

Not Your Mother's Library Transcript

Episode 42: Expanding Horizons

(Brief intro music)

Rachel: Hello, and welcome to Not Your Mother's Library, a readers' advisory podcast from the Oak Creek Public Library. I'm Rachel.

Mary: And I'm Mary.

Rachel: It's March, which, according to HolidaySmart.com, marks the onset of Expanding Girls' Horizons in Science and Engineering Month. "Science and engineering are typically male-dominated fields, but times are changing. With an influx of women in these industries, young girls are beginning to see themselves represented in this niche and remain interested in these topics for longer. In the past, although many girls are interested in science when they are young, most of them [were] discouraged from pursuing those interests. This month, and every month, it's time to encourage girls to pursue their passions, no matter what they are." Science is...uh, I was going to say "incredible," but I guess what I really meant is "credible." 'cause it's fact-based. Get it?

Mary: Yeah.

Rachel: (laughs) As for engineering, which deals with math—not my strong point—I do recognize the importance. It is used to build, well...everything! Machines, infrastructure, buildings. You name it, and it was probably made possible through the hard work of an engineer. And yes, for a long time these fields have been dominated by the male workforce. But it's twenty-friggin'-twenty-three, which means everyone needs to understand that other genders are just as capable. If you want to inspire the next generation with books about STEM and women in science, we have a long line of recommendations waiting in the wings. But don't go on stage just yet; it's also Read an e-Book Week from March 5th through the 11th. As Mary explained to me: "They're books, just with 'E'."

Mary and Rachel: (laughs)

Rachel: Could you tell us a bit more about how our listeners can access e-Books through their local library?

Mary: Of course! First of all, I was a book snob for a really long time. If I couldn't physically hold the book and turn the page, I didn't want to read it. However, when I realized just how much quicker I could get

access to the books on my TBR list, I became a believer. I actually do most of my reading on my phone now. I'm already holding it, I might as well just read instead of scrolling through social media. So, how do you check out e-Books? When you have a library card through the Milwaukee County Federated System, you already have access to these platforms. If you already use CountyCat, or our online catalog, you will see lots of e-Books and audiobooks! When you find the one you want to check out, you can borrow it directly from there. Once you have it borrowed, you can either read it in your browser or you can open the Libby app and read it there. Readers who have been with the program for a while might remember OverDrive being the suggested reading platform for e-Books. They have been phasing into Libby. If you have the Libby app, you can browse and borrow directly from there, as well! You just log in with your library information, and it shows you everything that's available. If this isn't enough for you, you can also download Hoopla, which is free for you, too, if you have a library card through Milwaukee County. Here, you can find more e-Books, audiobooks, and even music and TV episodes! If you have a Kindle or a Nook, you can download these apps directly to your e-Reader and enjoy these e-Books just as you would have if you would have purchased the titles from Amazon or Barnes & Noble. Does it get any better? And, as always, if you have any questions about these apps or about your library card, please stop by or call the library so you can take advantage of all of these platforms.

Rachel: I completely understand wanting to hold a physical book and smell its delicious smelly smells. Truth be told, though, e-Materials have grown on me over the last couple of years, too. The ease of access is unparalleled. But that's enough of that. Let us discuss the anti-magic of science and engineering! My first recommendation for you today is "STEM Lab: 25 Super Cool Projects: Build, Invent, Create, Discover" by Jack Challoner. This full-color children's book presents exactly what it says on the cover. There are "over two dozen...activities demonstrating such scientific properties as forces and motion, chemical reactions, shapes and structures, and light and sound." Some of my favorite projects include blubber glove, Pythagoras cup, geodesic dome, and wave machine. Don't you just love those names? Everything uses basic materials that you can find around the house or during a quick trip to the grocery store. I do recommend setting up an easy-to-clean space with newspaper or a reusable plastic tablecloth that can protect your furniture, but the experiments themselves aren't all that messy. The author includes safety tips at the front of the book, and information about the science and setup behind each activity is laid out in easy-to-understand terms. This can be enjoyed by children in elementary through middle school, which is a great age to spark interest in STEM learning. If you are interested in more and feel adventurous, try Challoner's other title, "Maker Lab Outdoors." These are both part of a series put out by the Smithsonian, so you know that what you are getting is gold.

