Audiobook Mixtape 2: Gift Ideas from the Ologists' Brains Ologies Podcast December 9, 2021

Oh hi, it's me, it's the guy who has, like, one item in the grocery store and you let him cut in front of you, and he thinks about it all day, Alie Ward. We're back with a brand new, shiny, Audiobook Mixtape episode, which you're like... What? Huh? What? All right, so there's so many ologists who are authors and they've sweated and fretted and poured themselves onto pages, and I thought, in 2019, "Why not make like an audio catalog of their books?" So, I did! And it's up at AlieWard.com/Ologies/Bookworm. So, maybe you need gift ideas. What's better than a book? They're biodegradable, they can be regifted when you're done with them or when someone else is done with them. Or maybe, you yourself will be on some planes, or trains, or in an automobile this season and need a good read.

So, I did an updated episode for 2021, gathering as many excerpts from ologists who we've had on since the last Audiobook Mixtape episode, put them all together, with the help of the *Ologies* staffers, Noel Dilworth and Susan Hale, who literally made a whole spreadsheet of all the ologists and their books and helped me reach out to get the actual author's picks for what part of their books they wanted me to read into your face. So, I'm about to do that. Also, I took a Twitter poll to ask if you wanted me to read all of these excerpts like a normal person, making a normal episode, [lowers voice to near whisper] or kind of like an ASMR bedtime story vibe. And guess what? You said, "No thanks! Just do it normal," so... I will.

Okay, first thank you patrons for supporting this show from before we ever launched. I love you all. You can join Patreon for as little as a buck a month and submit questions to the ologists and thank you to everyone who supports us by telling friends and family, who tweeted at me about being your number one Spotify listen this year. Apparently, 80,000 of you had *Ologies* as your number one podcast on Spotify, which blows my butt right off. Thank you to everyone who rates on Apple Podcasts and leaves reviews. I read them all and I prove it with a fresh one left this week by NewMexicoNatureTeachers, who wrote:

Better than a narwhal migration. There's this guy named Chris who teaches 7th graders to love every creature on this planet and when Chris turned 30, he hoped to see the narwhal migration, but it didn't happen. He's about to turn 50 and he's your biggest fanboy. Thanks for a show that continues to show me the marvels of the world.

Chris! Happy birthday. May all narwhals be with you cosmically, and I hope they migrate before your eyes and before the whole world collapses. Just kidding, we'll get to that later. Okay, onto books.

Settle in for a stroll down the stacks, and if any of these ologists and episodes are unfamiliar to you, go back, listen to their episodes. Augh, so good! Also, I thought this episode would be so easy to do, just read a bunch of excerpts. Guess what? Turns out narrating 30 pages of straight script and making segues isn't as brisk as I thought it would be, and this episode is already two days late now, so let's do the music thing. All right, Audiobook Mixtape Number 2.

Okay, still me. So, y'all, it's winter in the northern hemisphere, we're about to pull on some absurdly thick socks and cozy up with a dozen or so books from your friends. What shall you sip? Perhaps some hot malt cider. Does that even exist, from an existential aspect? If you listen to the Ciderology

episode with Gabe Cook, perhaps you know that Americans call anything with apple juice, cider, pretty much. We're big oafs about it, we get it wrong. But southern hemisphere, maybe you're on the beach right now, maybe you're in a Santa hat, kicking back cold ones. Either way, in Gabe's new book, *Modern British Cider*, from CAMRA Books, he tells us what cider looks like in this modern age. Where has it come from and what is making the trends that are being experienced right now? And he picked this excerpt for me to read to you. He wrote:

People who know me well are aware of certain identifiable traits that I possess; my uncanny knack for being a jammy git, my insistence of always choosing red on the roulette table, and my utilization of utilize over my use of use. Another known foible is my ability to speak with the aim of eliciting an informed and technical response on a topic, and yet instead undertake a torturous, seven-minute narcissistic monologue that ends in a yes or no question, or maybe no question at all. It's a particular skill.

Well true to type, I'm approaching this book in a similar fashion. I have been presented with a clear, bold, and totemic title: Modern British Cider. The natural conclusion to writing such a book, you might imagine, would be to establish, identify, and explore exactly what constitutes a modern British cider, which is precisely what I am not going to do.

Right now, cider doesn't really need me, a condescendingly mustachioed Englishman, to apply any form of restrictive definition, just as it's beginning to emerge from its chrysalis and turn into the wonderful boozy butterfly that it has the potential to become. Modern British cider isn't a singular thing, it's not a style, it's not a particular process or form of packaging, it can't be a tick-box exercise because the boxes haven't been agreed upon yet. It's more of a free jazz ensemble, exploring the routes before joining back up together.

Augh! Don't you love when someone loves something? So anyway, that was his pick from *Modern British Cider*.

But maybe alcohol isn't something that you have a good relationship with; maybe your drug is oxytocin, and it's love. Dig into a brand-new book by Dr. Robin Dunbar of the Philematology episode all about kissing. So, he authored the book, *The Science of Love*, which was published by Wiley in 2012, and in it, he covers casual questions like, what evolutionary benefit could there be to feeling like you would die for a mate? And is parental love anything like romantic love? If love exists to encourage childbearing, why do we love until death do us apart and beyond? So, Robin Dunbar picked the opening excerpt of *The Science of Love* for me to read to you, and it goes like this:

It's the weirdest thing that will ever happen to you, falling in love I mean. Think about it, there you are, wending your way innocently through childhood, doing the things that children do, and then the hormones suddenly kick in, and then you fall in love. Hesitatingly at first, in that first all-consuming crush, but then with more confidence and determination as practice and experience make perfect. And although it doesn't happen every day, from time to time, throughout the rest of your life, it will catch you by surprise. It's very weird. All at once, you can't think of anything else except this seemingly random person who has just stepped, probably equally innocently, into your life. Your attention is focused almost to exclusion on the object of your desire. You just cannot get enough of them. You experienced heightened happiness, often associated with glazed eyes, a faraway look, and a dreamy expression. And roused, though not turbulent emotions. The word besotted often comes to mind.

