

# A Lofty Mountain to Scale

## *A Tale of Perseverance*

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**S**ince you of the Western Surgical Association have honored me by choosing me as your first woman president, I thought it only fitting to recognize those women physicians who preceded me.

Today as I present this address on the history of women in medicine and surgery, I want to propose to you that over time there has been an intense desire on the part of women to be equally educated with their male peers. This desire has in turn allowed them to learn the science and art of treating their fellow human beings. However, to achieve this, they have had a lofty mountain to scale and have had to find a formidable measure of perseverance.

Margaret Mead, the famous anthropologist, was once asked when human civilization began. One might have thought her answer would be about the evidence of a tool or artifact. However, she answered that the first evidence was of a healed femoral fracture, which indicated that an individual cared enough about another human being to provide food, warmth, and time to allow the fracture to heal. Thus from prehistoric times, we have evidence of medical care being provided.

Let us begin with the first woman physician in recorded history. Her name was Presehet. She lived in Egypt in roughly 2500 BCE. The hieroglyphics on her tomb indicate that she supervised both female and male physicians. During this time in history, the sexes had equal social and educational status. Medicine was taught as a science with specialization (eg, surgeons, ophthalmologists). She taught with a modern approach to patient care involving medical history and the physical, diagnosis, prognosis, and therapy.<sup>1</sup>

Documentation about women doctors in Greece and Rome is quite rare. The



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few facts available show that Greek and Roman women physicians were a small percentage of total physicians, but that they were an everyday presence in the world dating from 500 BCE. Plato stated that assignments in medicine should be based on the individual's aptitude and not on physical differences. The Greek language attests to the presence of women doctors in the Greek word meaning "doctress."

Roman literature refers to women doctors as an accepted part of the scientific community with the Latin word *medica*, meaning female doctor. One Roman *medica*, Metrodora, writes of vaginal infections and use of the vaginal speculum.

Both in Greece and Rome, women physicians had the same forms of training and education as male doctors. Many were well educated, contributed to medical literature, and added to the grand tradition of medicine.<sup>2</sup>

During the Middle Ages, the lady of the manor or the abbess of the convent provided most of the medical care in Europe

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and England. These women had no formal training. Many were well informed from the writings of their time and were frequently the only source of medical care. If they were fortunate, through the lenience of a father or brother, they were allowed to learn Latin and thus obtain a medical education. In fact, the church questioned whether women even had souls. On the theological scale, God was first, the Pope was second and women were placed below oxen.

By the 12th century, there was Avicenna of the Arab schools, Greek texts by Galen and Hippocrates were entering Western Europe, and the governments had begun intervention into regulating medical practice. The church supported these laws, and it is at this time in history that women began to lose any possibility for education. It is no wonder then that women, if they practiced medicine, were linked to witchcraft and magical practice because of their gender-specific weakness.

However, Trotula was the greatest woman physician of the Middle Ages and served on the Salerno medical faculty.<sup>3</sup> In Venice during the 11th century, the College of Physicians and Surgeons issued licenses to barber-surgeons of both sexes.<sup>4</sup>

Much of the work performed by women physicians and surgeons during the Middle Ages was done among the poor because there was less competition from the men who were members of the guilds and took care of the wealthy. Women were sometimes allowed to work in hospitals, and some became skilled at setting fractures and closing wounds.

One person of high rank, King Charles II of England (1630-1685), employed a woman surgeon, a Mrs Holder, who was able to heal his hand wound where others had failed.<sup>5</sup>

The involvement of women who had been educated in medicine and surgery produced either scorn or criticism by their male contemporaries. However, occasionally they were praised relevant to their work among the poor. Accusations of witchcraft were frequent, and most of the leading men of the time were unfriendly to all women engaged in medical practice, despite their level of education.

During the 18th century, the status of the surgeoness declined; they were not taken seriously and were frequently regarded as figures of fun. By this time, licensing of female surgeons had been prohibited. By the middle of the 19th century, the surgeoness had disappeared. So completely had she been lost in history that it is surprising that for many centuries, those women, other than nurses and midwives, held the titles of apothecary, surgeon, and physician.<sup>6</sup> The reorganization of the medical profession and the enactment of the medical registrar in 1858 prohibited women from attending the universities. Thus, after scaling part of the lofty mountain, women physicians fell to its base and disappeared from the scene of medical education and practice.

