On the occasion of her bicentenary, Upstate Medical University has launched a campaign to honor the legacy of one of its most famous graduates: America's first female doctor.

he first woman in America to receive a medical degree, Elizabeth Blackwell, MD, was born on February 3rd, 1821. She graduated first in her class in 1849 from Geneva Medical College, which is the predecessor of what is known today as Upstate Medical University. In 2021, Upstate is commemorating Dr. Blackwell's 200th birthday with a series of events and the launch of the Elizabeth Blackwell 200th Anniversary Legacy Campaign. The fundraising effort is intended to build upon Upstate's efforts to celebrate her life and contributions and will support the commissioning of a sculpture of Blackwell for the University grounds and the establishment of an Elizabeth Blackwell Scholarship for medical students.

"Today, more than half the students at American medical schools, including Upstate, are women. That is due at least in part to the bravery and intellect of Elizabeth Blackwell, who opened the door for women in the medical profession. We are proud to have her among our alumni ranks," says Paul Norcross, executive director of the Upstate Medical Alumni Foundation. "This fundraising effort



Second-year medical students Sruti Akula and Neelima Dosakayala celebrate Blackwell's 200th birthday (photo taken pre-COVID).

celebrates the 200th anniversary of her birth as a platform to honor an American icon and support future students who share her passion."

To categorize Blackwell as a trailblazer is an understatement. In the 1840s, the idea of a woman pursuing medicine was unthinkable. Nonetheless, it wasn't until 1964 that Upstate first began recognizing its pioneering female physician. Patricia Numann, MD '65, one of 15 female students in the entire College of Medicine at the time, was among a group of female students, faculty, and alumni who conceived of the idea to honor Blackwell. "We raised \$500 for Joe Kozlowski to paint her portrait, which was more than a semester's tuition in those days," she says.

At the portrait unveiling, Upstate President Carlyle Jacobsen, PhD, surprised attendees with the announcement of a campus street to be named after Blackwell. Construction of Elizabeth Blackwell Street–located across from the hospital entrance and between East Adams and Harrison streets in Syracuse-was part of the site planning for the downtown hospital, which now runs between the hospital parking garage on one side, and Jacobsen Hall, the Campus Activities Building, and Health Services on the other.

The College also started a lecture series in Blackwell's name, held every February. Mary Voorhees, MD, assistant professor of pediatrics, gave the first Elizabeth Blackwell Day Lecture back in 1964.

This year, due to the pandemic, the Blackwell Lecture has been postponed to September. In February, Upstate sponsored an interview on its award-winning radio show Health-Link on Air with Janice Nimura, author of *The Doctors Blackwell: How Two Pioneering Sisters Brought Medicine* to Women and Women to Medicine. The widely-heralded book, published in January, tells the unlikely story of Elizabeth Blackwell and her younger



sister Emily, who both became pioneering female physicians.

In the interview, Nimura said she spent five years writing the book, which included a research visit to Geneva, New York, to walk the streets and view the buildings that Elizabeth did while in medical school.

According to Nimura, Elizabeth was largely imprinted by her upbringing. Born in Bristol, England, she and her nine siblings came to the United States with their parents as children, settling in the frontier town of Cincinnati, Ohio. Her father was an abolitionist and sugar refiner, whose life's goal was to make sugar from sugar beets without slave labor. Unfortunately, he died shortly after their arrival, leaving his large family struggling to make a living. His five daughters received a clear message: having a husband was no guarantee of security. None of the five Blackwell sisters ever married and two of the Blackwell sons married prominent feminists of the day, Lucy Stone and Antoinette Brown.

All nine children received the same education, a combination of schools and tutors that Nimura describes as "patchwork but passionate.



Daguerreotype portrait of Elizabeth Blackwell



The first building of Geneva Medical College, the Middle Building, stands between Geneva Hall on the right and Trinity Hall on the left.