So yes, his book is *The Science of Love*, and it covers everything science has discovered about romance, and passion, and sex, and commitment, and more.

And if you are me and have been mainlining The Beatles documentary and wondering how close friendships mirror intimate partnerships, but with less boning, perhaps you'd like to pre-order Dr. Dunbar's upcoming 2022 book, *Friends: Understanding the Power of our Most Important Relationships,* because we get by with a little help from each other. So, links to those on my website, friends.

But if you're like, "Okay, what... get back to boning, internet Dad!" Well, okay then, let's talk dicks. Better yet, let's read a whole book about boners, and schlongs, and dingdongs, and pickles. So author, PhD biologist, and Phallology guest, Dr. Emily Willingham, wrote the book on 'em. It's called, *Phallacy: Life Lessons from the Animal Penis*. It was published by Avery in 2020 and Dr. Willingham provided an excerpt from Chapter 2 which gets at most of the book's main themes, and she writes:

Perhaps you've never looked at a human penis and wondered, where did that come from? In which case, congratulations on your escape from the fate of many a girl and woman, holding a smartphone. But it's a question that lots of biologists have asked, and then asked again. The answer for humans and most mammals is pretty straightforward and, honestly, not enthralling. But the rest of the animal kingdom, dear god! By the time you're done with this book, you'll be just fine with the penis you have, or share, or enjoy, I promise.

So, that is her excerpt. She apologized for that penis paragraph saying, "If it's too short, I can try to find another." Dr. Willingham, if we've learned anything from your work, it's that the size, length, or breadth is not what's important. And as the blurb of the book says, "The fallacy sold to many of us is that the penis signals dominance and power, but this wry and *penetrating* book reveals that in fact, nature did not shape the penis, or the human attached to it to have the upper hand." So, it's intention and how you use it.

Okay, if you're looking for more of Dr. Willingham's work, maybe more upstairs than downstairs business, she has a brand-new book, it's being released December 14th, next week, by Basic Books and it's called, *The Tailored Brain: From Ketamine, to Keto, to Companionship, A User's Guide to Feeling Better and Thinking Smarter.* Her book has been called a candid and practical guide on the new frontier of brain customization. She says that there's no one-size-fits-all shortcut to the ideal mind and the way to understand cognitive enhancement is to think like a tailor; so, measure how you need your brain to change and then find a plan that suits it. So, that new book is, *The Tailored Brain.* So yes, if you liked her previous work on dicks, you might just love her brain book.

Okay, so from Willingham's willies to worms? That seems like a good segue, right? So, Dr. Oné Pagán, beloved guest from the episode Planariology, about very cool worms, I promise, has written several books. There's one, *The First Brain: The Neuroscience of Planarians*, through Oxford University Press. So many of you loved him and got pumped about planarians from his passion. I'm going to read you an excerpt that he sent me from his 2014 book at planarians. Ready? Okay:

Before getting into what a flatworm actually is, we should explore a more general question: what is a worm? A generic worm is an invertebrate, which means an animal that does not have a vertebrate-style spinal cord. Examples of invertebrates include insects, arachnids, and well, worms! Among other things. Worms in particular are usually not much more than a tubelike-shaped critter, which generally lacks appendages, but there are variations of the theme on this, of course. For example, sometimes we refer to caterpillars, the very hungry kind or otherwise, as worms. And there is a particularly interesting type of worm, the velvet worm, also known as peripatus, which is not really a worm but is nonetheless a very interesting little guy, who I think deserves a book of its own.

But I digress. In general, worms tend to be slimy little living things. All kids like worms, girls, boys, doesn't matter. The traditional aversion to slimy, wriggly, living beings comes later in a kid's life, depending on his or her particular upbringing. Some people outgrow their fascination with critters like these. Thankfully, I never did. Of all worm species, flatworms are some of the most interesting ones on this Earth of ours.

Ah! I love him. So, if you've already read this worm tome, maybe you'd like his other book which is, *Strange Survivors*, which is about really bizarre offense and defense strategies animals use to survive in the cut-throat world of natural selection. Or he has a brand-new book out, 2021, it's called, *Drunk Flies and Stoned Dolphins: A Trip Through the World of Animal Intoxication.* It's published by Benbella Books. So, I'm sorry, drunk and stoned animals? Yes. And he writes:

From parrots to primates, consuming medicinal chemicals is an instinctive behavior that helps countless organisms fight infection and treat disease. But what if the similarities don't end there? Like us, many creatures also consume substances that have no apparent benefit except for intoxication. In fact, animals have been using drugs for recreational purposes since prehistoric times. We may even have animals to thank for the idea. Legend says that coffee was discovered by observing the behavior of goats that had eaten it.

Ahh! So that is his latest book, it's called, *Drunk Flies and Stoned Dolphins*. And if you need more of Dr. Pagán in your life, which you do, since being on *Ologies*, he launched his own podcast and it's called, *The Bald Scientist*. He talks more about his life and work and books there; he's a gem, we love him.

Okay, from shit-hammered gnats, let's talk about angry wasps. Are wasps angry? Are they the assholes we've made them out to be? So, if you listened to the Spheksology episode with author and entomologist Eric Eaton, you may have learned, wasps are just trying to wasp, and they just want to feed bits of your turkey sandwich to their carnivore babies. And Eric wrote a breathtakingly beautiful book called, *Wasps: The Astonishing Diversity of a Misunderstood Insect.* It was published in 2021 by Princeton University Press and like his episode, it sings the praises of the insect that we all have unfairly decided we hate, or maybe have confusing feelings toward. And he picked this excerpt for you:

Humanity has a great ambivalence toward wasps. Our patriarchal culture reveres the warrior image of social wasps, conveniently ignoring the fact that wasps we all want to emulate are all female. Meanwhile, we loathe yellowjackets for exploiting our urban and suburban lifestyles. It may come as a surprise to learn that the overwhelming majority of wasp species lead solitary lives rather than dwelling in paper palaces with queens and workers, or that not all wasps can sting.

