

## **The true story of 16 women who fought gender discrimination in elite science with Kate Zernike [Podcast]**

---

AMA Update covers a range of health care topics affecting the lives of physicians, residents, medical students and patients. From private practice and health system leaders to scientists and public health officials, hear from the experts in medicine on COVID-19, medical education, advocacy issues, burnout, vaccines and more.



# AMA UPDATE



## AMA Update

### The true story of 16 women who fought gender discrimination in elite science with Kate Zernike

Feb 27, 2023

- Listen on Simplecast

## Featured topic and speakers

In today's AMA Update, New York Times Pulitzer Prize Winning Writer and Author Kate Zernike join to discuss her new book "The Exceptions," which chronicles the true story of 16 female scientists who fought against gender discrimination as tenured professors at MIT. Her new book details how these exceptional women in science faced discrimination and came together to fight against professional inequities. AMA Chief Experience Officer Todd Unger hosts.

Learn more about "The Exceptions: Nancy Hopkins, MIT, and the Fight for Women in Science" by Kate Zernike.

## Speaker

- Kate Zernike, New York Times Pulitzer Prize Winning writer and author

## Transcript

**Unger:** Hello and welcome to the AMA Update video and podcast. We've got a special edition for you today. Move over, Jenna Bush, move over, Reese Witherspoon. Today is the first official installment of the AMA Book Club and for our first selection, we're going to be talking about a new novel called *The Exceptions*, which tells the true story of 16 women, all tenured professors at MIT, who came together to fight gender discrimination. And I'm fortunate to be joined by the book's author and New York Times Pulitzer Prize-winning writer, Kate Zernike. I'm Todd Unger, AMA's chief experience officer in Chicago. Kate, it is so great to have you with us today.

**Zernike:** Thank you for having me, Todd. It's great to be here.

**Unger:** This has to be a pretty exciting day to see your book released.

**Zernike:** It is. I've been working this for five years. And I've been thinking about the story for more than 20 now. So yeah, it's really nice to see it coming into the world.

**Unger:** Well, it is a really extraordinary story. And sometimes it almost reads like fiction, but we know it isn't. For those listening and watching this, why don't we just start with a quick synopsis. And tell us why do you call it *The Exceptions*?

**Zernike:** Yeah. So when I was—this book is about a group of really extraordinary female scientists who are all tenured professors at MIT, which of course, is a top institute of science and technology. And they were really extraordinary in that they were hired at the beginning of affirmative action. They were really so low in their fields. They were quite extraordinary people. They're extraordinary scientists.

So they were exceptional in that way. And that they were singular talent, singularly brilliant. But *The Exceptions* also refers to the way they reacted when they were faced with discrimination, which was to say, this isn't discrimination, this is just the circumstances or this is just this personality conflict or this is maybe just one bad guy. And so they were able to, kind of, push, away this discrimination for a long time. But of course, what we come to see is that the exception, those weren't the exceptions. And these women aren't the exceptions. There are many extraordinary scientists out there who should be more welcomed in the field.

**Unger:** We're going to talk more in detail about just how they came together around that problem. But it's also just really interesting the role that you play really in talking about the story because you broke it for *The Boston Globe* back in 1999. How did you first learn about the main character in the story, Nancy Hopkins, and her colleagues? And what drew you to this story?

**Zernike:** So the story came to me as a tip from an editor and it was very vague. It was women—something about women discrimination at MIT. And again, it was 1999. And I thought, maybe it's a lawsuit or something. I didn't expect—I didn't really know what to expect.

But I was given the name of Nancy Hopkins. And I called her. And she's clearly—she's just a very compelling character. She's very intense, but she's very just warm. And so she said that actually MIT was going to admit that it had discriminated against the women on its faculty. And I was really struck by this in my field. This is what we call a man bites dog story.

This wasn't a story of they were, MIT, was pressured to do this by a lawsuit. In fact, these women had come together and gathered information to show that they were being discriminated against. And it was so powerful that MIT agreed and said, we're going to acknowledge this publicly.

