







s the quest for gender equity and inclusion at the School of Medicine and Dentistry unfolds on these pages, we celebrate some trailblazers and new leaders who, by example and advocacy, are driving the advancement of women in medicine and science.

In 2017, for the first time in history, men no longer made up the majority of students entering U.S. medical schools. But a leaky pipeline still exists when it comes to women advancing in clinical and research careers. There are disparities in salaries, promotions, awards, and research funding, as well as underrepresentation in academic leadership positions and scholarly work.

The University of Rochester School of Medicine and Dentistry—where the percentage of male and female medical students is split down the middle—is not immune to a gender gap at the highest levels, but is working hard to change that.

Only 30 percent of deans, department chairs, and executive-level administrators are women. Men hold four times the number of chair positions as women, and are 44 percent more likely to be promoted to full professor.

It takes conscious and steady effort to make a dent in such a pervasive, historical imbalance, and the medical school is taking that effort seriously. For one thing, it has increased the number of full-time professors and other leadership positions over the past three years. And numerous resources already are available or being initiated to ensure that women feel their perspectives are noticed—and valued.

"The whole picture at the top is changing," says **Linda H**. **Chaudron (MD '92)**, senior associate dean for Inclusion and Culture at the medical school. "The institutional support to assure equity and advance women and other underrepresented groups is not just visible, but authentic."

That support extends to the University of Rochester Medical Center, with administrators becoming more intentional about breaking down institutional, systemic, and structural barriers to gender equality. To achieve its full potential, a world-class academic medical center's leadership must reflect the diversity of the population it serves.

It is a lengthy undertaking, being carried out in Rochester and on a national level.

"There has been slow and steady progress over time, and we really need to celebrate our wins," says Diana Lautenberger, director for Faculty and Staff Research at the Association of American Medical Colleges. "At the same time, by spending too

much time and energy thinking about the progress we've made, sometimes that distracts us from how far we still have to go."

According to AAMC, women across the country account for 16 percent of medical school deans and 18 percent of department chairs—each figure rising just 4 percent and 6 percent, respectively, over the past 10 years. The number of female full professors in academic medicine has increased only from 19 to 25 percent in the last decade.

"That's nowhere near where we want it to be," adds Lautenberger. "We need to move the needle at a much higher and faster rate."

AAMC's next "The State of Women in Academic Medicine" report, coming out in November, will include a more comprehensive snapshot than usual of female experiences in a male-dominated field—pulling data from engagement and satisfaction surveys, as well as health care surveys, to learn about climate and culture.

The medical school and the Medical Center "are creating more ways for women to get together to talk about ways the culture and structure needs to change, and how they can support each other," says **Vivian Lewis, MD**, who recently retired as vice provost for Faculty Development and Diversity in the Provost's Office at the University of Rochester.

Aside from helping to launch policies focused on families, harassment, and discrimination, the office researches aspects of climate and faculty satisfaction. In spring 2020, data will be available from a three-year effort with the Collaborative on Academic Careers in Higher Education at the Harvard Graduate School of Education, in which anonymous exit interviews will help shed light on why women are leaving their positions.

The Office for Inclusion and Culture, meanwhile, offers programs and events supporting the advancement of women in medicine and science throughout their careers.

For instance, the annual **Tana Grady-Weliky, MD**, Lecture on Women and Diversity in Medicine hosts nationally known figures in academic medicine to focus on issues of importance to women and others from underrepresented groups in medicine. In 2020, **Deborah German, MD (Res '79)**—an alumna of the internal medicine residency—will be the keynote speaker.

Other examples include the program Developing from Within: Exploring and Enhancing Choices for Mid-Career Women Faculty; a series for junior women faculty titled Strategic Career Advancement: Conversations with a Former Chair; Women's Wednesday Workshops, led by graduates of Drexel's ELAM program; half-day career development seminars; and networking events.

In addition, affiliations with national organizations such as the American Council on Education's Women's Network, which advances and supports women in higher-education careers, offer faculty and staff opportunities for growth.

More men should step up to call out bias and better understand where representation falls short, given that they're the ones who dominate positions of power, advises John P. Cullen, PhD, director of Diversity and Inclusion at the University of Rochester's Clinical and Translational Science Institute and assistant director of the University of Rochester's Susan B. Anthony Center.

According to research on unconscious bias, male applicants are rated as more competent, hireable, and deserving, than females with identical experience.

"In my opinion, it shouldn't always be up to the group that is oppressed or marginalized to take on the fight by themselves,"

Profiles in Perseverance — Women Leaders Share



Ania Majewska, PhD

Professor in the Center for Visual Science and the Department of **Neuroscience**

University of Rochester School of **Medicine and Dentistry**

Ania Majewska heard a familiar refrain when she announced she was going into neuroscience.

It's going to be so hard. You'll be working constantly. You won't have time for a family.

"There was definitely a scare factor to it, and I had to think very seriously about my choices going forward," she says. "There just wasn't a clear alternative for what else I would do, because I just love my job. It does require dedication, but not nearly as many sacrifices as people say it does."

One of the main reasons Majewska followed her passion is because, unlike many places around the country at which she interviewed, the University of Rochester School of Medicine and Dentistry had several senior-level females with families.

That doesn't mean everyone understood where she was coming from.

When Majewska first started her lab, she received the same advice from three different senior male scientists—to hold off on hiring anyone for the first year and work 24/7 to set up the lab herself.