So, sit back y'all, relax by the fire, and thumb through some really gorgeous photos of wasps. Also, when you're stuck on a holiday Zoom with your cousin's husband you hate, just change the subject by announcing that wasps are agents of pest control in agriculture and gardens and they're subjects of study in medicine, engineering, and they pollinate flowers, and they engage in symbiotic relationships, they create architectural masterpieces in the form of their nests. So, there you go, there's some dinner party convo.

And if you're like, "Mmm, I don't know about wasps." That's fine. If you're like, "Do you know of any bug books that celebrate small, hard animals who don't have tiny shivs on their butts but maybe they have, like, lamps instead?" Well! Do I ever. So, self-described sparklebuttologist and firefly expert, Sara Lewis, wrote a book about these luminous little beetles, lightning bugs, and it's called, *Silent Sparks: The Wonderous World of Fireflies.* It was published in 2016 by Princeton University

Press, and Dr. Lewis picked an excerpt for me to read from Chapter 2: Deep in the Heart of the Smokies. She writes:

It wasn't until the forest was completely dark that we saw the first flash. Moments later, a dozen male fireflies took flight around us, broadcasting their typical mating call: six rapid bursts of light followed by six seconds of total darkness. Suddenly, the forest came alive with flying sparks and thousands of male fireflies were flashing together in lock-step synchrony. Together, they flared out their six precisely timed flashes and then they all ceased at once. Darkness rushed in like a shade drawn over my eyes. All the scientific descriptions that I'd read left me totally unprepared for the transcendental thrill of this rhythmic, pulsating display. Mesmerized, I sank down and yielded to this immense biological rhythm, alone in the silence, save for a synchronous symphony played by a thousand fireflies. I felt like I'd fallen out of time.

That night in Elkmont, I'd witnessed a prodigious effort that was all about procreation. The tiny pulsating stars responsible for this brilliant display, were desperately trying to propel their genes into the next firefly generation. As for the rest of us, we were just fortunate to be spectators at their exhibition.

So, her book, again, *Silent Sparks*, it's been called a passionate exploration of one of the world's most charismatic and admired insects. So, it might just inspire you to go sit in a forest and reconnect with the natural world.

And also, aren't we all kind of passionate about passion? I feel like we are. Cicadas are. Just ask entomologist Dr. Gene Kritsky. He is the author of the 2021 Ohio Biological Survey book, *Periodical Cicadas*: *The Brood X Edition*. And if you're like, "Why do these bugs live underground 17 years? I need more info before brood X emerges again in 16.5 years." He told me that page 72 of his book, describes the purpose of 17-year cicadas. He writes:

Love gives them wings and they flaunt themselves in the sun for a brief space, like some gay Lothario. And like him, they dissipate every energy and then fall to the earth like an empty pouch, as Balzac says, and die. When examined after their death, they're found to be a mere shell, scarcely more substantial than that they cast off when they began their amatory career. It's true that the female, before her death, goes to some trouble to drill holes in the bark of the trees for the purpose of laying her eggs, after which, she too falls and dies, leaving as empty a carcass as that of her mate.

For 17 years have these hopeful creatures been waiting in the dark recesses of the Earth for the time when fate will throw them together. And for 17 years, they have been laying in a good supply of food so that when their honeymoon shall arrive, they may waste no time in idle, vulgar feeding. But they devote themselves entirely to the cultivation of each other's acquaintance. And so, through affection, they starve to death.

Augh! How emo, how beautiful. Horniness, it drives us... it drives us to peril. What a beautiful tragedy. So, that was Dr. Gene Kritsky's book, *Periodical Cicadas*. What a beautiful tragedy! They need to love to connect, to leave a genetic legacy to copulate with the absolute loudest screaming partners you can find.

It's not just humans or bugs though. Bears are also so vulnerable to the magic of affection. You can take it from Ursinology guest and bear expert, Chris Morgan. So, he wrote a book called, *Bears of the Last Frontier: The Adventure of a Lifetime among Alaska's Black, Grizzly, and Polar Bears*, it was published in 2011 by Stewart, Tabori, and Chang, and it details his time traversing Alaska to document and study the mating behavior of giant coastal brown bears. And he writes in the chapter, "The Love Zone":

A pattern emerges on the meadow that has had me transfixed. The bears enter the scene over a giant log pile, pausing as if walking into a saloon and assessing the competition. Some bears scatter, while others quit munching momentarily to size up the newcomer. The biggest males confidently resume grazing while the intermediary bears leave the scene quietly, gingerly looking over their shoulders, in the hope that the females weren't watching them retreat.

Pushing through the saloon doors, a giant male entered the scene today and every female looked up. They all seem to be trying to catch his attention, coyly turning in circles before sitting on their rumps and wandering back and forth toward and then away from him in the hope that he might follow. The big fellow had an air of supreme confidence about him, and he immediately pulled out some of his best moves to impress his competitors, starting with a bear's typical cowboy swagger. Elvis, eat your heart out. The hip gyrations on this guy caught everyone's attention, including another large male who was already copulating with a female.

Whaaat?! Thank you, Chris Morgan, we have just learned that nature is one big muddy, orgy. It's a little heteronormative, but whatever floats these beautiful, beloved beasts' boats. You know?

