan Bernard. *Howard University*. <https://magazine.howard.edu/categories/campus-news/new-appointment-daphne-buchanan-bernard>

Howard Newsroom. (2018). *Howard University Pharmacy Dean Tofade Awarded Prestigious 'FIP' Fellowship*. <https://newsroom.howard.edu/newsroom/article/8851/howard-university-pharmacy-dean-tofade-awarded-prestigious-fip-fellowship>
(1925-26: *Catalog of the Officers and Students of Howard University*, 1925)
"1925-26: *Catalog of the Officers and Students of Howard University*" (1925). *Howard University Catalogs*. 48. <https://dh.howard.edu/hucatalogs/48>

Howard University. (2021). People Profile. <https://profiles.howard.edu/>

Howard University. (1950). The Bison: 1950. *Howard University Yearbooks*. 119. https://dh.howard.edu/bison_yearbooks/119

Howard University. (1951). The Bison: 1951. *Howard University Yearbooks*. 120. https://dh.howard.edu/bison_yearbooks/120

Howard University. (1952). The Bison: 1952. *Howard University Yearbooks*. 121. https://dh.howard.edu/bison_yearbooks/121

Howard University. (1953). The Bison: 1953. *Howard University Yearbooks*. 122. https://dh.howard.edu/bison_yearbooks/122

Howard University. (1954). The Bison: 1954. *Howard University Yearbooks*. 123. https://dh.howard.edu/bison_yearbooks/123

Howard University. (1955). The Bison: 1955. *Howard University Yearbooks*. 124. https://dh.howard.edu/bison_yearbooks/124

Howard University. (1956). The Bison: 1956. *Howard University Yearbooks*. 125. https://dh.howard.edu/bison_yearbooks/125

Howard University. (1957). The Bison: 1957. *Howard University Yearbooks*. 126. https://dh.howard.edu/bison_yearbooks/126

Howard University. (1958). The Bison: 1958. *Howard University Yearbooks*. 127. https://dh.howard.edu/bison_yearbooks/127

Howard University. (1959). The Bison: 1959. *Howard University Yearbooks*. 128. https://dh.howard.edu/bison_yearbooks/128

Howard University. (1960). The Bison: 1960. *Howard University Yearbooks*. 129. https://dh.howard.edu/bison_yearbooks/129

Howard University. (1962). The Bison: 1962. *Howard University Yearbooks*. 131. https://dh.howard.edu/bison_yearbooks/131

Howard University. (1963). The Bison: 1963. *Howard University Yearbooks*. 132. https://dh.howard.edu/bison_yearbooks/132

Howard University. (1964). The Bison: 1964. *Howard University Yearbooks*. 133. https://dh.howard.edu/bison_yearbooks/133

Howard University. (1967). The Bison: 1967. *Howard University Yearbooks*. 136. https://dh.howard.edu/bison_yearbooks/136

Howard University. (1972). The Bison: 1972. *Howard University Yearbooks*. 141. https://dh.howard.edu/bison_yearbooks/141

Institutional Research and Assessment (IRA). (2021). Faculty on payroll as reported to as reported to IPEDS for reporting year 2018-2021. *Howard University*. <https://ira.howard.edu/dashboards>

- Johnson, L. H. (2016). *Pipelines, Pathways, and Institutional Leadership: An Update on the Status of Women in Higher Education*. Washington, DC: American Council on Education.
- Garza, A. (2020, August 17). *Happy Mother's Day to Women Pioneers in Pharmacy*. Digital Pharmacist. <https://www.digitalpharmacist.com/blog/happy-mothers-day-women-pioneers-pharmacy/>
- Spivey, C. A., Chisholm-Burns, M. A., Murphy, J. E., Rice, L., & Morelli, C. (2009). Assessment of and recommendations to improve pharmacy faculty satisfaction and retention. *American Journal of Health-System Pharmacy*, 66(1), 54-64. <https://doi.org/10.2146/ajhp080142>
- Stubbs S. (2015). *Debra Parker selected as new Dean for the College of Pharmacy*. The Pulse. <https://pulse.findlay.edu/2015/uncategorized/news/debra-parker-selected-as-new-dean-for-the-college-of-pharmacy/>
- Schudel, M. (2005, September 24). *Cecile H. Edwards Dies at Age 78*. Washington Post. <https://www.washingtonpost.com/archive/local/2005/09/24/cecile-h-edwards-dies-at-age-78/fc53ed51-182a-40bd-b4b7-3c097f298f27/>
- Svarstad, B. L., Draugalis, J. R., Meyer, S. M., & Mount, J. K. (2004). The Status of Women in Pharmacy Education: Persisting Gaps and Issues. *American Journal of Pharmaceutical Education*, 68(3), 79. <https://doi.org/10.5688/aj680379>
- Worthen, D. B. (2006). Chauncey Ira Cooper (1906-1983): Champion of Minority Pharmacists. *Journal of the American Pharmacists Association*, 46(1), 100-103. <https://doi.org/10.1331/154434506775268571>