What was so striking about Nancy was the way she had gone about it. So she was the first person to start this and then she joined with these other women. But she said to me, well, I knew that I had less space—less lab space than the men in my building. And I said, well, how did you know? And she said, well I measured.

And I said, you measured? And she said—with a tape measure? Really? And she said, yeah. I went around the building and I measured every lab and I measured every office. And I thought, oh my God, here's this—I think she was 50 at the time, year-old woman, tenured professor at MIT crawling around buildings and measuring lab space. This is the length she had to go to prove what was going on.

**Unger:** Yeah, here she is fighting for very expensive equipment for her research. And at the same time, a lot of this boils down to a tape measure, which I understand is kind of on display at MIT at this point. Is that right?

**Zernike:** Yes, at the MIT Museum. And, again, yes this is equipment. But we have to think about when we are asking—when we're requiring her to do this to prove her case, what is she missing? And what are we missing in terms of the science that could be done in that time? And what is the distraction of all of this? What are we missing in terms of what science she might be doing?

**Unger:** Well, one of the things that I found just so interesting as I've started reading a lot more about medical history, was just even in your first chapter, here is a young woman who is working like literally at the epicenter of science and these discoveries about DNA and surrounded by all of these people that have eventually become Nobel Prize winners. And then you start to go through her story. In the first chapter, it's revealed that she was groped.

And from there, it's a chronicle of the challenges that she kind of faced and sometimes kind of brushed off. Do you think what she faced in that period of time was kind of unique to women in science? Is this kind of typical of what women were going through all over the country?

**Zernike:** So this is another way that Nancy is extraordinary. She falls in love with the study of DNA in a lecture by James Watson, four months after he and Francis Crick have been awarded the Nobel Prize for decoding the structure of DNA. And she is brave enough that she goes to Watson's lab and says, I want to work in your lab.

And really that took an extraordinary amount of courage for her. And she becomes Watson's protege. And he really mentors her. But there were not a lot of women in that lab. And when Nancy looked around Harvard, she didn't have a single female professor. There weren't female professors.

The women in science were working in the labs of their husbands. They weren't running their own labs. So Nancy thinks to herself, well, I'm not going to go get a PhD. That's a waste of time. All I want to do is do science.

In the end, she has to do a PhD because she's just so good that Watson insists that she do it. But she was really extraordinary. There were not women. It was really men running the labs, men making the big discoveries. So again, these women were just really unusual for their courage and being the only ones.

**Unger:** And being kind of limited by expectations around their ability to work 80-hour weeks and do a job while they have children, things like that, were not commonplace for women to do.

**Zernike:** And part of it was just nepotism rules. These universities couldn't hire—they wouldn't hire spouses. So of course, if you're only going to hire one spouse, who's going to get hired? It'll be the man.

So the women were much more often going to be research associates in the labs of the men. They weren't going to be PhDs and they weren't going to be running their own labs. And I think the same was true in medicine. I think it was really hard for women to achieve that top level.

**Unger:** Now fast forward 30 plus years to 1999. For those of a certain age, I'll speak for myself, that doesn't seem so long ago. And it seems like modern times. And you even say in your book, gender discrimination seemed out of step with the times even then. But explain what you mean by that and how these women's stories run counter to that perception?

**Zernike:** So, again. We were almost at the turn of a new century, 1999. I was 30. I thought my career was going pretty well. I thought opportunities were pretty open. And then you started to think and listen to the ways these women had been, as they say, marginalized. And they defined this as 21st century discrimination, which I think is really why this story is so important and so powerful.

It wasn't the obvious ways. There were some obvious ways in which the women were being discriminated against, things like, again, lab space, salaries. But for the most part, what really upset them were just the ways they've been pushed aside.

So it was the conversations that they were left out of, that then becomes a collaboration that they're left out of, that then becomes a grant proposal that they're left out of. It's certain things within a university, like not knowing that you could get a loan sponsored by the University to buy an apartment. So these women were really struggling against the tide. Meanwhile men were having their career paths paved for them.

So again, it was a subtle discrimination. At the time, and now we take it so much for granted, but at the time we weren't talking about unconscious bias. But that's what these women identified. The first big paper on unconscious bias was actually in 1995. But again, we didn't have workplace training on that kind of thing.