"I thought this was very interesting, given that they knew I had a 6-week-old infant at home," she says.

Over time, Majewska, whose specific interests lie in understanding how visual activity shapes the structure and function of connections between neurons in the visual cortex, found that her family gave her perspective on her work.

"I used to take every small problem or failure at work to heart, but I no longer have the time or energy to do that," she explains, adding that the issues tend to resolve themselves even when she doesn't stress as much about them.

Moreover, she has taken multi-tasking to a level she never thought possible. For instance, during a 15-minute lull she is equally liable to be working on a grant or planning an on-the-go menu for a son who has celiac disease and a slew of after-school activities.

"Being able to manage everything—most days—has given me more confidence in my abilities," Majewska says. "The need for that sort of efficiency has also made me much less tolerant of wasting my time. I know to focus on the things I think are really important, both at home and at work."

Majewska's research with post-doctoral associate Marie-Ève Tremblay, PhD, led to a landmark paper in 2010—a detailed look at how brain cells interact with each other and react to their environment swiftly, reaching out constantly to form new links or abolish connections. That relationship was one of the highlights of her career.

"I have three kids, she has three kids," Majewska says, "and I love the idea that we can be at the forefront of cutting-edge science and still have lives."

Cullen says. "I use my privilege as a man, and a white man, to advocate for equity. The work is slow, and it's going to be slow. But we are not going to shift the needle quickly enough until we get men involved. They have a responsibility to do this."

For his perspectives on male allyship and the need to support women in academic biomedical research, AAMC, in November 2017, appointed Cullen to its Group on Women in Medicine and Science Steering Committee—the first man to be selected to join the group.

"We often go into a room and see who has a seat at the table, but it's more important to flip that and see who doesn't have a seat at the table," Cullen says. "Maybe there are women in the room, but are there women of color? Then the next part of this is, even if they have a seat at the table, do they have a voice? Are they being heard?"

Chaudron, chair of the AAMC GWIMS Steering Committee, praises Mark B. Taubman, MD, URMC CEO and dean of the School of Medicine and Dentistry, for his part in helping to answer these questions.

"There are always places we can improve," she says, "but his clear commitment to gender equity and academic advancement has really sent a message to people that this is important and we need to address it head-on."

Their Stories

Vivian Lewis's class in medical school, at Columbia University College of Physicians and Surgeons, was considered quite progressive in the 1970s—about one-third of the students were women

"I was part of a kind of sea change," she says. "The senior class looked very different."

Although the residency programs she considered had hardly any women faculty, about half her peers in the residency she chose, in obstetrics and gynecology at Mount Sinai School of Medicine of City University, were women.

"Honestly, we were the stronger ones," she says. "We were overachievers. We felt the expectations were greater for us."

By the time Lewis came to the University of Rochester Medical Center in 1991 as an associate professor and to lead the Division of Reproductive Endocrinology, she was enthusiastically helping to advance a field continuously expanding in scope and impact.

"Reproductive endocrinology barely existed when I was coming along, so part of what attracted me was that it seemed like an open canvas, with so much to be discovered," she says.

Lewis has been chair of the advisory committee on reproductive health drugs for the Food and Drug Administration since 2014. Aside from reproductive endocrinology, her areas of expertise include infertility, menopause, in vitro fertilization, and hormone replacement therapy.

Being promoted from associate professor to full professor "was an interesting step for me and a turning point," Lewis says, because she was the only underrepresented minority in that role. "There had been one before me, but that person had moved on, and now it was my turn."

She didn't understand why. There were few female full professors as it was, though she knew many women who deserved to be moving up the ranks. And she knew other ethnic minorities who'd left their jobs in frustration because they felt they were hitting the glass ceiling.

"I thought, 'I deserve this promotion, and yet I shouldn't be so unique. This is ridiculous," she says.

From that promotion in early 2000 until July 2019, Lewis was the only female African American full professor throughout the entire university.

Lewis, who retired in September but continues to work for the university part time, is proud of the way science and medicine around women's health and reproduction have expanded choices available to female practitioners and patients—in large part due to the women's movement.

"You can't separate the two, and that's for the better of health care," she says. "Not to say women are solely responsible. But we've made our mark."



Vivian Lewis, MD

Vice Provost for Faculty Development and Diversity in the Provost's Office

University of Rochester

Professor of Obstetrics and **Gynecology**

University of Rochester School of **Medicine and Dentistry**



Erika U. Augustine (MD '03, Flw '10)

Robert J. Joynt Professor in Neurology

Associate Director at the Center for Health + Technology

University of Rochester Medical Center As a high-school student, **Erika Augustine** was in the Science and Technology Entry Program (STEP), a University of Rochester School of Medicine and Dentistry pipeline program aimed at attracting underrepresented minority students into translational research careers.

Gender diversity was not a major concern as she made her plans to become a child neurologist.

"The university made a commitment to developing that pipeline a long time ago, so I knew this was an environment that valued diversity and actually took actions and steps to try to address it," she says. "I didn't have the sense ever that this was a place I didn't belong from a gender standpoint."

As the years went on, Augustine transitioned from being a fellow at the University of Rochester Medical Center to a faculty member.

"I'm much more aware of my gender now," she says.
"There are times when I am the only woman in the room."

Maybe that's in an advisory committee meeting.

Or in a leadership group.

But those times seem to be fewer more recently, says Augustine, in large part because of the continued and increased attention on diversity initiatives that impact employment and promotion decisions, student mentoring, and implicit biases that may affect the way colleagues work together.