Let us turn to an interesting historical figure, a British medical officer who served from 1813 to 1865 in the army, and who achieved a ranking post of the service from 1858 to 1865. This person was known as Dr Frank Berry. He received his diploma from the University of Edinburgh in 1812. In 1813, he entered the British Army as a hospital mate, and in 1815, he was promoted to assistant surgeon for courage at the Battle of Waterloo and was made Inspector General of Hospitals in 1858. He was described as short and eccen-

tric with a high thin voice, but no one questioned his capabilities and competence. But the big surprise was that when he was buried, it was discovered that he was a she, and that she had succeeded in this impersonation to achieve her goal in the only way available to her during the time that she lived.

We will now cross the Atlantic Ocean and review some of the very persevering personalities on this continent.

The first woman medical graduate from an approved American medical school was Elizabeth Blackwell. In 1845, living in the home of a physician, she attended lectures of Joseph Warrington, MD, who sponsored her by a letter of recommendation to Geneva Medical College. A woman student was unheard of; the faculty opposed it, but they did not want to oppose the well-known Dr Warrington. To evade the issue, they referred the responsibility to the students, who thought it was a hoax and laughingly voted for it. Elizabeth was admitted in 1846 and attended school for 3 years. She graduated at the head of her class in 1849.<sup>7</sup> However, because it had caused too much notoriety for the college, she received her diploma in a back room and not with the rest of the class. No other woman graduated from that college until 1855. Geneva Medical College eventually became the College of Medicine at Syracuse University in 1872, and is today the State University of New York Upstate Medical Center.<sup>8</sup>

When Dr Blackwell moved to New York City, she was refused a place in the women's section of the city's dispensary. Having been rejected, she opened a dispensary of her own, which became the New York Infirmary for Indigent Women and Children. In a few years, this institution provided a source for postgraduate training for women in medicine, and eventually provided a MD diploma.

By 1871, 9 women had received their medical degrees from schools recognized by the American Medical Association (founded in 1847): 2 from Geneva Medical College, 6 from Cleveland Medical College, and 1 from Chicago Medical College. Established medical schools had long been in existence but did not accept women. The earliest of these was the University of Pennsylvania, Philadelphia, in 1765, and the Medical School of King's College in New York in 1768, which later became Columbia University.

Emily Blackwell, Elizabeth's sister, was also drawn to a career in medicine. However, she was refused admission to Geneva Medical College, as that institution's faculty was still rebounding from the publicity relative to Elizabeth's acceptance. Emily was turned down by 9 approved medical schools before she was admitted to the Rush Medical College of Chicago in 1852; however, the Illinois Medical Society protested, and she was denied admission for the next session. She finally was accepted at Cleveland Medical College and graduated in 1854. As was the custom, she did her postgraduate training in Europe and England as an assistant to Sir James Simpson at Edinburgh University. Simpson had introduced chloroform and its usage in obstetrics. She returned to New York to work with her sister at the New York Infirmary. By 1859, 300 women had graduated in medicine from that institution. Their patients were from the tenements, and often the care was free. At this time, Dr Emily was considered the best-trained woman physician in the world, mainly because of her European experience. She was the first woman in this coun-

try to engage in major surgery. She was professor of obstetrics and gynecology at the infirmary medical school. The infirmary medical college, after a legislative act was passed permitting the infirmary to confer the MD degree in 1864, was intended to be temporary until enough approved medical schools were open to women. Cornell University opened its doors to women in 1899, and the infirmary closed its doors.

Some of the accomplished graduates of the infirmary include Dr Josephine Baker, who established New York City's Bureau of Child Hygiene—the first in the United States. Another graduate, Dr Emily Biteringer, was the first woman ambulance surgeon in New York City and the first woman staff member at Bellevue Hospital. A third graduate is Dr Elise L'Esperance, who was appointed assistant professor in the Department of Pathology at Cornell University—the first woman of that rank in the college.

During this half century of American history, 1849 to 1900, women generally were not accepted at the approved medical schools, and only the exceptional were admitted. In response to this, several medical schools were licensed to train women, including the Women's Medical College of Philadelphia and the Boston Women's Medical College. Women in medicine were not accepted by the mainstream of their medical peers. The men of the time, and society in general, felt that it was socially unacceptable for women to learn anatomy and surgery. Despite these barriers, several women continued to persevere.