I don't think any of them spent much time sitting in classrooms, but they all read avidly and discussed what they read. Education and intellectual pursuit were of paramount importance," she says.

As a young person, Elizabeth became interested in the writings of Margaret Fuller, a journalist and women's rights advocate who wrote Woman in the 19th *Century*. Fuller argued that "women could do anything that men did, it was just a matter of talent and toil, not gender," says Nimura. "Elizabeth had a healthy self-esteem and saw herself as someone who could embody this idea-find a way to prove that women could do anything men could doand medicine turned out to be the path she chose as sort of a graphic way of making this point, not necessarily to be a healer or because she was passionate about biology."

For the time, it was a profoundly eccentric choice. Medical schools in the United States did not admit women. After being rejected by 29

medical schools, Blackwell was accepted by Geneva Medical College, but only because the faculty put it up to a student vote, and as a practical joke, the 150 male students unanimously voted to admit her to their ranks. No one thought it was a joke when she graduated at the top of her class and the dean bowed to her at graduation.

But earning her medical degree was easy compared with what came next. Not only would no one hire her, but when she started her own

practice, Blackwell struggled to gain patients. Women wealthy enough to choose their own doctors did not trust a female physician. Together with her younger sister Emily, who she had encouraged to pursue medicine five years after her, Blackwell founded the New York Infirmary for Indigent Women and Children. The clinic, which also served as a nurse's training facility, was funded by "charitable donations from wealthy people who liked the idea of a woman doctor serving the poor, but didn't necessarily want to be consulting one themselves," says Nimura. Later, the sisters started their own medical school, the Women's Medical College of the New York Infirmary, to provide women with access to the best medical education available. By the end of the 19th century, new medical schools such as Cornell and Johns Hopkins were admitting women and the College closed in 1899.

In 1869, Blackwell returned to England, where she worked with Florence Nightingale and four others to establish the first medical school

for women in England, the London School of Medicine for Women. By the time Blackwell died in 1910, there were around 9,000 female physicians in the United States, many of whom studied at the Women's College for

Medicine or trained at the New York Infirmary for Women. With her book climbing bestseller lists, Nimura says the interest in



Blackwell's story owes partly to timing. "With the inauguration of our first female vice president, I think it's the right moment for redefining a heroine in our imaginations," she says.

For the Upstate community today, Blackwell represents the institution's mission to improve health through education, biomedical research and patient care and its core values, including innovation, respect, diversity and inclusion. "Elizabeth Blackwell is the most recognized woman physician in the world. As her alma mater, I believe that she should be visible daily and honored with the best tributes we have to offer," says Dr. Numann.

The centerpiece of that effort is to establish an Elizabeth Blackwell, MD, Scholarship, which will be used to support students who share Blackwell's resilience, passion, and service to the indigent and to population health. According to Norcross, the goal is to raise enough funds to create an endowment that will fund a full annual scholarship. "Elizabeth Blackwell is a major figure in medical history. As her alma mater, we want the scholarship in her name to be appropriate to her stature," he says.

And in an effort to honor Blackwell in a public way, Upstate has commissioned sculptor Sharon BuMann to create a life-size bronze sculpture of Blackwell as a 26-year-old medical student for the Weiskotten Courtyard. A native Central New Yorker, BuMann has previously created well-known public sculptures of surgeon and women's rights advocate Mary Edwards Walker, MD, blues musician Libba Cotton, and the Syracuse Jerry Rescue Memorial.

"The statue will be seen by anyone entering Weiskotten Hall, and hopefully, will be the first in a sculpture garden with other

note-worthy alumni," says Numann.

The Legacy Fund also supported the creation of a commemorative exhibit on Elizabeth Blackwell, sponsored by the Health Science Library and curated by Cara Howe, assistant director of archives and special collections (see companion story).

A s a counterpoint to her interview with Janice Nimura about Elizabeth Blackwell, HealthLink on Air host Amber Smith also interviewed current students Sruti Akula '23 and Neelima Dosakayala '23, who have been involved with activities surrounding the 200th birthday commemoration, about their experiences as female medical students today .