Augustine, who specializes in the care of children with movement disorders, has been awarded multiple sources of grant support for training, career development, and clinical research. That research focuses on developing novel therapeutics for Batten diseases, a group of rare pediatric neurodegenerative disorders.

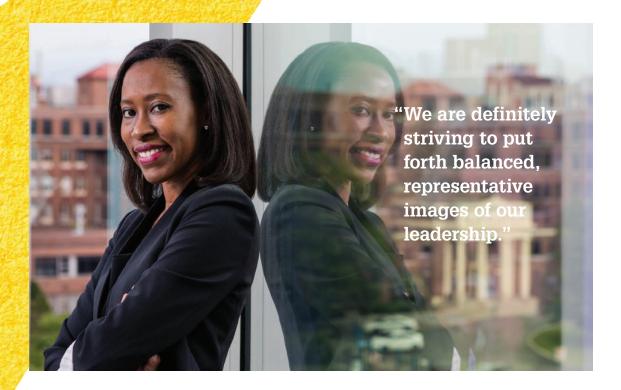
As diversity officer with a national career development program for child neurologists funded by the National Institutes of Health, Augustine pays close attention, as do her colleagues in the program, to how others perceive those in charge.

"We are definitely striving to put forth balanced, representative images of our leadership," she says. "We are conscious of making sure young researchers resonate with the people they see as leaders."

Just as she was made aware of career-development opportunities outside the university, Augustine encourages others to apply for national programs such as the Association of American Medical Colleges' leadership-development seminars for women.

Literature suggests diverse teams produce better outcomes, and that diversity, Augustine points out, inevitably needs frames of reference from females.

"It's an important component of being and becoming a first-rate, leading-edge institution," she says. "If we do not fully represent a broad spectrum of origins and perspectives, then based on the science, we have not yet reached our full potential."



Though born in the machismo culture of Colombia, **Jimena Cubillos**, whose family moved to the U.S. when she was 6, was always told by her parents she could be anything she wanted when she grew up.

She would go on to pursue a career in the heavily male-dominated field of urology, becoming the only pediatric surgeon, male or female, to perform robotic procedures at Golisano Children's Hospital—and one of a minority of urology surgeons to do so nationally.

Cubillos, with expertise in minimally invasive, laparoscopic, and robotic pediatric urology, has been at the forefront of social change in academic medicine since studying at the University of Rochester School of Medicine and Dentistry.

"Our class was the first year there was an equivalent number of males and females, and the class after us had more women than men for the first time," she recalls. "It was definitely a point of pride. We felt like we had beaten the gender gap, and the administration talked about it on a regular basis."

In small ways her gender as a female physician comes into play, such as when she's talking socially with male colleagues after rounds and has to split off from the group when it's time to change into scrubs in a separate locker room.

"You're not privy to that half of the conversation, but it's not intentional," she says. "There's just a reality

that exists. Though to be honest, I'm glad I've never had to see a department chairman in his skivvies."

People in her department have gone out of their way to help her advance in her career, Cubillos says. When she recommended someone in particular for the position of division chief in her department, her chair and division chief both suggested it would be a good idea for her to take on the role—for her, personally, and for the field on a national level, which needed more female division chiefs. At the time she wanted to start focusing on quality efforts instead, so she declined to pursue the opportunity, but she appreciated the confidence in her potential and the continued support that followed.

Cubillos had been careful from early on to choose only supportive surroundings. When applying for a residency, for instance, she heard through word-of-mouth she should avoid known "malignant programs for women."

Today, the face of urology is changing. While Cubillos used to be able to count the number of women in urology who attended national meetings, she says that statistic is growing.

"There are definitely a lot more women now, and they're younger, so a new generation is coming into the field," she says. "I think the workforce is going to change, and it's going to become more acceptable to do things like job share and work part-time. I'm hopeful."



Jimena Cubillos ('97, MD '03)

Associate Professor of Clinical Urology

Director of Quality in the Department of Urology

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University of Rochester Medical Center

URSMD Full-time Faculty 2019 Female Faculty Male Faculty Sr. Instructor/ **Professor: 14.5%** Instructor: 14.5% Sr. Instructor/ Instructor: 9.5% Professor: 29.7% Assistant Assistant Professor: 42.7% Professor: 32.4% **Associate** Professor: 28.2% **Associate** Professor: 28.4%



Ruth A. Lawrence (MD '49, Res '58)

Northumberland Trust Professor in Pediatrics

Professor of Obstetrics and Gynecology

University of Rochester School of Medicine and Dentistry

Founder (1985) and Medical Director of the Breastfeeding and Human Lactation Study Center, Golisano Children's Hospital **Ruth Lawrence** was the first woman ever to be offered an internship in pediatrics at Yale University—but she wasn't quick to accept, which prompted her summons to the office of **George Hoyt Whipple, MD**, founding dean of the University of Rochester School of Medicine and Dentistry. He was on the phone with the medical school dean at Yale.

Ruth recalls: "He was saying, 'Hey look, George, we took a risk. We said we'd take a female and she hasn't answered us.' With Dr. Whipple looking down at me, I said, 'Well, I'd love to come to New Haven.'"

That internship, followed by a residency also at Yale, exposed Ruth—who wore a white coat just like her male peers but was tasked with weaning her first child at 3 months to get back to work—to some of the greatest minds and practices in pediatrics. One of those practices was breastfeeding, common in New Haven even as physicians at the time, in the early '50s, were urging patients to feed their babies formula.