An example of one of these persevering women is Mary Walker, MD. Mary was a graduate of Syracuse Medical College, class of 1855, and the only woman in her class. She had had 6 years of medical experience when the Civil War began. Denied by the Surgeon General of the Army to obtain a commission because she was a woman, she traveled out to the battlefields; to sites where the numbers of wounded were so great and the need for medical care so desperate that the military officials could not turn away her emergency assistance. For all her months of welcome medical assistance, she was offered no commission and thus no pay. She did receive rations and a tent. She believed that the style of women's fashions of the time was cumbersome and also unhealthy. Declaring that corsets were coffins, she adopted the male attire of pants, which was difficult for her male peers to accept.

Finally in 1864, she received an assignment as a civilian contract surgeon to the 52nd Ohio Infantry Volunteers. After the war ended, she wrote President Andrew Johnson requesting a commission; however, the Judge Advocate of the War Department advised the president against it, as there was no precedent for commissioning a woman. President Johnson, however, didn't want her service to go unrecognized, and in 1865, he signed a bill awarding her the Congressional Medal of Honor for meritorious service. In 1917, the medal was revoked for lack of proper war documentation. In 1977, long after her death, President Jimmy Carter reinstated the award. Mary Walker, MD, remains the only woman awarded the Congressional Medal of Honor.<sup>9</sup>

Philadelphia, the City of Brotherly Love, was until recently the city that contained 2 segregated medical schools—Jefferson, all male, and Women's Medical College of Pennsylvania, all female. Supported and encour-

aged by the Quakers, the first school of medicine in the United States, the University of Pennsylvania, was founded in 1765. It was again through the championing of a group of Quaker men who realized the need for medical education for women that the Women's Medical College of Pennsylvania was incorporated in 1850. Male Quaker physicians precepted the early graduates of this school.

During these years, the first well-known female surgeon appeared: Mary Dixon Jones, a graduate of Women's Medical College of Pennsylvania in 1873. She pursued further gynecologic surgical training at the New York postgraduate medical school. The work in surgery and the new science in bacteriology were crucial to her subsequent career. While the gradual use of anesthesia had lessened the pain of surgery, Lister's use of the germ theory and the usage of antiseptics improved the outcome of surgical procedures. Most of these operations were gynecologic, and by far, the greatest number of abdominal operations from 1860 to 1890 were performed on women.<sup>10</sup>

Although she had an active career in teaching, writing, and clinical surgery, no other female surgeon reached her status. Formalization of residencies and internships limited the training opportunities for women.

I have mentioned the Women's Medical College of Pennsylvania and the Boston Women's Medical College as sources of medical education during the years between 1850 and the end of the 19th century. What was available elsewhere?

The Cleveland Medical College was the medical department of Case Western Reserve and had opened in 1843. The dean, Dr John Delamater, believed in medical education for women, and as an experiment opened the doors to them. The first woman graduated in 1852, but the experiment must have failed, because the doors were closed to women in 1856. Women were not allowed at this institution for another 25 years.<sup>7</sup>

The University of Michigan was the first state university to admit women. The first diploma to a woman was awarded in 1871. Women were admitted to Chicago Medical College in 1869; however, the major source of medical education for women was at the Chicago Women's Medical College, which was later absorbed by Northwestern University. In 1920, Northwestern closed its doors to women until 1922.<sup>7</sup> There were many exceptional women surgeons who practiced in Chicago during these years. For example, Bertha Van Hoosen became the Professor of Clinical Gynecology in 1902 at the University of Illinois in Chicago.

Alice Hamilton, a graduate of the University of Michigan, initiated laws in industrial medicine, and taught in that department at Harvard Medical College from 1919 to 1935.

In the Midwest, the State University of Iowa College of Medicine became the second state school to admit women in 1870. Tuland Medical College became the medical department of the University of California in 1873 and was coeducational from the beginning, as was Stanford University.<sup>7</sup>

Emma K. Willits, a graduate of Women's Medical College of Chicago, came to the Children's Hospital in San Francisco in 1897 and went on to become chairman

of the Department of General Surgery. When a visiting physician looked at her hand holding a retractor, he remarked, "What do you expect to do with such small hands?" Her reply: "I will use skill and not brute force."