Now I think we look at unconscious bias and we're almost a little bit jaded. We think, oh yeah, I know what that is and I don't have any bias. But the reality is when you read a story like this and when you talk to women, when you read their experience, you realize that we all do. And it's systematic. It's through our system.

And one of the reasons that I wrote this story, you mentioned at the top about it's, sort of, like a novel. I wanted people to feel two things. I wanted them to feel what it's like to do science because it is thrilling and I wanted them to appreciate the thrill of that work. But I also wanted them to understand what it feels like to be marginalized, to be pushed aside because I think it's important that we understand what unconscious bias feels like for those who are on the receiving end.

**Unger:** Back in the time that you broke the story, it was big news. It made kind of front page of *The Boston Globe*. Were you surprised by the response you got to your article?

**Zernike:** Everyone was surprised. So Bob Vergano who's the dean of science who helped these—who became a hero to these women by fixing a lot of the problems, he arrived in his office that—the story broke on a Sunday. He arrived in his office on Monday. There was a CBS Evening News crew outside. Nancy walked into her office, picked up a phone, it was Australian radio on the other end. The *New York Times* put it on the front page.

Remember this is early days of the internet, pre-social media. So the *New York Times* puts it on the front page and suddenly, the whole world knows. And the women were just flooded with emails saying, "Oh my God, I thought I was the only one." Other women in other campuses, a range of different institutions, all saying this is my experience. This is my life. Thank you for bringing this to light.

**Unger:** Now it's 20 plus years later and your book is coming out. What do you hope that folks will take away from it?

**Zernike:** Well, again, I really hope that people will appreciate the thrill of science and appreciate the passion of these women because, again, think of what we're losing out if we are shutting out 50% of our population right from the start. If we're not being inclusive, what are the discoveries we're missing?

But again, I also want people to appreciate what it feels like, why this discrimination persists and how it's subtle. And how even subtle ways in changing our thinking and changing our behavior can help the situation. But I want people to appreciate just how subtle the problem is by seeing Nancy's experience up close

**Unger:** Kate, in your epilogue, you talk about the progress that's been made. But you also acknowledge that we still have a lot of work to do. Where do you think we stand today? And do you still consider women like these the exceptions?

**Zernike:** Yeah. One of the reasons I chose the title, *The Exceptions*, is because when I was reporting, people kept saying to me, so-and-so's exceptional. Well, one thing someone did say to me was, and this is a Nobel Prize winner at a university in California, saying, it is no longer exceptional for me to go pick up my kid at a daycare center and see a pregnant woman. Like you didn't have daycare centers on these university campuses. Women weren't taking maternity leave.

So now you see women in pregnancy clothes. They're not hiding their pregnancies anymore. So that has really changed. Certainly at MIT, MIT is now run by women from the head of the corporation to the president to the director of research, the dean of science. The city of Boston is run by a woman, the state of Massachusetts.

So we have seen a lot of progress. On the other hand, in 2018, the National Academies of Science, Engineering and Medicine did a report that talked about discrimination. And it surveyed women in the field. And it found that 50% of them had experienced some kind of discrimination.

And the most prevalent kind of discrimination was not overt sexual assault or even sexual coercion, it was the kind of discrimination these women were talking about, the marginalization, the being pushed aside, the not being included in certain ways. And it's hard, I think, for women or for anyone who feels marginalized because you don't want to raise this point every time it—you don't want to complain about every small thing. The trouble is the small things really do add up.

**Unger:** Kate, thanks so much for being our first guest as part of the AMA Book Club. Folks out there, the book is called *The Exceptions* and it's now widely available for purchase, so pick that up. It's really a fascinating read. We'll be back soon with another AMA Update. You can find all our videos and podcasts at [ama-assn.org/podcasts](https://ama-assn.org/podcasts). Thanks for joining us today. Please take care.

---

**Disclaimer:** The viewpoints expressed in this podcast are those of the participants and/or do not necessarily reflect the views and policies of the AMA.