Comfortable around breastfeeding because she'd seen her mother nurse her siblings, Lawrence dug into research in earnest once in her post-doctoral residency in pediatrics at the University of Rochester Medical Center, where, she says, "if a woman spoke up [for herself] she was apt to be punished for it."

She wrote articles on the benefits of breastfeeding, and word spread. Soon she was being sought out by the wives of doctors who had read her work and wanted help breastfeeding their infants. Attention swelled, and Lawrence went on to become an international expert in the field of breastfeeding

medicine. Her book, *Breastfeeding: A Guide for* the Medical Profession, continues to be the

preeminent reference for clinicians worldwide since its 1979 publication.

Meanwhile, the mother of nine managed responsibilities she knew the men in her life—at home and at work—did not have to consider.

"My husband used to say, 'As long as the house is neat, the children are well dressed and in school and doing well, and dinner is on the table, you can do what you want," she says, smiling about it now. "Erma Bombeck had a famous saying, 'Don't let them see you sweat.' That's what I felt."

She had to put the kids to bed, so was unable to attend nightly club meetings with other pediatricians. And she was in charge of the university hospital nursery, a job her male colleagues did not want—but one that ultimately helped her pioneer neonatology as a specialty.

Over her seven decades of experience as a pediatrician, clinical toxicologist, and neonatologist—a storied career earning her two lifetime achievement awards—Lawrence has seen women go from "keeping our heads down" to being able to "speak up and challenge leadership."

Given her achievements over the years, she recognizes she has had a role to play in that evolution—a role that led to her accepting the Charles Force Hutchison and Marjorie Smith Hutchison Medal, which recognizes alumni for outstanding achievement and notable service, earlier this year.

"I've never looked at myself as a disruptor," she says, "but I hope I have helped a lot of women overcome whatever obstacles are in front of them."



Personal 'Herstories' of Pediatrics in Rochester

Fifty years ago, when **Elizabeth McAnarney, MD**, arrived at the University of Rochester, there were no female professors in the Department of Pediatrics. Now, more than half of the department's executive cabinet members are female—and more than two dozen females hold the title of professor.

A new book, spearheaded by McAnarney, celebrates the women in the department who helped bring about the cultural shift responsible for that progress. *Women of Rochester Pediatrics: In Their Own Words*, written by Nancy Wharton Bolger, is a rich look at the personal and professional lives of some of the Department of Pediatrics' most admired leaders.

"As each recounts her story, through interviews with the author, one hears similar themes of optimism, hope, and confidence despite many professional

As a student at the University of Rochester School of Medicine and Dentistry, **Linda Chaudron** didn't give much thought to being a woman. More than 40 percent of her class was female.

But gender became an issue during her second year in medical school.

Chaudron wanted to schedule a conference on women in medicine, but was told by male leadership there wouldn't be enough interest.

"That didn't sit well with me," she says.

She told a female administrator about the exchange and learned she could go to every department chair and ask for money as a show of support. Chaudron estimates she likely raised four times as much as she would have received otherwise.

That money sponsored a half-day conference, at which senior women faculty from different disciplines shared their career stories and where they saw the future of medicine headed for the next generation.

"That adversity was a great thing, because it made me learn how things really work when it comes to administration, funding, and persistence," she says. "It's probably led me on the path I'm on."

Interestingly, Chaudron came to work at the School of Medicine and Dentistry in part because of support she received while interviewing for her first faculty position. As a new mother who needed to pump breastmilk for her 3-month-old son, she was provided a faculty office and time to pump. She also recalls one male faculty member acknowledging the difficulty in being away from her baby.

"My experiences at other institutions were not as supportive of the challenges of being a breastfeeding mom on the interview trail, and those experiences contributed to my choice of where I wanted to start my career as a faculty member."

Since then Chaudron, whose clinical and research expertise is in women's mental health, especially on perinatal mood and anxiety disorders, has been in several leadership roles to help influence culture, climate, diversity, and inclusion.

As senior associate dean for diversity at the medical school, she worked to expand the diversity efforts then focused on faculty to students, residents, and post-docs. When Chaudron took on her current role as vice president for Inclusion and Culture at the medical center and senior associate dean for Inclusion and Culture at the medical school, her reach became even broader.

"And this job continues to be an evolution," she says.

Chaudron's accomplishments earned her the Susan B. Anthony Lifetime Achievement Award in 2015 for her work as a champion of women in science and medicine.

As Chaudron moves steadily forward with initiatives to better the work environment for women and for other groups who are historically underrepresented in medicine and science, she keeps close the lessons learned from her conference-planning medical-school days.

"That was a pivotal experience for me in terms of my advocacy," she says. "Now as an administrator, I realize I'm not always in tune with what's important to students or other trainees. We really have to listen to them."



Linda H. Chaudron (MD '92)

Senior Associate Dean for Inclusion and Culture

Professor of Psychiatry, Pediatrics, and Obstetrics and Gynecology

University of Rochester School of Medicine and Dentistry

Vice President for Inclusion and Culture in the Office of VP for Health Sciences

University of Rochester Medical Center

and personal challenges," writes McAnarney, distinguished university professor and chair emerita of the Department of Pediatrics, in the book's preface.