And so now that we've covered some birds and the bees of bears and bugs, let's talk bird butts. You loved Dr. John Bates' Oology episode, and he is the editor of the University of Chicago Press's, *Book of Eggs: A Life-Size Guide to the Eggs of Six Hundred of the World's Bird Species.* This is the ultimate, thick, illustrated, love letter to 600 of the most intriguing eggs. Dr. Bates picked this excerpt for me to read to you:

The diversity of birds that successfully reproduce via the egg is astonishing. Birds live on every continent and successfully breed in every terrestrial habitat. In the frigid Antarctic where winter temperatures are below 70°F, and winds may reach 200 miles per hour or 320 kilometers. The emperor penguin stands in place, carrying its single egg on top of its feet for two months to warm it before the chicks hatch. In Chile, grey gulls breed in the world's driest deserts, where few predators can venture. The eggs and chicks are safe, but the parents must commute daily to the ocean to obtain food and water for themselves and their offspring.

We still have much to learn about the biology of birds' eggs but there is no doubt that reproduction through eggs has been a very successful system for birds for millions of years. This book is a journey through the strategies that different bird species and the tactics that different individuals have evolved and adopted to successfully reproduce, via the fragile egg.

So, in the 'which came first, the chick or the egg' debate, the order is... the egg, then the chicken, then the scientist, and then the book.. And then you buy the book. I don't know, read it for yourself, give it to a friend, there you go.

And if you're wondering, "Is there a book about history and geologic time? Maybe also molten Earth?" Well, there is, and it's called, *Ms. Adventure*, it's by the wonderful Jess Phoenix, who is your favorite volcanologist and also the guest of the very first episode of *Ologies* ever. Her book was published this year in 2021, by Workman Publishing and it is part memoir with a boatload of adventure and exploration from jungles, to glaciers, to TV studios, and of course, the world's largest volcano. Okay, so this is a story about one time, she was doing science on a volcano, page 104.

I approached the flow guardedly. My goal was to get close enough to stick the pointed pick end of the hammer into one of the flow's toes. As I drew closer, the heat grew more intense than anything I'd ever felt. The flow I was targeting was in excess of 1800°F, which is nearly four times hotter than the highest setting on an oven. It seemed as if nature had hushed itself unbidden, except for my heartbeat, which was jackhammering in my ears.

I paused, eyeballing potential targets and not wanting to get closer to that outrageous heat until I knew for certain where I would strike. I set the coffee can down behind me and settled on a nice, fat, lobe of lava about six feet away that was slowly blobbing toward my right foot. Faintly, I heard a tinkle that sounded like tiny pieces of glass being crunched ever so gently. The lava was making an almost musical sound as the new flow rolled over the older ground beneath. Between that and the radiating waves of heat that were hitting me full force, it felt like a dream.

I couldn't take the heat much longer, so I clenched my teeth and stepped toward the flow, right arm extended with the hammer pick pointing down. Suddenly, my eyes felt like they were being sandblasted. At Matt's direction, I had kept my sunglasses on, so I tried blinking. The awful feeling remained, and I recognized my eyes were dehydrating. I needed to hurry, or my vision might end up more compromised than it already was, and one errant movement could result in serious burns. I took one last step, shielded my eyes with my gloved left hand, enough to deflect some of the searing air, planted my right foot 10 inches from the flow, and stuck the pick into the living, silvery glob.

Feeling no resistance, I pulled up slowly, straining against the heat to see what was happening on the end of the hammer. The lava followed the hammer's path, some of its sticky bulk attached to the pick with the rest fighting to stay part of the flow. The taffy from Hell stretched vivid and red, the insubstantial silver crust broken by the hammer, the flows dazzling scarlet, insides exposed to the world. I kept pulling and freed a glob, the molted rock tendrils oozing back to the bulk of the flow. I pivoted, shaking the hammer to make the glob release its hold. It fell to the waiting coffee can, and the water inside crackled to life, boiling instantly thanks to the scorching lava bleb I had dropped. Steam rose from the can as the sample was hyper quenched, solidifying it and preserving the information contained inside its primordial makeup.

As soon as the boiling stopped, I picked up the can and rejoined Matt at a safe distance from the flow front. Relieved to be in cooler air and ecstatic about all things lava, I couldn't stop grinning. We packed up the sample and trekked off to map the lava flow that was currently burning an isolated island of green amid this sea of black.

So, there you go, how planets are made in Jess Phoenix's book, Ms. Adventure.

But if we're all here, right, on this big craggy lump of rock, who else is out there? Don't ask me, I don't know. Ask Astrobiology guest Dr. Kevin Hand, who is a NASA JPL scientist and author of the 2020 book *Alien Oceans: The Search for Life in the Depths of Space*, published by Princeton University Press, who at this point in the episode owes me a fruit basket.

Actually, one sec, before we hear what a professional alien hunter has to say, let's just throw some money at one of my favorite causes. We're going to pick 826LA which is a nonprofit organization dedicated to supporting students aged 6 to 18 with their creative and expository writing skills and helping teachers inspire their students to write. 826LA is based here in LA, they provide afterschool tutoring, they have evening and weekend workshops, they have in-school tutoring, help for English language learners, and they assist with student publications. So, that donation was made possible by sponsors of the show, whoms I like very much.

[Ad Break]

Okay, terrestrial o'clock, here we go. So, Dr. Hand chose this excerpt for me to read to you. Here we go:

The discovery of life beyond Earth, or conversely, the discovery that it does not exist anywhere else, is as profound a shift in our framework of the cosmos as is moving the Earth from the center of the universe to being just one of many planets orbiting an average star in a universe full of stars. So, perhaps we are the only ones, perhaps the origin of life is hard, and life is rare. Or perhaps we live in a universe teeming with life, a biological universe of incredible diversity across planets, moons, stars, galaxies. Perhaps our tree of life, the singular center of biology as we know it, is revealed to be but a tiny twig on a tiny branch, joined to a vast and grand tree of life, connecting the beauty of all life in the known universe.

Looking up in the night sky, seeing Jupiter as a bright point of light above the horizon, I can't help but wonder whether our return to that beautiful planet and its magnificent moons, will once again catalyze a scientific revolution in our understanding of our place in the universe. Europa and the many alien oceans of our solar system await.