"If I could speak to her today, I would definitely thank her," says Akula. "As a female in the field, I'm fortunate not to really feel any difference from my male colleagues."

"Not only was she a pioneer in being the first, but she set a foundation for other women to follow," adds Dosakayala. "In addition to fighting for women, she also fought against racial inequity. I thank her for starting the work and I'm proud to be able to continue it."

To contribute to the Elizabeth Blackwell Legacy Campaign, please contact Paul Norcross at norcrosp@upstate.edu or visit https://medalumni.upstate.edu/ elizabeth-blackwell.

"It Shall Be the Effort of My Life"

## The Work and Words of Elizabeth Blackwell, MD

o commemorate the 200th anniversary of the birth of Elizabeth Blackwell, the Health Sciences Library Archives and Special Collections has launched an exhibit focusing on her life and legacy—the triumphs, challenges, and sacrifices made by this pioneer in the history of medicine.

According to Cara Howe, assistant director, archives and special collections, the exhibit was assembled from Upstate's own small collection, as well as research conducted at the Library of Congress and the Schlesinger Library at Harvard University, which both have large repositories of Blackwell family papers. She also drew heavily from Blackwell's autobiography, *Pioneer Work in Opening the Medical Profession to Women*.

"I really wanted to include her own words for this exhibit," says Howe. "Many of the secondary resources tend to all quote the same content from her, the same quotes repeated. I wanted to spend some time with Dr. Blackwell's words and her memoir was a really wonderful source."

Howe believes Blackwell's legacy to the institution cannot be overstated. "To claim the first woman doctor as an alumna of our institution really helps set the stage for current diversity and inclusion initiatives," she says. "It demonstrates a strong commitment to that that reaches back to the earliest years."

## THE FOLLOWING IS AN EXCERPT FROM THE EXHIBIT:

Steady, Uphill M

reviously a student of the metaphysical, Elizabeth needed to discover if she could overcome the repulsion she felt for the corporeal nature of medicine. Her first exposure to anatomical studies was shepherded by a Dr. Allen who, knowing of her aversion, helped her to see the artistry of the body, igniting a newfound appreciation for the aesthetics of the subject. With this initial hurdle surmounted, Elizabeth sent letters of inquiry to medical schools in Philadelphia and New York. Invariably, she received rejections with repeating themes; either women were not physically able to withstand the rigors the education and training required, or it was considered immoral for them to have intimate knowledge of the body. Most especially, the idea of a woman receiving anatomical training along-side men was unconscionable.

When her letter of acceptance finally came, from a small school in Upstate New York, she had no idea that her admittance was actually the product of a practical joke. The faculty of Geneva College of Medicine, not wanting to refuse her entrance outright, had put the question of her

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Diploma awarded to Elizabeth Blackwell, MD. Geneva College of Medicine.

OURTESY OF THE NATIONAL LIBRARY OF MEDICINI

admittance to the student body, assuming the young men would balk at the idea of studying along-side a woman. The students, assuming the application could only be a hoax, unanimously voted to admit Elizabeth.

To their surprise, the product of their joke arrived in November 1847 to begin her studies. Though the citizens of Geneva gave her a wide berth and suspicious stares, she found her classmates to be ultimately accepting of her presence and respectful of her person. Her self-contained demeanor and commitment to her studies soon won the respect of the faculty. When one of her greatest supporters, Dr. James Webster, tried to dissuade her from attending anatomy lectures with the rest of the class, she sent a letter that was roundly applauded by the group and cemented her presence in the front-row for all demonstrations. When she graduated at the top of her class on January 23, 1849, the valedictory address, delivered by Dean Charles Lee, exalted Elizabeth as a novelty. Despite proof that a woman could fulfill the requirements of a medical course of study, even those who witnessed it first-hand were not prepared to agree that it was anything more than a fluke.