The book features 29 physicians, including Rochester alums such as **O.J. Sahler (MD '71, Flw '77)**, the George Washington Goler Professor of Pediatrics, whose story is representative of many profiled in the book. As one of only two women in her medical school class of 75 students at the School of Medicine and Dentistry, Sahler's journey was rife with challenges. But she persevered and went on to have a successful career, first as the medical school's first female clerkship director, and later, as the leader of the department's psychosocial oncology research and education program, among many other accomplishments. In addition to sharing their own stories, the featured physicians also offer advice to young women pursuing careers in medicine. Among them, **Ruth A. Lawrence (MD '49, Res '58)**, professor of Pediatrics and Obstetrics and Gynecology, offers the following piece of wisdom: "If you're ambitious, be ready to jump through hoops. And don't let them see you sweat."

Women of Rochester Pediatrics is available online from Amazon and Barnes & Noble.



Deborah J. Fowell, **PhD**

Dean's Professor in the Department of Microbiology and Immunology **Member of the Center for Vaccine Biology and Immunology** University of Rochester Medical Center

Growing up a member of the working class in the Midlands, in central England, **Deborah Fowell** pushed up against certain boundaries because of her family's socioeconomic status.

She has found no such hierarchy in her work as an immunologist.

"What I find so amazing is that science is a huge leveler," she says. "You're respected for your intellect, which really does drive how far you can go. Everything else kind of fades away.

"I can't say I've been discriminated against, or not gotten to a position I wanted, because of anything other than not being the best one for the job," she adds.

Fowell believes women could, however, be better at self-promotion, a skill that might remove some of the hurdles they face in moving into leadership positions.

"We are often not very good at advocating for ourselves," she says. "I'll fight fiercely to advance people in my lab, and for colleagues in my department, but have a tough time doing it for myself."

The University of Rochester Medical Center has done a stellar job recognizing this reality, Fowell explains, by developing a helpful program called "Developing from Within: Exploring and Enhancing Career Choices for Mid-Career Women." The program is for current or future department or institutional leaders across science and medicine disciplines who want to come together to develop leadership skills.

Despite her hesitations, Fowell, who came to the Medical Center in 2000 as a junior faculty member, has worked her way up through promotions to full professor. Her research focuses on mechanisms of immune regulation at tissue sites of inflammation.

"I've come to appreciate how special science is—that, for the most part, appearance doesn't influence people's opinion of you," she says.

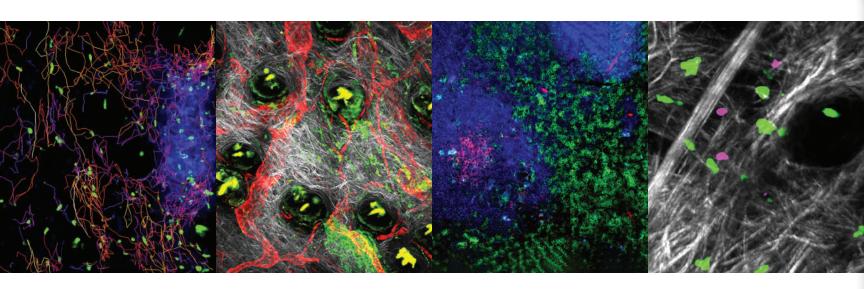
When Fowell has been the only woman in the room, she hasn't noticed. For example, while reviewing grants with some 15 other scientists at the National Institutes of Health, one of them pointed out—to her surprise—the gender imbalance at the table.

Remembers Fowell: "I'd been so excited about discussing which grants had done well and which hadn't done well. That sort of scientific interchange was so stimulating that I hadn't paid any attention to the make-up of the room."

Through her own grant from NIH, Fowell organized a group of scientists from within and outside of the immunology field to adapt and develop cutting-edge imaging techniques that could lead to new approaches in manipulating the immune system and improving treatment of infectious diseases.

That sort of collaboration transcends the subject of gender, according to Fowell.

"It's more about being smart, being dedicated, and thinking creatively," she says.



Showered with support.

As the only female intern in pediatrics at Yale University in the 1940s, Ruth Lawrence, MD, was given sole use of one of two shower rooms on her dorm floor, "I would get a little rat-atat on my door at night from the men, asking if they could take a shower in my room," she recalls. "I'd say, 'If you pick up your towel, yes." Those men wound up being extremely supportive, throwing her a baby shower and taking medical calls on her behalf iust before the first of her nine children were born.

Privacy, please.

Prior to joining the University of Rochester, Ania Majewska, PhD, experienced male colleagues coming into the women's bathroom to tell her she has a phone call, as well as a male advisor who reserved a single room for the two of them to share at a conference—until his wife intervened. "In both cases I was too timid to say anything about the behavior, which, looking back, is sad," she says. "But, in general, I think women have a harder time standing up and pointing out behaviors that are unprofessional. Maybe it's because many of us don't like to be confrontational, so we put up with it more."

A (Wo)man's World?

A sampling of early questions and challenges faced by URMC women faculty in fields traditionally dominated by men.

Name neutrality.

When B. Paige Lawrence, PhD, Wright Family Research Professor, arrived at the airport for a meeting in Montreal, the scientist assigned to pick her up was surprised by her appearance. "Oh my God, you're a woman!" he exclaimed, apparently thrown off by her gender-neutral name. The same thing happened when she traveled to France to give a talk, and it happens occasionally when she attends conferences. "The fact that many people just assume I'm a man says something about our culture as scientists," she says.

A lesson in leadership.