Ooof! Goosebumps. So that was Dr. Kevin Hand's, *Alien Oceans*. And if you're like, "Read more stuff like that please, internet Dad," then fine... I will.

If you heard the UFOlogy episode about flying saucers and all kinds of sky mysteries, you'll remember that one guest, Sarah Scoles is an author and wrote *They Are Already Here: UFO Culture and Why We See Saucers.* And that is via Pegasus books; it came out in 2020. Here is the excerpt that Sarah wanted me to beam into your consciousness. Here we go:

Perhaps knowing is not the point of UFOs. For serious researchers in this field, trying to know seems to hold the most appeal of all. Unanswered questions after all, keep you up at night; they animate you, compel you to crack open that laptop just one more time, letting it light your face blue at 1:00 AM. They press you to come up with theories and then test them on your friends. "Hear me out..." your sentences begin to begin. When, or if, you find whatever you're seeking, the film of your life slows to fewer frames per second.

People I've interviewed have called UFOs various versions of the ultimate problem to solve. Many of them don't believe UFOs, a term that denotatively just means something in the sky that the seer can't understand, they don't believe that they were forged in alien furnaces far, far away, although some do. But they do believe these sights are something. Maybe they're something in our heads, maybe they're secret military craft, misinterpreted planets, blimps, wavering stars, atmospheric phenomena, swamp gas, our collective ignorance of all of the above organized into skylights. But whatever they are or are not, people undoubtedly see things they can't explain, talk about them, write about them, wonder about them.

Ohhh yes, so bring on the invasion of, in Sarah's words:

...the big wigs, the scrappy upstarts, the field investigators, the rational people, and the unhinged kooks of this sprawling UFO community.

So, the truth is out there, in a book.

You know what else is out there? Space garbage. So much of it. So, over our heads and in the future, it might even encircle our planet like a hula hoop made out of broken robots. So, Dr. Alice Gorman is a space archaeologist, and last year she published a book via MIT Press called... you ready? Hold onto your butts, it's the best title: *Dr. Space Junk vs The Universe.* I mean with that title, how am I supposed to pick an excerpt? I'm not, because we asked Dr. Gorman to do it. This is the cosmic sample she wants us to read. Here we go:

We don't think of the space environment in the same way as Earth's. One reason is the common perception of space as a black, empty vacuum. Unlike Earth, space is infinite, beyond our sun

there are billions of others just like it, even in our, "unfashionable end of the western spiral arm of the galaxy," as Douglas Adams called it in the Hitchhiker's Guide to the Galaxy. Perhaps most importantly, as far as we know, there is nothing living in interplanetary space that humans haven't put there. We have managed to expand the human biosphere, just a little, into low Earth orbit, where the International Space Station circles with its tiny crew. And I hate to tell you this, but some fool sent Madagascar hissing cockroaches into space on an experimental space station that's still in orbit. There's no way that's going to end well.

That's *Dr. Space Junk vs. The Universe,* by Alice Gorman. So, if you ever needed new nightmare fuel, you're welcome, there you go. And we talk about that in her Space Archaeology episode as well.

You're wondering, "Is there a disasterologist in the house? Because this sounds terrible." And to be honest, there is. Her name is Dr. Samantha Montano, and she came on the show in 2018 to talk about emergency management. And guess what? She put out a book this year. It's published by Park Row, and it's called, *Disasterology: Dispatches from the Frontlines of the Climate Crisis.* It's part memoir, part expert analysis and a passionate account of a country in crisis, one unprepared to deal with the disasters of today and those looming in our future. Her work is so weird and great and cool. So, she picked this bit from *Disasterology* for us to read:

Years ago, when I first began to understand the urgency of the climate crisis, I struggled to figure out how I could help prevent future climate-driven disasters when I was already standing in the middle of one. How could I justify taking the time to worry over Miami's future when that future had already arrived in New Orleans?

What I did not understand at the time was that we could and had to do both. If we do not radically change our emergency management policy and approach to managing disasters, the apocalyptic Hollywood disaster scenes that come to mind when we think about climate change could become real life. My hope is, by sharing with you, the long and often indirect journey I have taken to understand the true extent of the trouble we're in, you will see the problems clearly too and find the courage to take action because we have a lot to do.

Okay folks, yes, we have a lot to do. I feel like we're on board, we know that. But what is to be done?

So, in her episode of Indigenous Fire Ecology, Dr. Amy Christianson talked about land stewardship for a start... and by start, I mean revisiting as these methods have been used for tens of thousands of years. And she wrote a guidebook called, *First Nations Wildfire Evacuations: A Guide for Communities and External Agencies*. It was put out by Purich Publishing and Dr. Amy Christianson describes increasingly frequent wildfire blazes, and she's been on the frontlines of these. She writes:

It begins with the smoke. Someone from the nation will see a smoke plume, either nearby or faraway, and almost immediately an image will appear on social media. Did you see the smoke? A quiet unease then ripples through the community.

Wildfires in the summer are nothing new for first nations in the boreal forest and everyone understands that the risk is real. It often happens on a hot day, when warm winds gust, the smoke plume expands, and ash spreads through the upper atmosphere, turning the sun a disconcerting orange. In need of reassurance, people call the Band Office for their families. Band staff search for information and try to determine the position of the fire and whether it's a threat.

When the ash starts to fall, everyone knows that things are getting serious. What was once beautiful, black ash floating like tiny feathers in an orange sky, now collects like ground gray chalk on car hoods and a platform for curious children to write their names. The day begins to

darken as the smoke blocks out the sun. Day quickly turns to night and visibility becomes limited to a few meters at best. Those who have respiratory conditions such as asthma begin to experience difficulties breathing, and then ash and embers at ground level make it physically difficult for even healthy people to breathe.

