My Life as a Surgeon:
Sally E. Carty, MD

Questions:

1. Growing Up

As the oldest of a big family, I grew up first on Long Island, and then in northern California in the early 70s -where the sky was truly the limit for possible imaginations.

2. Why did you become a doctor?

To help people.

Yes, that's a child's answer - but I reached it in childhood. My father had taught us to prize good citizenship, and I saw in high school that medicine would let me be helpful to society while doing science and math in an interesting way. I didn't know any female doctors or scientists then, but I knew from books (Robert A. Heinlein, Ursula K. LeGuin, and the many other science fiction authors who were my actual parents) that they did and could exist.

3. Why did you become a surgeon?

My family was kind of poor, so I'd always sewn my own clothes and otherwise often "made things" for the delight of doing it. Mind-hand work is the best kind there is.

In choosing surgery, I felt at home with the immediacy, the creativity, the decision-making, the hours, even the blood. I also liked the *esprit de corps* and imagined that I would be part of it.

In choosing general surgery, I liked its strong value to patients and its comprehensive self-reliance- for example, that you have to know how to treat UTI and hypokalemia yourself.

4. When did you decide to become a surgeon? Did you have an epiphany? What was it?

Love, 1983

Like almost all female physicians in the 70s, I had planned on pediatrics or primary care. At my medical school, there was one female surgeon, but she was badly ridiculed.

But surgery surprised me - it was entrancing. One day at the scrub sink, the very best of the CT surgeons (ambidextrous, ethical, less sexist than the others) said real casually "so Carty, what are *you* going into?" and I answered "Surgery, sir" just like that. Then I had to figure out how to make it happen. It was a rebellious decision, and it was also the right one.

5. Did you develop a clear vision/mission for your surgical career? What was it?

Graduation, 1984

In college I majored in Russian philosophy, which was a good way to be premed while also getting a classical education, but I didn't realize that would make it harder to get into medical school - a process for which I had no mentors and no clue. For example, the college dean refused to write me a letter to apply.

Since I was on my own, after college I worked as a lab tech at the University of Pennsylvania and ended up co-authoring quite a few basic science papers on endocrine organelle bioenergetics. For that reason, every time the topic of endocrinology came up during med school and residency, it felt easy to learn more.

At that time in the US, the specialty of endocrine surgery did not yet exist; the only extant setting was to do general surgery while dabbling in breast and endocrine and try to build up a devoted practice. I thought hard about doing noncardiac thoracic. But one day an older resident said, “Carty, why are you fighting it?” - and he was right, so I decided to try and be an endocrine surgeon by going the route of the surgical oncology fellowship at the National Cancer Institute (NCI).

6. Who were your mentors? In what way for each?

Antonio Scarpa MD, PhD, was my egalitarian basic scientist leader at Penn, possessing immense insight and a wicked sense of humor; his grandfather was the Scarpa of inguinal fascia fame. Robert G. Johnson MD, PhD, was his scary-smart post-doc with a tremendous “can-do, why not” approach. They both mentored me generously and hugely.

Later, Timothy S. Harrison, MD, was the surgeon who specialized in endocrine at my residency program; he and his wife Eliza Cope Harrison (an historian, and daughter of the famous surgeon Oliver Cope who wrote *Early Diagnosis of the Acute Abdomen*) were cultured and thoughtful supporters. Dr. Harrison told others that I would accomplish a surgical career “with grace.”

Richard L. Simmons, MD, became a tough but kind mentor when I joined the University of Pittsburgh faculty in 1991, and I’m grateful for his openhanded and continuing wisdom. For two decades, I’ve admired the way Timothy R. Billiar, MD, has guided Pitt’s Department of Surgery to maintain and extend an outstanding level of excellence and mutual responsibility.

And ever since medical school together, and surgery internship together, and faculty surgery positions together, and parenthood together, Barry M. Schaitkin, MD, has been a wise, ethical, supportive, and hilarious best friend who has taught me so much- starting right off with how to make small talk in the elevator.

7. Has your career been as envisioned/expected?

No. (Among so many other things, life has taught me to ask open-ended questions.)

8. Expected and unexpected challenges

First, I did not expect to have to "sell" myself to referring MDs. I was very naive and thought patients would arrive for care without any self-promotion, which early on I considered to be immoral - and without competing with other surgeons, which I still consider to be possibly immoral. Today, in an HMO setting, it is possible to practice without marketing, but otherwise definitely not.

