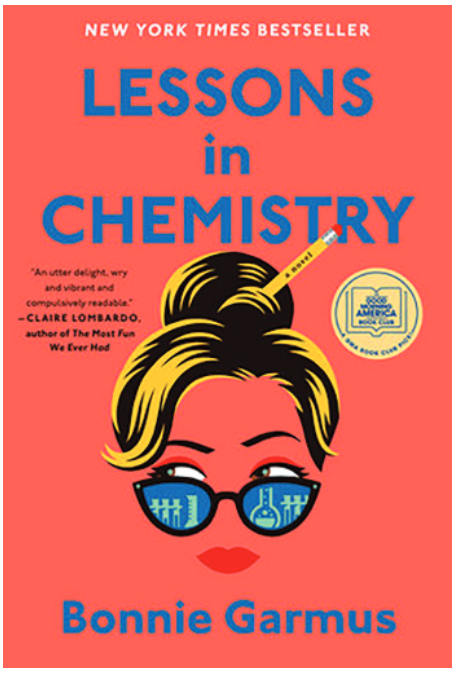

Lessons in Chemistry: A Novel. By Bonnie Garmus. 2022. Doubleday. (ISBN 9780385547345). 400 pp. Hardcover, $29. E-book and audiobook also available.

Lessons in Chemistry is a richly imagined alternate history of scientific research at the forefront of molecular biology in the 1960s. The central protagonist rarely receives sufficient credit for her discoveries; colleagues and supervisors discount her because of her gender.

Kirstin and I both trained in a department that was still populated by several of the octogenarian luminaries who originally published research like that reimagined by *Lessons in Chemistry*. And for nearly a decade, one of these luminaries had invariably asked the department's sole woman professor to serve everyone tea.

Even as our community progresses toward greater equality, it's essential that we recognize this history. The opportunities for contemporary women scientists did not come easily: they were fought for by people like my graduate-school advisor, who during her own postdoctoral research routinely worked through the holidays, knowing that she'd be denied opportunities if she were merely *as good* as her colleagues. To overcome systemic bias, she had to be *better*. And Rosalind Franklin, the codiscoverer of DNA structure who went uncelebrated during her lifetime, was caught in a quintessentially misogynistic trap: she was scorned both for being too attractive *and* for dressing too frumpily.

The protagonist of *Lessons in Chemistry*, Elizabeth Zott, is a deeply compelling and inspiring stand-in for real-world scientists like these. Zott hungers for the recognition that would have come easily if she'd been a man. And the novel celebrates scientific discovery, peppered throughout with brief descriptions of interesting chemistry. I think it's a testament to how well this character is drawn that at the rare moments when Zott describes chemistry inaccurately—such as when she explains protein unfolding and coagulation (to a dog!) while frying an egg—my reflexive reaction was, "That's not what Elizabeth Zott would say!"

It's also a sign of how far our understanding of molecular biology has come since the 1960s. We've learned so much about protein folding—from computer simulations, X-ray crystallography, and NMR spectroscopy—that we can now clearly explain the essentials of this process to high school students. Elizabeth Zott would be so envious of how much we know today.

The novel is tidily plotted, replete with quasi-mystical coincidences that reminded me of Charles Dickens or John Irving. You should be forewarned, though: a wide variety of traumatic episodes are presented very abruptly, and the book would probably benefit from a bevy of content warnings, including for sexual assault, untimely death, and suicide. At times, I also cringed at what felt like excessively malicious depictions of people who believe in deities. Especially from a story that parallels the book of Job, where we're expected to accept numerous characters' unresolved tragedies while focusing our attention on the protagonist, I found myself wishing for a bit more generosity.

Still, so much of my experience with this book was great. I'd feel comfortable recommending this novel to any scientist (or feminist!) who likes to read.

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Strange Sea Creatures. By Erich Hoyt. 2020. Firefly Books. (ISBN 9780228102977). 112 pp. Hardcover, $24.95.

Strange Sea Creatures explores unusual marine organisms from all over the world, organized for the reader by their depth below the surface. The photos in this book (taken from biologists' and divers' explorations) are stunning, and the contrast between organisms and the dark background allows the reader to focus on the small and intricate anatomical details of these exotic creatures. As stated in the introduction, many of the organisms pictured have yet to be fully characterized and studied, so the descriptive text is often sparse, but it highlights how incomplete our exploration of the marine world continues to be. Readers looking for detailed information about these organisms will need additional resources, but this book shines as a collection of biology-related artwork evoking curiosity and appreciation for the vast array of marine habitats and fauna.

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Climate Ghosts: Migratory Species in the Anthropocene. By Nancy Langston. 2021. Brandeis University Press. (ISBN 9781684580644). 216 pp. Hardcover, $45. E-book and paperback also available.

Teachers seeking contemporary examples to use to discuss climate change, threatened species, habitat destruction, and human impact need look no further: *Climate Ghosts* has that and more. *Climate Ghosts* focuses on three "ghost species"—groups of organisms that have declined in numbers or been displaced from their native habitats, but not gone completely extinct—loons, caribou, and lake sturgeon. Readers will learn about the historical events that led to the decline of these species, efforts to restore their habitats and populations, and the cultural and religious significance of these species to Indigenous communities in the Great Lakes region.

Throughout the book, Langston emphasizes that "restorationists don't need