The band reaches out to multiple agencies, local, provincial, and federal, for advice on whether to evacuate. Although the smoke seems to be near and poses a threat to community members, they have no idea how close the fire is to the community. The actual flame front could be many kilometers away, but rumors continue to circulate. If the First Nation is accessible by road, some people might simply get in their vehicles and leave before an evacuation is called. For those who live in fly-in communities, it's not that easy. In both cases, residents must depend on leaders and outside agencies to ensure their safety. There are often no set protocols or guidelines in place, even though First Nations are some of the most at-risk communities in Canada and it's been predicted that their "at risk" status will only increase with climate change.

If you live in a First Nation and are responsible for or are concerned about wildfire evacuation, or if you work for an outside agency and need or want to know about the special concerns or needs of First Nations, this book is for you. Though it will also be a valuable resource for other Indigenous and non-Indigenous communities in Canada and beyond. Indigenous peoples around the world have lived with fire for tens of thousands of years and have specialized fire knowledge which has been passed down through generations. Unfortunately, as a result of colonization, many Indigenous communities have been unable to practice their fire management techniques to protect their communities from fire.

So, that is from Dr. Amy Christianson's book, which will be linked in the show notes too.

And if you want some more background on the whys and the whats and also the hows when it comes to climate, Dr. Ayana Elizabeth Johnson of the Oceanology episode released a 2020 Penguin Randomhouse book called *All We Can Save: Truth, Courage, and Solutions for the Climate Crisis* and it was co-edited by Katharine Wilkinson. And Dr. Johnson picked the very beginning for me to read, so if you like science history... do you?... I had a feeling. Okay, here we go:

Eunice Newton Foote rarely gets the credit she's due. In 1856, Foote theorized that changes in carbon dioxide in the atmosphere could affect the Earth's temperature. She was the first woman in climate science, but history overlooked her until just a few years ago.

Eunice Newton Foote arrived at her breakthrough idea through experimentation with an air pump, two glass cylinders, and four thermometers, she tested the impact of carbonic acid gas (which was the term for carbon dioxide in her day) against common air. And when placed in the sun, she found the cylinder with carbon dioxide trapped more heat and stayed hot longer. From a simple experiment, she drew a profound conclusion, "An atmosphere of that gas would give to our Earth a high temperature. And if as some suppose, at one period of its history, the air mixed with it a larger proportion than at present, an increased temperature must have necessarily resulted," said Eunice Newton Foote. So, in other words, she connected the dots between carbon dioxide and planetary warming, and she did it more than 160 years ago.

Foote's paper, "Circumstances affecting the heat of the sun's rays" was presented in August 1856, at a meeting of the American Associated for the Advancement of Science, and then it was published. For unknown reasons, it was read aloud by Joseph Henry, Secretary of the Smithsonian, rather than by Foote herself. That was three years before Irish physicist, John Tyndall, published his own, more detailed work on heat-trapping gasses, work typically

credited as the foundation of climate science. Did Tyndall know about Foote's research? It's unclear, though he did have a paper on color blindness in the same 1856 issue of the American Journal of Science and Arts, as hers. In any case, we have to wonder if Eunice Newton Foote ever found herself remarking, as so many women have, "I literally just said that, dude."

This book is about a spectrum of work that needs doing and a collective effort to make our best contributions. It's not about heroes. So, whether you're a veteran of the climate movement, a keen onlooker from the sidelines, or someone joining this conversation for the first time, we hope you will find yourself in these pages. We have peeled away jargon, including foundational information, and created simplicity without forfeiting complexity because this book is for everyone concerned about our shared future.

So, that is from *All We Can Save*, which was edited by Dr. Ayana Elizabeth Johnson and Katharine Wilkinson, so that was from their intro. Ugh! So, if you're looking for a book about the whole damn Earth and what to do, again, *All We Can Save*. Writings by dozens of diverse women leading on climate science in the United States; there's scientists, journalists, farmers, lawyers, teachers, activists, wonks, innovators, and designers, all have essays in there. Awesome book, *All We Can Save*.

Speaking of ladies doing things, let's get a glance at historical power structures, shall we? We shall. So, Dr. Kara Cooney of the Egyptology episode, put out a new book just last month, November 2021... For a second I forgot what year and month we were in; it's been a time, people. But Dr. Kara Cooney's book was put out by Nat Geo, and it's called, *The Good Kings: Absolute Power in Ancient Egypt and the Modern World.* Okay, you ready for this? She sent this excerpt to read to you, and I'm hoping not to stumble through it too much. Here we go:

Whether Khufu's monarchical divination, Senusret's absolutism, Akhenaten's fanaticism, Ramesses's populism, or Taharqa's pious orthodoxy, Egyptian pharaonic history was largely a patriarchal rinse and repeat with approximately the same result. The modern world has been tossed around in the same cycle, albeit with more stark, philosophical differences, communism or capitalism, socialism or democracy, fascism or theocracy, totalitarianism or oligarchy, with all the bloodshed in between. And yet, it's all still essentially the same patriarchal system. And with every new cycle, each leader uses the pain of the last fall to cement his nascent rule. Rinse and repeat.

The patriarchy is the water in which we all swim, unknowable to most, normalized for all. Humans have been thinking these unequal, controlling, spreadsheeting, market-driven, power-obsessed, smash-and-grab, consumptive, accumulating, domesticating, competitive ways for so long that we feel we don't know any other way. We find ourselves looking up from our hard labors only to see that the landscape has been clearcut while we weren't looking, that the toxic smog of industry suddenly hides the blue sky, and that a few billionaires have carved out pleasure gardens with beautiful furnishings, air purifiers, and high walls. In response, we have cleaved into two factions. One group that wants to walk forward to find a different way, and another group that just wants a king, like the one Israel asked for in the book of 1 Samuel 8.

So, if you have ever looked at power structures and wondered, why are we like this? Egyptologist Dr. Kara Cooney sheds some light on our past with her new book. And again, that was called, *The Good Kings: Absolute Power in Ancient Egypt and the Modern World*.

