

Patricia Bath

Harlem, New York ' Howard University ' Columbia ' UCLA

In Sixty Seconds

Origins. Patricia Era Bath was born on November 4, 1942 in Harlem. Her father, Rupert, was a merchant marine and the first Black motorman on the New York City subway system. Her mother, Gladys, cleaned houses and saved for her children's books. At sixteen Patricia won a National Science Foundation summer cancer-research fellowship at Yeshiva University. The program director cited her work in a published paper. She graduated from Charles Evans Hughes High School in two and a half years.

Work. She earned her bachelor's from Hunter College in 1964 and her MD from Howard University College of Medicine in 1968. She did her internship at Harlem Hospital, then her ophthalmology residency at New York University from 1970 to 1973, the first Black woman in the country to complete one. At Columbia she helped launch the field of community ophthalmology, running blindness-prevention clinics out of Harlem Hospital. She joined the UCLA Jules Stein Eye Institute faculty in 1974 and chaired the UCLA ophthalmology training program.

Impact. On May 17, 1988, she received U.S. Patent 4,744,360 for the Laserphaco Probe, a device that uses a laser to remove cataracts in about one minute, replacing the grinding mechanical tools that had dominated cataract surgery for decades. She was the first Black woman physician in the United States to receive a medical patent. She filed four more on successor versions of the probe. She also co-founded the American Institute for the Prevention of Blindness in 1976 with the founding premise that eyesight is a basic human right.

Legacy. The Laserphaco Probe and its successors restore sight to cataract patients around the world, including in low-resource regions where Bath ran screening campaigns personally. UCLA's Dr. Patricia Bath Institute for Eye Care supports her continuing research program. The U.S. Postal Service issued a Black Heritage stamp in her honor in 2021. In 2022 she was inducted, posthumously, into the National Inventors Hall of Fame. Her daughter, Eraka Bath, a UCLA psychiatrist, carries the family's medical work forward.

The Network

Eraka Bath

Daughter. Child and adolescent psychiatrist and associate professor at the UCLA Semel Institute for Neuroscience and Human Behavior. Has continued her mother's work on health-care disparity and preserves the family's record of her mother's research.

Gladys Bath

Mother. A domestic worker from North Carolina. Bought her daughter the first chemistry set and microscope on household-cleaning wages and told her she would be a doctor.

John Bath

Father. Merchant marine sailor from Trinidad. One of the first Black motormen on the New York City subway system. Took his daughter to Harlem Hospital as a child and told her that Harlem's health problems were solvable with the right science.

Lois Young-Tafari

Co-founder. Co-founded the American Institute for the Prevention of Blindness with Bath in Washington, D.C. in 1976. Helped build its early community-screening programs.

For Discussion

1. Bath co-founded the field of community ophthalmology in the late 1960s, treating eye care as a public-health discipline delivered through neighborhood clinics, public schools, senior centers, and barber shops. What does that framing teach about the relationship between specialist medicine and public health, and where else has a specialty redefined itself as a public-health practice?
2. The UCLA Medical Center initially offered Bath a basement office labeled honorary faculty office, which she refused. What is the social meaning of a physical space offered to a first-of-kind hire, and when does the offer of space itself disqualify the institution as a good-faith employer?
3. The Laserphaco Probe reduces cataract removal to roughly one minute in competent hands. The impact on population-level vision outcomes is cumulative across millions of procedures. What is the right way to evaluate a surgical invention whose total contribution only aggregates slowly across decades of clinical practice?
4. The American Institute for the Prevention of Blindness was founded on the premise, written by Bath in 1976, that eyesight is a basic human right. What kinds of conditions can a nonprofit operationally declare basic human rights, and where does the declaration produce changes in how those conditions are treated?
5. Bath's five U.S. patents made her the first Black woman physician in the United States to hold a medical patent. What specific barriers, formal and informal, kept Black women physicians from the patent system before 1988, and what barriers remain today?

Primary Sources

1. Bath, Patricia E. NIH oral history interview, Changing the Face of Medicine series, National Library of Medicine, 2003.
2. Bath, Patricia E. TED talk, The Right to Sight, TEDMED, 2013.
3. United States Patent and Trademark Office. U.S. Patent 4,744,360, Apparatus for Ablating and Removing Cataract Lenses, issued May 17, 1988.
4. National Library of Medicine. Patricia E. Bath Papers and the Changing the Face of Medicine exhibition records.



5. Slotnik, Daniel E. "Patricia Bath, 76, Who Took On Blindness and Earned a Patent, Dies." The New York Times, June 4, 2019.