Mary: My first recommendation is “The Only Woman in the Room” by Marie Benedict. Hedy Lamarr was a Hollywood star who certainly was not born into fame. She was a scientist who had found out secrets about the Nazi party in the height of World War II. Here’s an excerpt from the blurb: “Her beauty almost certainly saved her from the rising Nazi party and led to marriage with an Austrian arms dealer. Underestimated in everything else, she overheard the Third Reich’s plan while at her husband’s side, understanding more than anyone could guess. She devised a plan to flee in disguise from their castle, and the whirlwind escape landed her in Hollywood. She had an idea that might help the country fight the Nazis...if anyone would listen to her. [It’s] a powerful novel based on the incredible true story of the glamour icon and scientist whose groundbreaking invention revolutionized modern communication.” This revolution she invented was ‘frequency hopping’. Her idea was an attempt at preventing military information from being intercepted during World War II. For this idea, she was awarded the Pioneer Award of the Electronic Frontier Foundation as well as the Invention Convention—say that five times fast.

Rachel: (laughs)

Mary: —Bulbie Gnass Spirit of Achievement Award. I’m not sure what else I have to say to convince you to read this one. Wow! A good readalike is “The Magnificent Lives of Marjorie Post” by Allison Pataki. Marjorie is remembered for hosting lavish parties attended by figureheads of state, celebrities, and the wealthiest in the world. She has also outrun the Nazis, crawled through the warehouses in Moscow to recover the Tsar’s treasures. But perhaps more memorable is her business sense. She built her empire and became an extremely savvy business woman partly through her knack for numbers and money management. She surpassed everyone’s expectations, even her own. Definitely one to check out!

Rachel: Women are marginalized all the time, sure. But you know who gets the short end of the stick even more consistently? People of color. Giving voice to minority groups will enact change. That is why my next recommendation is “Changing the Equation: 50+ US Black Women in STEM” by Tonya Bolden. I see that I didn’t take the time before to explain what STEM is—my bad. This is an acronym for ‘Science, Technology, Engineering, and Math’. Parents are most likely familiar with this term because STEM is now taught in schools to children of all ages, though it wasn’t really a thing when I was a kid, and I’m only a few short years ahead of Gen Z! So. Now that we’re all on the same page, I can tell you that Bolden’s work includes “groundbreaking computer scientists, doctors, inventors, physicists, pharmacists, mathematicians, aviators, and many more. This book celebrates over 50 women who have shattered the glass ceiling, defied racial discrimination, and pioneered in their fields. In these profiles, young readers

will find role models, inspirations, and maybe even reasons to be the STEM leaders of tomorrow. These stories help [you] to dream big and stay curious.” Importantly, Bolden also provides “endnotes, a bibliography, and an index” in case you are a student and want to find primary sources for a paper. I would posit that “Changing the Equation” is a fantastic secondary resource not only in science or history class but also for ethics, racial, and women’s studies. Readers ages 10 to 14 would benefit most from this book. If you want something for a much younger child, I recommend the picture book “Little Black Girl: Oh, the Things You Can Do!” by Kirby Howell-Baptiste.

Mary: I’m going to continue with that theme and recommend “The Chai Factor” by Ferah Heron. Amira is a 30-year-old engineering student who comes from a traditional Indian-Muslim household. An incident on the train as she’s returning home from grad school is enough to make her distrust anyone. When she finally does arrive home, she finds that her family has rented out the basement to a barbershop quartet which makes it extremely difficult to relax and focus on her thesis. Duncan, one of the quartet’s members, seems to really know how to push her buttons. As they butt heads, though, maybe there’s more to him than just an annoying, loud, flannel-wearing singer. The expectations of her family members present quite a bit of drama as they begin to spend more time together. I’m going to let our listeners know there are several trigger warnings for this book. They include Xenophobia, Islamophobia, racial profiling, public and work harassment, academic anxiety, gaslighting, sexism, intercommunity racism, and homophobia, and eating disorders.