In the late 1980s, while on sabbatical at a Switzerland research institute, Edith M. Lord, PhD, brought her 5-year-old daughter, Kara, to a grand affair there. "We were walking past pictures of people who were in charge of things," Lord says, "and she had one question: 'Where are the women, Mom?"

Server scientist?

While at an international conference, Deborah J. Fowell, PhD, found herself chatting with fellow graduate students and a well-respected scientist who was a leader in his field. Aside from being the only female in the group, Fowell was passionate and animated as she discussed how vaccines work and ways to improve them. During a pause, the scientist said, "Oh, dear, can you run along and get us some drinks?" Fowell obliged, but on her way back with the beers, she admonished herself. "I remember thinking, 'How stupid. Why am I doing this?" she says. "This person five minutes earlier had been very gracious in listening to my ideas. It was an odd juxtaposition."



Deborah German, MD (Res '79)

Vice President for Health Affairs and Founding Dean of the College of Medicine

University of Central Florida College of Medicine

During **Deborah German's** third year of residency in internal medicine at the University of Rochester Medical Center, her vacation was scheduled to start April 1. Her first child wasn't due until April 7, however, so she had to be creative.

"There were no other arrangements," she says, "so I figured out how to advance my own labor so I could have my baby on vacation."

After six hours, she gave birth to a healthy, 6-pound, 11-oz. daughter on April 1.

German, a specialist trained in the field of rheumatic and genetic diseases, remembers women comprised about 10 percent of her class in medical school and residency. She saw that as a challenge that would make her strong.

"I am stronger today because I had to figure out a way," she says. "I wouldn't turn the clock back for anything, but like everything else in life, when you expose yourself to great challenges, you learn great lessons."

German took on one of those great challenges when she was selected in 2006 to help launch the University of Central Florida College of Medicine. Despite being called "crazy" for wanting to provide full four-year scholarships, including tuition and living expenses, for the entire 40-member charter class, she did just that, raising \$6.4 million at a time when the economy was beginning to tank.

Her vision was all the more surprising to some because of her size. German stands 5 feet, 2 inches.

At a brunch held to introduce her to female leaders in the community, one woman asked, "Can you do this job? You're so small." German responded, "I don't feel small."

Two years later—after she had built a team of more than 500 faculty and staff, appointed more than 2,000 volunteer and affiliated faculty, and overseen construction of a 375,000-square-foot medical campus—the *Orlando Sentinel* named German its 2008 Central Floridian of the Year.

In fact, German has earned recognition for achievements throughout her career, which has included positions as director, associate dean, senior associate dean, national chair, and president and chief executive officer.

Step by step, she has continued moving forward by heeding advice she gives her two daughters and professionals around the country. When making a decision, ask yourself whether it is prompted by fear or courage. Always choose courage.

The ability to confront pain and uncertainty, which goes back to German's experience as a soon-to-be mother, is necessary, she says, for anyone to be successful—as is the ability to be honest.

These qualities serve both men and women well, she adds, but when seen in women, "it's even more powerful because it's unexpected."

"I wouldn't turn the clock back for anything, but like everything else in life, when you expose yourself to great challenges, you learn great lessons."

Deborah German, MD













When Barbara Iglewski and her husband both were hired at the Oregon Health and Science University School of Medicine—she as an instructor, he as an assistant professor—her salary was almost 40 percent less than his. Though she received a promotion a year later to assistant professor, her salary boost was minimal.

But money has never stopped Iglewski from excelling in her field, in which her landmark research launched an entire field of study into how the system in many types of bacteria works—and led to her 2015 induction into the National Women's Hall of Fame.

She is recognized by the Institute of Scientific Information as a "highly cited" scientist, a designation bestowed on fewer than 0.5 percent of all publishing researchers.

Iglewski came to the University of Rochester School of Medicine and Dentistry in 1986 as a professor and chair of the Department of Microbiology and Immunology. While salaries weren't discussed between departments, Iglewski, who served as chair for more than two decades, says she wanted from the start to make them more equitable in her own department.

"Several women had vastly inferior salaries to men at comparable stages," she says. "I said I would only come to the university if I could change that. And I did. That's one of the things I'm most proud of."

As her reputation in research grew, the climate for women in medicine and science was experiencing an evolution of its own.

"I had doors open for me as a woman that would not have necessarily been available for men, and the reason was things were changing," Iglewski says.

The federal government, as an example, was trying to show it had women on their research panels, and in the late 1980s she became president of the American Society for Microbiology.

"The reason I wanted that position was that there were still very few women on the editorial boards of the ASM journal who were reviewing," she says, "and those who were asked to review didn't have their names on the pages of the iournal."

After her one-year term as president ended, she became chair of the ASM Publication Board for nine years, where she appointed female editors-in-chief and "lobbied hard" to get male editors-in-chief to appoint women as editors and editorial board members.

At the same time, she was working with "truly outstanding" grad students, post-doctoral fellows, and faculty collaborators, many of them women.

To this day Iglewski is a mentor, adamant that women deserve better start-up packages, including protected time to develop their research projects.

For all of her work, which includes also serving as vice provost for Research and Graduate Education at the University of Rochester, Iglewski earlier this year was presented with the Eastman Medal—the university's highest recognition for outstanding achievement and dedicated service.

She continues to spread the word about opportunities that may fly under the radar.

"It's important that women help other women," she says.