And the book on race that everyone will be reading next year is edited by Anna Gifty Opoku-Agyeman, who was our fiscal guide through the Economic Sociology episode. She's edited a book, it's called, *The Black Agenda: Bold Solutions for a Broken System*, and it will be released via St.

Martin's Press in February 2022 but it's available for pre-order, and here's a preview of its contents, here's the book blurb for it just to kind of get you excited:

The summer of 2020 marked an important shift in discussing racial equity's place in America. The Black Agenda honors that shift in discourse by being the first book of its kind; a bold and urgent move toward social justice, through a profound collection of essays featuring Black scholars and experts across economics, education, health, climate, criminal justice, and technology. And it speaks to the question, what's next for America? On the subjects of policymaking, mental health, artificial intelligence, climate movement, the future of work, the LGBTQ community, the criminal legal system, and much more. Essays include groundbreaking ideas ranging from Black, maternal, and infant health, the reparations, to AI bias, to inclusive economic policy, with the potential to uplift and heal not only Black America but the entire country.

So, that is the book blurb for, *The Black Agenda*. And one reviewer wrote, "This book will challenge what you think is possible by igniting long overdue conversations around how to enact lasting and meaningful change rooted in racial justice." Which reviewer said that? You want to know. Oh, just Ibram X. Kendi, the number #1 *New York Times* best-selling author of *How to Be an Antiracist*. So, that is already getting a lot of buzz and excitement around it. That's called *The Black Agenda*, edited by Anna Gifty Opoku-Agyeman, and that will be out in February 2022, but there's a link for preorder on my website.

And for more on social and cultural work, you can dig into some history with Stephen Hanks who you may remember from the pre-pandemic, so long ago, February 2020 Genealogy episode. And Stephen wrote the books, 1619 - Twenty Africans, Aki Tree, as well as the 2021 book, Three Brothers – 1626: The Ancestry of the World up to 1626 and Beyond to Our Day and that's all through Inkwater Press. And Stephen picked an excerpt from Three Brothers for me to read to you. Right in line with the holidays, it's this beautiful passage about history, and tracking your past, and food. And the way he writes is very kind of poetic and beautiful. He says:

In 2016, a retired man living in the Pacific northwestern part of the United States took his DNA test. How did the DNA of the Yakut tribe of Siberia match an African American in the United States? Siberia, today part of Russia, but prior to then, the region was home to the Huns, the Mongol empire, and to various nomad Indigenous.

One traditional culinary dish is Siberian pelmeni, made of various meats such as beef, pork, rabbit, or bear, cooked in a pot with bone broth and liver. It can also be served as dumplings mixed with milk, onion, and garlic. One's appetite may also turn to omul fish, which can be boiled, fried, or salted and smoked, an appetizer with vodka. Venison is also served, prepared in soups, dried, or fried in cowberry sauce.

How could a migration of Indigenous Asian peoples of Siberia cross into Alaska, divided by the frigid waters? The Athabaskan, the Arawakan, the Carib, the ancestors to the Mexica, the Chickahominy, the Tuscarora peoples, passed through the trail across the Bering Strait, to South America, the Caribbean, and North America.

So, that's an excerpt from Stephen Hank's book, *Three Brothers – 1626.* So, if you're appetite has been wet, you can order *Three Brothers – 1626* which covers the origin of slavery in New York and Virginia, the ancestry of the Indigenous in Haiti and the Americas, and the rise and fall of international world powers. So, he covers a lot in it.

So yes, since we did our last books episode in 2019, there's been so much, obviously. Wonderful work has been published on history and equity, and how injustice and ignorance, sadly, blooms.

And last summer I got to interview the founder of Agnotology, which is the study of ignorance, and his name is Dr. Robert Proctor. He is a Stanford professor who, for decades, has been studying why we refuse to face the truth. He wrote the book on ignorance, well coedited it with Dr. Londa Schiebinger, and it's called, *Agnotology: The Making and Unmaking of Ignorance*, and it was published by Stanford University Press in 2008. So, Dr. Proctor sent me a snippet to read to you. Here we go:

"Doubt is our product" - The Brown & Williamson Tobacco Company internal memo 1969

Philosophers love to talk about knowledge, a whole field is devoted to reflection on the topic with product tie-ins to professorships and weighty conferences. Epistemology is serious business, taught in academies the world over. There is moral and social epistemology, epistemology of the sacred, the closet and the family. There is a Computational Epistemology Laboratory at the University of Waterloo, and a Center for Epistemology at the Free University in Amsterdam. A Google search turns up separate websites for constructivist, feminist, and evolutionary epistemology, of course, but also libidinal and android, Quaker, internet, and my favorite, erotometaphysical epistemology. Harvard offers a course in the field, without the erotometaphysical part, which, if we are to believe its website, explores the epistemic status of weighty claims like, "The standard meter is one meter long," and, "I'm not a brain in a vat." We seem to know a lot about knowledge. What is remarkable though, is how little we know about ignorance.

So, because we know so little, he literally coined Agnotology. It is the study of ignorance and pretty much the opposite of epistemology.

And also, there are so many types of epistemology, just think about how many episodes I have in the future you guys, Erotometaphysical Epistemology? Mmm? Yes? Perhaps. Anyway. That is Dr. Robert Proctor's book.

But is ignorance bliss? I have thought about it, and I think never; I think it's never a good thing. But if there was a red pill or a blue pill, would you take it? Well, your favorite futurologist, Rose Eveleth, who you know and love from her podcast, *Flash Forward*, and also the Futurology episode, she wrote a book that's part essays and part incredible graphic novel and it's called, *Flash Forward: An Illustrated Guide to Possible (And Not So Possible) Tomorrows.* It was published by Abrams in April of this year. I texted her; she said she was impartial about the excerpt, and I was like, "There are so many good ones. Can I pick this part?" She said, "Pick whatever part you want." So, here we go:

Patrick Couwenberg embodied the mythological American Dream. Born into a wealthy family in the Dutch East Indies, Couwenberg's family lost everything in 1945, when the island nation wrested its independence from colonial rule to become Indonesia. The clan moved to the Netherlands completely broke and Couwenberg didn't let that deter him. He managed to learn five languages and eventually moved to Los Angeles where he scrubbed toilets while getting a degree in physics at the California Institute of Technology. After graduation, Couwenberg spent two years in the military, ultimately earning a Purple Heart for his service, due to injuries sustained in Vietnam, including shrapnel that stayed forever lodged near his groin. He returned to civilian life and helped the US more passively, assisting the CIA in operations in Southeast Asia and Africa, and eventually getting a Master's degree in psychology before ultimately going to law school and working his way up to a role as a judge in the Los Angeles Superior Court.