The University of Oregon likewise had been coeducational from its beginning. In 1894, Ester Lovejoy became its second woman graduate and the first woman to hold the position of head of the Department of Health in Portland. This was the first time a woman had held that prestigious position in a major city.<sup>7</sup>

Simultaneous social movements and events (eg, the founding of the suffrage movement in 1848, the California Gold Rush of 1849, and the opening of the Women's Medical College of Pennsylvania) all played a role in allowing women entrance into the professional world. In 1876, after the passage of the Medical Practice Act in California, women were allowed entrance into California State Medical Society—the first state medical society to do so.<sup>11</sup> By 1910, it was estimated that women physicians constituted 5% of physicians in the West.

There was an interesting story beginning to unfold in Baltimore in 1888. Johns Hopkins, who had endowed the institution that bears his name, held stock in the booming Baltimore and Ohio Railroad, a company that had netted him great personal wealth. However, the United States was in a period of economic uncertainty, and the company experienced a sudden loss of income. This, in turn, plunged into despair the trustees of the new Johns Hopkins University, who were just about to open the hospital and medical school and found that there were no funds. The executive president of the Baltimore and Ohio Railroad had died 4 years earlier, and his fortune passed intact to his daughter, Mary Garrett. It was her tenacity that began to change the winds of fortune for women.

Prior to this, women had been denied entrance to The Johns Hopkins University. To consider women as potential medical students was unheard of. Like all sciences, as the century ended medicine was becoming both more sophisticated and more remunerative. As such, it was regarded as beyond the scope of women.

The transactions of the American Medical Association in 1871 expressed a pathologist's view of feminine hopes:

Another disease had become epidemic. 'The woman question' in relation to medicine is only one of the forms in which this pest vexes the world. It attacks the BAR, wriggles into the jury box and clearly means to mount the bench. It strives, thus far, in vain to serve at the altar or thunder from the pulpit. It raves at political meetings, harangues in the lecture room and infects the masses with its poison.

In 1893, the renowned Williams Ossler, who would become part of the Johns Hopkins faculty, stated that there are 3 kinds of human beings—men, women, and woman physicians. However, Mary Garrett, along with 3 of her wealthy women friends offered to raise the money required to open the Johns Hopkins Medical School with one stipulation: that women would be allowed admittance equal to men. The trustees initially argued that men were of a higher order. Also, no woman of delicacy should study anatomy in the presence of men. However, the

money offered was the only way for the school to open. There were 3 women in the first class, but it was the class of 1900 that produced 2 outstanding women.

The first is Dorothy Reed, whose enrollment in medical school scandalized her socially prominent family. Later when she interned at Johns Hopkins, her aunt let it be known that in view of her unladylike occupation, Dorothy could not be received socially. She finished a pathology fellowship at Johns Hopkins. Along with Karl Sternberg, Dr Reed observed the enlarged histiocyte that identifies Hodgkin's disease. The Reed-Sternberg cell thus bears her name.<sup>12</sup>

Among outstanding Hopkins' 1900 graduates is Florence Sabin, who first mapped the lymphatic system in a Hopkins laboratory and became an assistant in the Anatomy Department, thus becoming the first woman faculty member at a major coeducational medical school. Dr Sabin completed her career in Colorado, where she engineered a major reform in public health services. She represents the State of Colorado in a bronze statue in the US Capitol rotunda.<sup>12</sup>

Thus, with the excellent careers of these 2 outstanding women physicians, women in 1900 must have thought that they had scaled halfway up the lofty mountain. However, the future would show that more perseverance would be required.

By the beginning of the 20th century, all but 2 of the women's medical schools had closed or merged with other schools. This trend toward gender integration allowed women to join formerly male-only medical societies, gain internships at urban hospitals, and enter typically male specialties.

There were 3 surveys of women physicians between 1881 and 1926. Critics of women physicians still believed that women were frail and encountered limitations during certain times of the month, and would be subject to the destruction of their health. These surveys supported that women's professional careers compared well in longevity to their male counterparts. However, supporters, including Dr Ossler, who by this time became a strong advocate of women physicians, began to see how productive women physicians could be.