"...I commenced my anatomical studies in the private school of Dr. Allen. This gentleman by his thoughtful arrangements enabled me to overcome the natural repulsion to these studies generally felt at the outset. With a tact and delicacy for which I have always felt grateful, he gave me as my first lesson in practical anatomy a demonstration of the human wrist. The beauty of the tendons and exquisite arrangement of this part of the body struck my artistic sense, and appealed to the sentiment of reverence with which this

anatomical branch of study was ever afterwards invested in my mind."

Pioneer Work in Opening the Medical Profession to Women: Autobiographical Sketches by Elizabeth Blackwell (1895)

"I therefore obtained a complete list of all the smaller schools of the Northern States...and sent in application for admission to twelve of the most promising institutions, where full courses of instruction were given under able

professors. The result was awaited with much anxiety... At last, to my immense relief (though not surprise, for failure never seemed possible), I received the following letter from the medical department of a small university town in the western part of the state of New York." *Pioneer Work in Opening the Medical Profession to Women: Autobiographical Sketches by Elizabeth Blackwell* (1895)

edical education of this era was sparse at best, with the American Medical Association being formed in 1847 to address the inconsistent and ineffective education most medical students received. Attendance at lectures for 16 weeks was required, two years in a row, with some preliminary years of study under the guidance of a practitioner. If a student managed to scrape together some observations in between terms, that was likely to be their only exposure to a real patient before receiving their diploma.

"Knowing very little of practical medicine, I finally decided to spend the summer, if possible, studying in the hospital wards of the great Blockley Alms House of Philadelphia."

Pioneer Work in Opening the Medical Profession to Women: Autobiographical Sketches by Elizabeth Blackwell (1895)



Lithograph of Blockley Almshouse in 1838

A s the medical curriculum afforded almost no practical training, students were responsible for seeking their own clinical opportunities between terms. The awakening Elizabeth experienced at Blockley, where the poorest of Philadelphia society suffered through debilitating illness in inhumane conditions, was pivotal. Though she chose to write her thesis on the typhoid cases she observed here, significant time spent in the women's Syphilis wards opened her eyes to the moral degeneration of society, which she would proselytize against for the duration of her career.

"But this terrible epidemic furnished an impressive object-lesson, and I chose this form of typhus as the subject of my graduation thesis, studying in the midst of the poor dying sufferers who crowded the hospital wards."

Pioneer Work in Opening the Medical Profession to Women: Autobiographical Sketches by Elizabeth Blackwell (1895)



Map of death rate of typhoid fever in the Mid-Atlantic region

COURTESY OF THE DAVID RUMSEY MAP

COLLECTION,

Izabeth observed throngs of Irish immigrants fleeing the famine, exiting ships infected with typhoid fever, spilling into the halls of Blockley Almshouse. Her thesis shows great insights regarding how little was actually understood about disease; germ theory was mocked as Quackery, in favor of the miasma theory that blamed "bad air" for the spreading of illness. Yet, her writings also demonstrate little sympathy for the patients, who she observed in a rather calculated manner.



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Valedictory Address to the Graduating Class of the Geneva College of Medicine at the Public Commencement.

"After the degree had been conferred on the others, I was called up alone to the platform. The President, in full academical costume, rose as I came on the stage, and, going through the usual formula of a short Latin address, presented me my diploma. I said: 'Sir, I thank you; it shall be the effort of my life, with the help of the Most High, to shed honour on my diploma.' The audience applauded..." *Excerpt from Journal (1849)* 

The same residents of Geneva who had ridiculed her turned out in droves to witness the conferring of diplomas. When she was invited to process down the aisle with the rest of the graduates she refused, pointing out that parading in public was inappropriate for a lady. After the ceremony, her brother Henry escorted her out of the First Presbyterian Church past an enthusiastic crowd that included many women.



To view the exhibit in its entirety, visit https://hsl.upstate.edu/ blackwellexhibit.