Barbara H. Iglewski, **PhD**

Professor Emeritus of Microbiology and Immunology

University of Rochester School of **Medicine and Dentistry**

Director of International Programs University of Rochester Medical Center





Gina Cuyler (MD '92, Res '95)

President and Co-founder Black Physicians Network of Greater Rochester, Inc.

Owner and Founder Comprehension Internal Medicine Wanting to know more about concierge medicine, **Gina Cuyler**, a primary care physician, asked a male colleague about his work in the area, but he shared little information. More recently, after sitting beside a different male colleague for two hours at a lecture, she broached the subject again, but he was no more forthcoming.

But when Cuyler approached a female physician on the topic—someone she had just met—their discourse was casual and fluid.

"Possibly the shared affinity of being women facilitated the conversation," she says. "Possibly some unspoken bond of having overcome challenges based on being different than the traditional white male physician prototype made it easier to connect."

Originally from Panama, Cuyler says she knew firsthand about conscious and unconscious bias—both because of her gender and race—through microagressions during her residency and internship in internal medicine at the University of Rochester Medical Center.

"I realized you can work as hard as you possibly can, but somebody else's opinion can result in an outcome that's different than it should be," she says. "There isn't always a concept of fairness."

Cuyler responded with advocacy work to diversify the face of medicine, work that earned her the University of Rochester Presidential Diversity Award in 2017. She co-founded and serves as president of the

Black Physicians Network of Greater Rochester, Inc., a nonprofit agency that matches engaged role models with underrepresented youth who want to pursue careers in medicine—and she serves as a mentor and collaborator herself.

"If you're not part of the solution, you're part of the problem," she notes.

With black female physicians representing about 4 percent of doctors in the U.S., and women representing approximately 39 percent of all physicians, "it would be impossible to find all female mentors for female mentees, given these demographics," says Cuyler, who also owns a medical consulting firm. "It is even more challenging to find mentors along racial lines."

Complicating matters, she continues, is the trend of men in leadership roles becoming increasingly reluctant to mentor women in the age of the #MeToo movement, afraid of being accused of harassment.

The answer is not in simply pairing women with women, or one race with the same race, in Cuyler's opinion. It is about building on shared experiences and shared goals.

"We need to create environments where we can give people the knowledge and tools they need not only to thrive, but also to help others be all they can be," she says. "We need to keep thinking outside the box and encouraging each other."



Throughout her career, **Paige Lawrence**, a widely recognized expert on how environmental factors influence the development and function of the immune system, has encountered "many examples of where gender played a role."

For example, when she started graduate school at Cornell University, there were no women's bathrooms within the research spaces. She had to walk from the lab area to an entirely different floor—and different part of the building, where the secretaries were stationed—to use the restroom, the closest one available for women. She encountered a similar situation in her first faculty position at Washington State University, although this time she led an effort to turn the men's room into a unisex space. She said that "having to walk far away to use a bathroom may sound trivial, but it is important. It sends a message that you are not welcome."

On two occasions, when she was the only tenure-track woman in her department at Washington State, she had to deal with men who complimented her lab and then announced they were going to set up shop in her space.

"It was very stressful," she says.

Lawrence talked with mentors before approaching the men separately to let them know she was bothered by what they'd said—and that the lab spaces were not available to them to take.

"They didn't push back, but they didn't apologize either," she savs.

Those and other examples, Lawrence emphasizes, pre-date her 2006 arrival at the University of Rochester School of Medicine and Dentistry, where she has felt "incredibly well-supported."

"When I went to my prior department chair to express a need for something, we generally worked together to meet that need," she says. She also noted that this same collaborative spirit percolates throughout the school and University of Rochester Medical Center, making for "a more positive work environment. While we still have areas to improve upon, I love working here."

With support both at work and from her partner at home, Lawrence has navigated the many pressures of having a career and family. She finds it heartbreaking that women in their 20s continue to approach her with questions about how they can have both. She prefers the term "work/life integration" over "work/life balance," because she believes it better conveys that being both a professional and caretaker is possible.

"I feel like the word 'balance' creates this idea there's some attainable Buddha-like state you're going to get to, and I've never achieved that state," she says. "A lot of times I've thought I was a complete failure because I couldn't achieve that state. I finally realized that, overall, I can contribute meaningfully to both my family and science without having to make binary choices."



B. Paige Lawrence, PhD

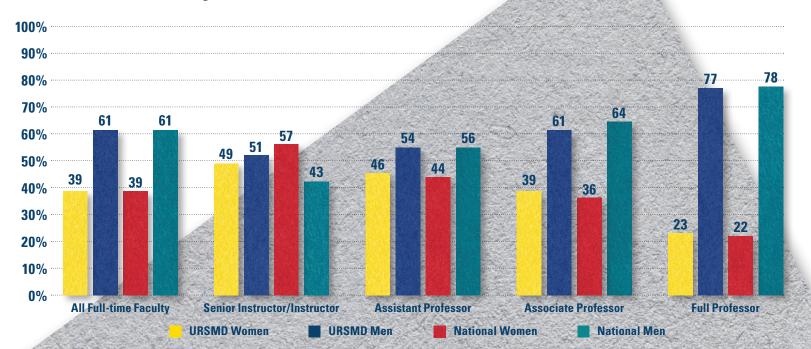
Wright Family Research Professor Chair of the Department of Environmental Medicine

Director of the Environmental Health Science Center

Professor of Environmental Medicine and Microbiology and Immunology University of Rochester School

of Medicine and Dentistry

Full-time Faculty Positions 2019





Jennifer A. Corbelli (MD '07)

Associate Professor of Medicine Program Director of the Internal Medicine Residency Training Program

University of Pittsburgh School of Medicine Despite struggling with impostor syndrome, **Jennifer Corbelli** went after a position as chief resident at the University of Pittsburgh School of Medicine because of a female mentor, Melissa McNeil, MD.