Receiving a medical education in the years from 1910 to 1920 required a bachelor's degree, an MD degree, a hospital internship, and even postgraduate training. These higher standards were a result of the Flexnor report of 1910. These changes in medicine coincided with significant changes in women's lives, including the Nineteenth Amendment, which gave women the right to vote and to enter the political arena. It was during this time that the number of women physicians reached its peak of 10% of the physician's population. Some were even entering the traditionally male specialties of otolaryngology, ophthalmology, and even surgery. However, by 1921, the numbers were beginning to reverse. Whereas in 1912, the percentage of women in surgery was 3%, by 1920 it was back to zero. It is interesting to note that the American Medical Association opened membership to women in 1915.<sup>13</sup>

The first quarter of the 20th century revealed an important new trend, which was a shift from the 19th-century pattern of professional separation of women and men and toward the integration of women and men in

the mainstream of American medicine. By 1915, 80% of women graduating in medicine attended coeducational schools.<sup>13</sup> The 1921 Tracy survey states that women were better educated, better trained, moving into specialties, financially secure, often balancing medicine and marriage, and working among rather than apart from their male colleagues. In spite of this, the Tracy survey states that women mainly worked in “female” specialties. After an initial foray into surgery and pathology, they had more opportunities and acceptance in pediatrics, general medicine, and obstetrics. Moreover, most women doctors remained single and had lower incomes. It seems that the integration of women into the medical profession with men did not occur. Most early 20th century women doctors worked within the mainstream of American medicine, but remained isolated from men.<sup>13</sup>

The second, third, and fourth decades of the 20th century continued to impose serious barriers for women wanting medical careers. Financing a medical education was a great deterrent for women. Most families, if having to choose between a boy or girl for funding for education, would choose the boy, as he was thought to be more productive. Bankers were reluctant to loan money to women for medical education. Admission committees of medical schools wanted a type of woman not deterred by marriage, and yet not too aggressive or manly. More restrictive were the limitations in opportunities for internships, residencies, and fellowships. These positions were restricted in the specialties by the intent of the directors. Rarely was a woman accepted on a surgical service. Maternity leaves were forbidden, and frequently, if pregnancy occurred the woman was dismissed. Following residency, entering private practice was extremely difficult for women. Again bankers were reluctant to loan money to them. Society in general was slow to accept women physicians. A man would have been embarrassed to be seen waiting in a woman doctor’s waiting room unless he was with his wife. Generally, women in medicine were regarded with suspicion. They were politely tolerated (sort of like alternative medicine is nowadays) then avoided if possible.

During World War I, with an increasing demand for physicians, the numbers of women in medical schools increased at the same time the number of male medical students decreased. During World War I, women physicians were not commissioned in the armed forces, even though female nurses were. After World War I, primarily because they were no longer needed to fill empty positions, the number of women in medical schools declined, and many hospitals closed their staffs to women.

The number of women physicians peaked again during World War II, simply due to demand as military medical care stood perilously close to the crisis stage. Between 1940 and 1945, the armed services ranks grew from 267 000 to 8 266 000.<sup>14</sup> Physician supply could not keep up with this demand. There was a great concern that American soldiers would not receive adequate care. Because of this demand, there was pressure on the US Senate to commission women physicians, especially surgeons, into the US military. The argument was that it would be best for a well-trained female surgeon to provide trauma care, and for the male OB-GYN specialist to remain in civilian life and de-

liver babies. In 1943, President Roosevelt signed a law allowing women to be commissioned, stating that women doctors should be judged not by sex, but by accomplishments and skill. If you remember, Plato made the same statement 2500 years earlier.

Despite the gains made during World War II, the culture of postwar America contained the ingredients for a subtle letdown for professional women, and even “Rosie the Riveter” was pushed aside. They were replaced by a wave of domesticity, with Ozzie’s wife Harriet being a good example. Though richer and better educated than their mothers, American women in the 1950s were encouraged to limit their ambitions. For example, the Smith College graduating class of 1955 was told by commencement speaker Adlai Stevenson, to assume the humble role of housewife whether you like it or not. The postwar economy had transformed the home into a suburban castle. By 1960, millions of women shared the same secret, that they were suffocating from happiness and boredom. Out of this discontent, the women’s movement began with goals of equal pay, equal work force participation, and equal opportunities for education. During the 1950s and 1960s, the percentage of women medical students remained at 6%, the numbers being constant since 1910 and the time of the Flexnor report. However, because of societal attitude changes, major events were beginning to change the composition of the medical and surgical physician’s work force. Perhaps the peak of the lofty mountain was coming into view.

In 1971, the Equal Opportunities Act was passed as a result of the women’s movement. This helped to remove many of the social barriers that had previously prevented women from entering professional ranks, especially surgery. And thus again, society had accomplished a major change in attitude relative to women working outside of the home. Some of these societal changes included contraception, childcare facilities, and the trend in male-dominated professions to accept and recognize the potential that women might have. So the winds of society were changing again, and the summit of that lofty mountain was coming into view. We must be at least above timberline.