Second, I did not expect to care about my income. For example, when I was recruited to the Pitt faculty, I told Dr. Simmons that the offered compensation was too high - so he cut it by 20%. Months later when I was dunned to contribute 5K to an endowed chair for my senior partner, I began to see that idealism can have flaws. This was 29 years ago, but by the time I realized that academic salary is a form of departmental status, I was chronically underpaid. Today, mentorship is much more available and salary negotiation is much more transparent.

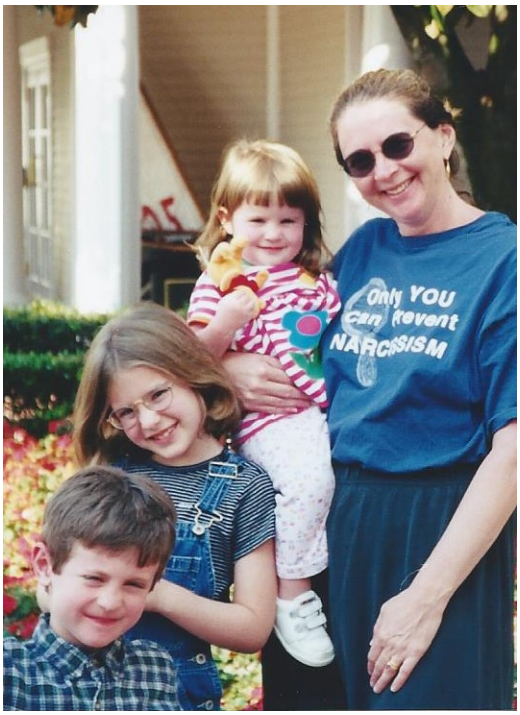
Third, I did not expect to write clinical papers. Around 1997, I saw with dismay that while some surgeons could swing it, I was not someone who could maximize all three variables of being a great scientist, great clinician, and great parent. So, I gave up my lab. A couple years later, Dr. Billiar said, "but you still need to write- how about clinical papers?" A lightbulb went off and I learned how. Right now, I have over 270 clinical and translational publications.

Another challenge was the stress of academic promotion. I had just never expected to rise past associate professor, and at each step was so scared that I did not even read the criteria until later. Talk about procrastination and Imposter Syndrome. Today, such mentoring is much more available, and the advancement criteria are a hundred times more transparent - but the stress can still exist.

I certainly did not expect to be good as an office administrator. When my senior partner died 20 years ago, suddenly I got to run things, including instituting modern algorithms for best care, and forming a true endocrine surgery program with junior

partners, a fellowship, multidisciplinary collaborators, national presence, etc. That work has been hugely fulfilling. But only recently have I seen that our divisional staff are highly responsible, happy, and effective - they follow protocols, innovate, answer calls right away, cover for each other with alacrity, and delight our patients. They totally rock. To think productively about administrative competence, I recommend some favorite books by C. J. Cherryh, in which her genius female protagonist gets computer-graded on some *un*traditional skills while attaining world domination in a galaxy of the future – a fascinating read.

I did hope to become a parent - but early on, we'd encountered many problems and multiple miscarriages so that parenting came very late, at least physiologically. During that time, I was the first female general surgeon at Pitt, and there was no time off or tolerance for such things. Later, Yolanda L. Colson, MD, PhD, (who went on to a brilliant career in thoracic surgery and will receive the Richard L. Simmons Prize from our department this April) was the first Pitt surgery resident to decide that she would soon become a mother - so I met pre-emptively with Dr. Simmons to make sure we did it right. Portions of that approach continue here today.



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Although I did expect to encounter sexism in surgery, to my chagrin, I was not part of the *esprit de corps*. In fact, as a resident I was treated so brutally that when things at NCI and Pitt were much better by comparison, for several years I did not see any problems here at all. But there are still problems, big and small. One example is the way that institutional support staff are often enabled to deny to female surgeons the dignity and authority that they willingly offer to males. Another example is that the very first time any co-worker asked, "so what's it been like for you as a woman in surgery?" was the year 2020. I'm grateful to that male chief resident, who poignantly taught me that we all should ask others about their diverse experiences a lot more often.