"I never would've pursued it except that she put the idea out there for me," says Corbelli, who landed the position. "I wouldn't have even sought that out myself, but she told me she was going to put my name forward, and that made a huge difference for me."

While she had several women role models at the University of Rochester School of Medicine and Dentistry—most importantly **Valerie Lang, MD** (**Res '00**)—she continues, "at that young age I still thought most of what I had to offer was that I was efficient and worked well with a team. I didn't see in myself what she saw in me. It would take me years."

The confidence Corbelli eventually developed spurred her to take on her current role as program director of the University of Pittsburgh School of Medicine's Internal Medicine Residency program. The Accreditation Council for Graduate Medical Education requires program directors to have completed residency at least five years earlier.

"I did it in my sixth year so I barely met the requirements," says Corbelli.

She was also about to give birth to her first child.

"I took over the job for three weeks and then had a baby," she says. "I don't think I would've done it except I had more mid-career and senior women around me who have really rich careers and are fantastic moms."

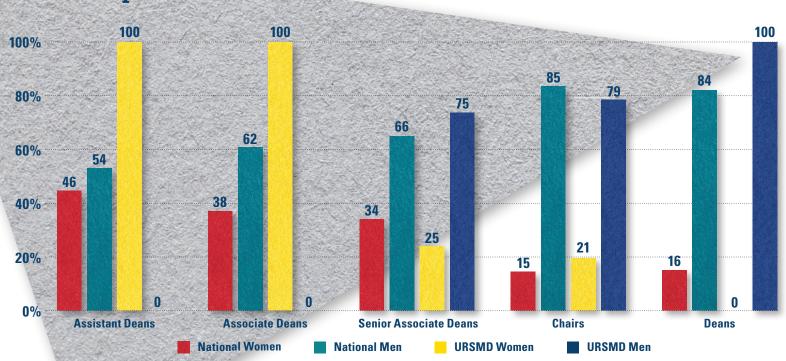
Corbelli recently co-authored a systematic review of the mentorship of women in academic medicine. Published in April 2019 in the *Journal of General Internal Medicine*, the review shows that mentorship programs designed for women are met with high satisfaction and can facilitate promotion and retention.

"In some ways, the more people have in common, the easier the mentoring relationship might be, but our data showed that gender concordance isn't nearly as important as we'd hypothesized," she says. "So a lack of enough senior female mentors shouldn't be a barrier to developing and optimizing mentorship programs for women."

Now a mentor herself, Corbelli helps women reach their individual definitions of success—even when the road gets a bit bumpy.

"So many women are not only showing us it can be done, but are also talking about it—and being real about the things that are difficult," she says. "It's so important to have role models who give you permission to bring your whole self to work, who can both acknowledge the challenges and help you best shape your career in ways you define as most meaningful and rewarding."

Leadership Positions in Academic Medicine



When **Edith Lord** unexpectedly became pregnant in the early 1980s, early on in her career as a scientist, she had to do a lot of soul searching. Balancing demanding work with single parenthood was not going to be easy.

"But of course I had no choice whether to continue," she says. "I was the only breadwinner."

She adds: "I used to say only single mothers should be working in the lab because you had to be really efficient. You had to get a lot of work done because you had to get to daycare."

Lord came to the University of Rochester School of Medicine and Dentistry as a faculty member in 1976, at a time when, as she remembers, there were two tenured women faculty out of hundreds. No female chairs, no female deans. Still, she always felt supported by colleagues and others.

And it was a step up from her time as a PhD student at the University of California, San Diego, where the faculty was exclusively male. "I must say, however, I didn't even notice at the time," she says. "That was the way it was everywhere."

Even now, when Lord often is the only female in the room, she tends not to perceive that fact. Her reasoning: "I think of myself as a scientist, not a woman scientist."

Though recently stepping away as leader of graduate and postdoctoral education, Lord maintains a lab and an NIH grant to continue her research. She focuses on the

immune responses that can control tumor development and also studies the unique microenvironment present within growing tumors.

Her administrative efforts standardized salaries and benefits across the board for postdoctoral trainees, created the staff scientist position as an alternative to becoming a research assistant professor, and addressed issues—and advocated—on the behalf of trainees.

Once, wanting to see more diversity at the faculty level, Lord nudged leadership to add more women to its search committees.

"It got me on some other committees," she says. "Whether good or bad, if you're going to complain about things, you have to put some work in. That's how it goes, right?"

Lord is the secretary-treasurer of the American Association of Immunologists, which "does a very good job of promoting women in leadership positions," she says.

That's a focus not always afforded to females in other scientific circles, she acknowledges: "They're not always the first people who come to mind, even though they may be as well qualified or better qualified. Things haven't changed as much as I would've thought they would when I was starting graduate school, and it has been almost 50 years now.

"Women have to speak up more, and hopefully they will be listened to."



Edith M. Lord, PhD

Professor of Microbiology and Immunology and Oncology

Former Leader of the graduate program in the Department of Microbiology and Immunology

Former Senior Associate Dean for Graduate Education and **Postdoctoral Affairs**

University of Rochester School of **Medicine and Dentistry**