The last 30 years has brought many changes to the composition of American surgeons. Not only has the number of women increased, but the number of minorities—that being Asians, African Americans, and Latinos—has also increased. The percentage of women in medical school and the percentage of women surgical residents during those years are presented in **Table 1** and **Table 2**.

What makes a female medical student look at surgery as a career? For those of us who have found immense satisfaction with a surgical career, it is the concern of seeing so many capable women bypassing surgery. Perhaps it is the lifestyle of surgery per se. Studies have revealed that women selecting surgery were more likely to be single, had a greater desire for financial reward, agreed that personal life would need to be sacrificed for the sake of their work, and were less likely to report that time demands of surgical practice were unreasonable.<sup>17</sup> Most women surgeons have decided on their careers by the time they reach high school, and the final deciding factor is a good experience during their surgical clerkship. Marriage does not present the same role conflict for men as it does for women. Marriage can be an asset for

**Table 1. Women in Medical Schools and Residencies\***

Year	Women Medical Students, %	Women Surgical Residents, %
1970	11.0	1.5
1980	25.0	6.0
1986	33.0	12.0
1999	45.0	21.0

\*Data for 1970, 1980, and 1986 are adapted from Crowley et al.<sup>15</sup> Data for 1999 are adapted from the Journal of the American Medical Association.<sup>16</sup>

**Table 2. The Distribution of Women Surgical Residents\***

Surgical Specialty	1989	1998
Colorectal	6.8	22.0
Neurological	7.3	9.6
Orthopedic	5.0	7.2
Plastic	13.4	19.4
General	13.0	21.0
Thoracic	2.0	6.3
Urologic	5.3	11.2

\*All data are percentages. Data are adapted from the Journal of the American Medical Association.<sup>16</sup>

men, but a detriment for women, and the married female surgery resident may be perceived as less committed to her career. Because male surgeons typically have tremendous support at home, they successfully divest many home responsibilities, thus focusing unlimited time to their careers. As more of these men marry women who have careers outside the home, they may be required to give more support at home and more limited time to their careers. When a woman surgeon marries, she typically marries another physician, and frequently another surgeon. There are still conflicts to overcome as the residency years and subsequently the development of a surgical career conflict with childbearing years. The old myth that a surgeon should be a superman and have an attractive wife who will help him achieve all his objectives at home and abroad has to evolve to suit the lifestyles of married professionals. As our society becomes more egalitarian, women, with the support of their career husbands, will be able to give more attention to their careers without giving up a full and satisfying home and professional life, a circumstance that, until recently, only the male counterpart could enjoy.

Certainly, we surgeons want to pass on the lessons of physical stamina, discipline, honesty, assertiveness, and coolness under pressure that we have learned in our residencies. Surgery, as we all know, is a wonderful profession. There is no better personal reward for the surgeon than to be able to diagnose a disease, correct the problem, and make our patients well. Predictably, this is fulfilling for both male and female surgeons. What unifies the experiences of both sexes is not just adversity, but their strength, dignity, and joy in their vocation of surgery.

For surgery to remain a competitive specialty that attracts the best candidates, it is important to recruit the best possibilities from the women's half of the pool. Sur-

gery cannot remain competitive, attracting the best and brightest, if the selection pool is reduced. Much can be done to encourage more women to pursue surgery. Balancing surgical lifestyles that allow both men and women to enjoy fulfilling family, parenting, and career roles can achieve this. Careful family planning, flexibility from the program director, and the guidance and support of both spouses are the ingredients of a successful career.

If surgery is to become more humane, admitting more women is not the answer. We must activate the human qualities in all surgeons by creating the career paths and reward structures that are so important to us all. Those of us who are raising daughters as well as sons know how important it is to us, to them, and to society to provide equal education for both sexes. If surgery is their career choice, we should encourage them.

In this short time, we have covered 4500 years of human history, and more specifically, surgical history, with emphasis on those persevering women surgeons. With the help of the forever-changing winds of human society, we, as in the time of the Egyptian physician, Persehet, are again educating both sexes equally in medicine and surgery. As future changes in society occur and history confirms that change will occur, it is going to take perseverance and cooperation on the part of men and women to maintain an extraordinary view from the summit of this gratifying, lofty mountain. It is indeed, a great responsibility for surgeons of both sexes to continue educating the best and the brightest to maintain the grand tradition of American surgery.

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