For helping me manage in this arena, and for effecting constructive change all over, I am deeply grateful to my colleagues Dr. Kelly L. McCoy, Dr. Linwah Yip, Dr. Nancy D. Perrier, Dr. Janice L. Pasieka, Dr. Giselle G. Hamad, Dr. Emelia J. "Mia" Diego, Dr. Sara P. Myers, Dr. Kia J. Nicholson, and many other both here and nationally.

9. Tell us about a low point as a surgeon that led to a life lesson.

Short answer: As Louisa May Alcott famously said: "I've had a lot of troubles, so I write jolly tales."

Pithy answer: Yes, I'm a national expert at the top of my field - but I've also made *many* mistakes. The important thing is to pay attention, be mindful, learn, and grow.

10. What has been the biggest challenge in your career?

Overall: Learning to shut up and not say what I think or observe*,* or instead say it in a more societally accepted way. I can still improve a lot.

Specifically: Living in a US culture marked by intolerance of many kinds and working in a business culture that is also marked by autocracy.

11. Expected/unexpected rewards in your career?

In 2013, when I became president-elect of the American Association of Endocrine Surgeons (AAES), I knew I'd have the power to effect constructive change - and I was terrified. In the arena of parathyroidectomy, there had been much technological innovation but also much heterogeneity and deterioration; in fact, I'd been poking AAES leadership for years to advise us all on how best to accomplish it safely and effectively. I decided to *be* that leader, and initiated the AAES Parathyroidectomy Guidelines, which came out in *JAMA Surgery* in 2016 (if you access it, be sure to read the online full document, not just the Executive Summary). This was simply a ton of work (basically a fourth child), but it was also a ton of fun.

Next, I co-chaired the AAES Thyroidectomy Guidelines, which came out in both long and short forms in *Annals of Surgery* in 2020. These two documents serve to teach, cohere, and advance care for patients. My wonderful colleague Dr. Linwah Yip is now working as first author on the AAES Adrenalectomy Guidelines.

In general, I've learned that sometimes you just *know* what to do - it is, or becomes, clear and obvious. When you have that feeling of Right Action, pay attention and do it.

12. What has been the biggest reward(s) in your career?

I really like operating. In endocrine surgery, I like the glistening delicate tissues, the small moves, the tricks of geometry, the colors, the general lack of blood loss, and the explicit challenge of finding a missing parathyroid from all the different tissue compartments where the pesky thing could be hiding. For many of the same reasons I also like adrenalectomy, but gave it up mid-career to give mentees a specific domain of their own. I also like having mentees.

I really like using objective clinical algorithms, hormonal markers, and thyroid molecular profiles to direct care and avoid unnecessary surgery. I like that when we do operate, resecting a hormonal tumor demonstrably helps endocrine surgery patients.

I really like teaching surgery to people who want to learn.

I really like working with my colleagues at Pitt. At this institution, the level of expert, informed, responsible, sensible, and ethical care is unusually high, and it's an honor to know and work with almost everyone. And in the Department of Surgery, there is also an uncommon and wonderful focus on clinical interdependence, versus the traditional omnipotent autonomy of yore.

I really like parenting and highly recommend it. Each of our three kids (Hope, Simon, and Iris) are a delight, and it's a blessing that they have become really cool adults.

13. What would you do differently in your career?

See multiple answers above. Also, if I had to do it again, I wish I could have located more surgical mentors and colleagues.

Also, I would also like to be more patient day by day. Also, I would like grandchildren 😊.

Family, 2014

14. Of what accomplishment are you most proud/gratified in your career?

I am most proud of the endocrine surgery program that I built at the University of Pittsburgh, and of my surgical and medical mentees in the world.

I am also very proud to participate in the Pitt surgical culture and mission, and to have been able to help with its constructive development.

I am also very thankful to be part of the recent growth of US societal tolerance for diversity of all kinds. No exceptions.

15.What advice do you have for those considering a surgical career?

My advice is to find and foster your courage. Regardless of whether you're coming from a position of vulnerability, try to cherish your tenacity and adapt your adaptability and hold fast to your clarity and hope. Meanwhile, be very grateful for your support group. In short, don't let things or others defeat you, because despite their doubts (and your own) you *can* help change things for the better.