Rachel: Wow.

Mary: These are tough topics but this novel deals with them well while managing to be light and humorous at times. A loose readalike is “Lessons in Chemistry” by Bonnie Garmus. This bestseller follows chemist Elizabeth Zott as she tries to find a job that will pay the bills and allow her to do what she loves: chemistry. Because it’s the 1960s and she’s unmarried with a baby on the way, her options are severely limited. She ends up accepting a job hosting a cooking show and teaching housewives how to cook. It turns out, though, she’s also teaching these women to go against the status quo. This book also deals with some difficult situations, so keep that in mind. Apple has actually picked up this book for a television series, so watch for that!

Rachel: My next recommendation is “A Lab of One’s Own: One Woman’s Personal Journey through Sexism in Science” by Rita R. Colwell. Haven’t read it yet myself, so I’m cheating here, but according to the blurb it is, “A memoir-manifesto from the first female director of the National Science Foundation

about the entrenched sexism in science, the elaborate detours women have taken to bypass the problem, and how to fix the system. When [Colwell]...first applied for a graduate fellowship in bacteriology, she was told, "We don't waste fellowships on women." Over her six decades in science, as she encounters other women pushing back against the status quo, Colwell also witnessed the advances that could be made when men and women worked together. Here she offers an astute diagnosis of how to fix the problem of sexism in science." I cannot even begin to imagine the uphill battles she faced through those long years. All girls get a taste of that sort of thing during school, but to continue on to higher education where—you know, your peers are supposed to be better educated—only to still deal with that BS is frustrating. If you end up raving about "A Lab of One's Own," you'll also find a readalike in newly published "The Exceptions: Nancy Hopkins, MIT, and the Fight for Women in Science" written by Kate Zernike. And by 'new', I mean that it hit shelves a mere two days ago! Zernike is the correspondent who broke the story about MIT's discriminatory practices toward female faculty, and this book is a larger account of that whole mess. If instead you want fiction, my go-to is always the "Mistress of the Art of Death" series by Ariana Franklin. It combines historical fiction with procedural crime, focusing on a young medical examiner prodigy who just so happens to be a woman. This story explores burgeoning science during the Medieval period as well as the nitty-gritty details of human anatomy. This series was written with adult audiences in mind, but I read the first three installments as a teen and turned out perfectly normal. Right, Mary?

Mary: Yep, perfectly normal. My next recommendation is "The Calculating Stars: A Lady Astronaut Novel." This book won several awards, including the Nebula and Hugo awards. It's loosely based off of "Hidden Figures: The American Dream and the Untold Story of the Black Women Mathematicians Who Helped Win the Space Race" by Margot Lee Shetterly, which I also recommend. The film actually came out in 2016 and is also fantastic. "The Calculating Stars" follows mathematician and pilot Elma York in 1952 after a disastrous meteorite falls to Earth and obliterates a large expanse of the east coast. This crash causes the climate to fall on its head. The world has to figure out something quick before they end up just like the dinosaurs—extinct. As humanity scrambles and doubles their efforts to explore and colonize space, Elma is recruited to be a calculator for the voyage to the moon. As she looks around at her coworkers, many of them women, she begins to wonder why women are expected to stay on the ground when they are just as capable of being up in space. She makes it her personal mission to be the first Lady Astronaut despite what society is telling her is acceptable. Can she fulfill this mission and break down this wall of planetary proportions? I'll give you a hint: she can do anything.

Rachel: That's all, listeners. Please check the show notes for a list of everything Mary and I discussed today. You can subscribe and rate the podcast if you like what you hear, which really does help us reach a wider audience and will keep the podcast going. Remember to contact us through the Oak Creek Public Library website or Facebook page by sending messages to @OakCreekLibrary. The library is also on other social media platforms like TikTok, Twitter, Instagram, and YouTube, so go ahead and give us a follow. This has been, a shameless plug. Until next time, happy reading.

Mary and Rachel: Bye!

(Brief outro music)

Mary: It's a powerful novel based on the incredible true story of the glamour icon and scientist whose groundbak...

Rachel: Groundbaking?

Mary: Why? I was doing so good!