STORIES OF BECOMING

SHE SAW WHAT OTHERS OVERLOOKED



How one woman's determination to make sight accessible changed the possibilities of eye surgery

DR PATRICIA ERA BATH (1942–2019)
Ophthalmologist. Inventor. Humanitarian. Pioneer.

Some of the most important innovations begin with a simple observation: something isn't right, and it doesn't have to remain that way.

Dr Patricia Bath noticed that access to eye care was unequal. People who needed treatment were not always receiving it.

She would go on to challenge that inequality, break barriers in medical science and develop an invention that helped advance cataract treatment.

But her story began long before the patent.

A CURIOSITY THAT WOULD CHANGE LIVES

Born in Harlem, New York, in 1942, Patricia grew up in a family that encouraged learning and curiosity.

Her father, Rupert, an immigrant from Trinidad, worked as a subway motorman and nurtured her interest in the wider world. Her mother, Gladys, encouraged her interest in science by buying her a chemistry set. She also worked as a cleaner to help support her children's education.

Patricia's academic ability became apparent early. At just 16, she was selected for a National Science Foundation summer research programme at Yeshiva University. There, she worked on cancer research and contributed to a mathematical equation predicting cancer cell growth.

She completed high school in two and a half years, graduated from Hunter College in 1964 and earned her medical degree from Howard University in 1968.

Her curiosity had become a calling.

SEEING THE PROBLEM BEHIND THE PROBLEM

During her medical training, Patricia worked at Harlem Hospital and later undertook ophthalmology training at Columbia University.

She began noticing a troubling difference between the patient populations she encountered.

Her research identified significant disparities in blindness and eye disease affecting Black patients from Harlem compared with the predominantly white patient population at Columbia.

She recognised that unequal access to eye care was a major part of the problem.

Rather than accepting this as an unavoidable reality, she began working towards a different approach.

She advocated for eye surgery services at Harlem Hospital and helped develop an approach she called Community Ophthalmology, combining medical treatment, prevention, education and community outreach.

Her philosophy extended beyond treating an individual patient. She wanted to change the circumstances that prevented people from receiving care in the first place.

In 1977, she co-founded the American Institute for the Prevention of Blindness, built around the principle that eyesight should be protected and restored regardless of a person's circumstances or ability to pay.

WHEN THE DOORS DIDN'T OPEN

In 1974, Patricia moved to Los Angeles to continue her medical career.

The following year, she became the first woman faculty member at UCLA's prestigious Jules Stein Eye Institute.

Yet professional recognition did not mean she was welcomed without resistance.

She encountered racial and gender discrimination. Colleagues excluded her from surgical opportunities and denied her access to laboratory space. At one point, she was offered an office in a basement next to laboratory animals.

She challenged the placement and secured appropriate working space.

Rather than allowing institutional barriers to define her professional future, she continued to develop her expertise. She also pursued international research into laser technology, including work in Berlin, Paris and Loughborough in England.

In 1983, she became the first woman in the United States to chair an ophthalmology residency training programme.

Her career was progressing, but her most significant invention was still taking shape.

THE INVENTION THAT HELPED RESTORE SIGHT

In 1981, Patricia conceived an idea that would become her most celebrated invention: the Laserphaco Probe.

Cataracts cloud the eye's natural lens and can eventually cause blindness. Patricia wanted to develop a more precise and less invasive way to remove them.

Her idea was to harness laser technology to break down the clouded lens through a small incision. The instrument also incorporated irrigation and suction to help remove the resulting fragments.

It took years of research, experimentation and technical development to turn the concept into a working device.

On 17 May 1988, she received US Patent No. 4,744,360 for her invention.

She became the first Black woman physician to receive a US medical patent.

Her Laserphaco technology subsequently entered use internationally. Patricia went on to hold five US patents and additional international patents related to her innovations in cataract treatment.

This was not simply an achievement in medical engineering. It was the result of someone recognising an unmet need, questioning existing methods and persisting until she could offer something different.

A LEGACY BEYOND THE INVENTION

Patricia continued to advocate for accessible healthcare, blindness prevention and opportunities for future generations of scientists.

Her work extended into international health initiatives and telemedicine, reflecting her belief that medical care should reach people regardless of where they lived.

She died in May 2019, aged 76.

Her legacy is not confined to a single device or patent. It includes the patients who received better care, the barriers she challenged and the generations of women and underrepresented scientists who could see what was possible through her example.

A THOUGHT TO TAKE WITH YOU

> "Do not allow your mind to be imprisoned by majority thinking. Remember that the limits of science are not the limits of your imagination."
>
> **DR PATRICIA BATH**

Perhaps the most powerful part of Patricia's story is that she didn't wait for someone else to imagine a better possibility.

WHAT CAN WE TAKE FROM HER STORY?

Patricia Bath's journey offers a valuable reminder that personal evolution is not always about changing who you are.

Sometimes it is about recognising what you have always been capable of, but have not yet had the opportunity, confidence or circumstances to explore.

She noticed a problem others had accepted. She challenged the limitations around her. She developed new skills and pursued an idea that took years to realise.

Her story also reminds us that achievement and contribution are not necessarily the same thing. The greatest measure of what we accomplish may be the difference it makes to someone else's life.

You don't need to invent a medical device to apply that thinking. You might simply need to question a belief, revisit an ambition or recognise an opportunity that you have previously overlooked.

YOUR GLIDE REFLECTION

Take a moment to consider these three questions.

1. **What have you accepted as a limitation?**
   Is there something in your life that you have come to believe cannot change, simply because it has always been that way?
2. **What are you noticing that others might overlook?**
   Could an everyday frustration, an unmet need or a recurring challenge actually be an opportunity to do something differently?
3. **What would you pursue if you stopped waiting for permission?**
   Is there an idea, ambition or new direction that deserves more of your attention?

ONE STEP TO TAKE

This week, challenge one accepted limitation.

Choose something you have been putting off, assuming is beyond your reach or believing cannot be changed.

Don't worry about solving everything immediately.

Instead:

- Identify what you would like to be different.
- Question the assumption that is holding you back.
- Find one person, resource or opportunity that could help.
- Take one practical step towards making it happen.

Small changes in how we see possibilities can lead to significant changes in what we do next.

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EDITORIAL SOURCES

1. National Women's History Museum: Patricia Bath biography. womenshistory.org/education-resources/biographies/patricia-bath 2. Smithsonian Institution, Lemelson Center: Innovative Lives, The Right to Sight. invention.si.edu/invention-stories/innovative-lives-right-sight-patricia-bath 3. National Inventors Hall of Fame: Patricia Bath. invent.org/inductees/patricia-bath 4. United States Patent No. 4,744,360, issued 17 May 1988.

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