"Couwenberg's story was," as that court's former director of public information wrote, "a publicist's dream come true." The problem was that it was all indeed a dream. As people

started digging into his resume, they found that nearly every piece of his biography was fabricated. He had never attended CalTech, there was no shrapnel near his groin, he never worked for the CIA, and he certainly did not have a Purple Heart.

In August of 2001, after four years as a Superior Justice in Los Angeles, Couwenberg was removed from his post. In perhaps the ultimate act of cowardice, Couwenberg had the gall to blame his wife for his lies, saying that she had typed his CV and repeated the tall tales he told her about his background.

Can you imagine? That part of the book, I was like, "WHAAAT?!?" So much effort, only to go down in history as an absolute dillweed. And that is from the chapter, "Don't Lie to Me: Do you really want to know when everybody's lying?" When I got to that part of the book I was like [huge gasp] I feel like I gasped everything on my desk toward my face.

So, that is again, Rose Eveleth's book and she's about to celebrate the conclusion of her podcast, *Flash Forward*, as we know it, she says. She might be possibly reintroducing or retiring it... we're going to see. But if you'd like to celebrate her and the podcast, you can join Rose and Julia for an online party on December 17th at 5 PM. There's going to be some surprise special guests for an evening of fun surprises. Meet your fellow listeners of *Flash Forward*, say hello and goodbye for a while. So, I put the link to that on my website right below the link to buy Rose's book, *Flash Forward*. So, that's all up at AlieWard.com/Ologies/Bookworm2.

Okay, looking toward to future... li'l segue, how do we do things though? How does anyone do anything ever? We're thinking about the study of knowledge, the study of ignorance, how much things have to change... how do we make sure to do those things instead of just having those intentions? You know, from matching socks, to writing term papers, the taking on massive issues, to a nightly skincare routine... how does shit happen? Well, in tiny little steps. And in February 2020, with the Volitional Psychology episode, I got a chance to meet with one of the world's authorities on procrastination, a research psychologist named Dr. Joseph Ferrari who wrote, *Still Procrastinating? The No Regrets Guide to Getting It Done.* It was published by Wiley Press. And I said, "Doc, pick me a piece to read for anyone who does not yet have this book." And he said, "Sure thing, you proc." If you listen to that episode, you know why he called me that. So, he selected:

If you've ever driven a car, been a passenger, or had someone come to pick you up, you've probably encountered a sidewalk sign with the words, "No standing. No parking. No waiting." It's frustrating to see these signs when you try to pick someone up. Where do you go? How do you accomplish your task? The person you're picking up is waiting for you, the parking regulations are obstacles impeding your goal of picking up a friend or a relative. It's almost as if these signs are talking to the procrastinators of the world.

What certain procrastinators may not realize is that someone is waiting for them, and that person can't park, stand, or wait. There are things that have to be done and they need to be done now. Procrastination is like stopping a train that left the station. When we procrastinate, we hold others up, we're telling the conductor, "Stop here. Stop where I want you to stop." Or even, "I will get on the train when I want to get on that train."

This book is more than a typical self-help approach for dealing with chronic procrastination. In fact, you should consider it to be of mutual help to you and all of the people you interact with. When you learn how to prevent the waiting, standing, or parking in your life, this will also benefit countless others whose schedules are delayed by your procrastination.

I will show you how to stop waiting for that perfect opportunity or time to act, because it doesn't exist, how to stop standing still and make the positive changes that will help you meet

your needs and achieve your goals, and how to stop parking and missing all that life has to offer.

So, that is Dr. Joseph Ferrari's book, *Still Procrastinating?* It's a great book for those of us who think Future Us will be better at doing something than Present Us. And by people, I just mean me, because I am just a constant referee in the battle between Past Me, who cowered at a task, and Future Me, who is *pissed* that we did that. And here's Present Me making you this episode... and putting it out two days late, but hey, what are you gonna do? I'm only human. Sorry! There's just a lot to read, all right? Okay, moving on.

Now, what if this year just takes a big-ass turn sideways, and despite all of our boosters and two years of holing up from COVID, Omicron just crashes your holiday party? For a quarantine refresher, perhaps you'd like a copy of Quarintinology episode guests Geoff Manaugh and Nicola Twilley. They put out a 2021 book called, *Until Proven Safe: The History and Future of Quarantine*, and it was published by MCD. And I was like, "You wonderful plague historians, why don't you hit me up with an excerpt, give me some adventure." And not unlike an underpaid frontline worker putting a sack of groceries on your doorstep that you'll have to wipe off with bleach, they delivered. So, on page 35, they write:

Over the past six centuries, quarantine has shaped the public health response to infectious disease around the world. But it has also shaped our streets, buildings, and cities, our borders, laws, and imaginations. Quarantine has inspired the construction of great fortress-like facilities, built on the edges of civilization as well as high-tech medical institutions in the very heart of the modern metropolis. While reporting this book, we crawled into crumbling hospitals overlooking the sea, toured ruins overgrown with weeds, and dawned hard hats to step inside a brand-new federal quarantine facility, then under construction in the geographic center of the United States.

Quarantine has also transcended its medical origins to become a vital tool in protecting our global food supply and even our planet. Our travels took us to a greenhouse in suburban London, charged with safeguarding the world's chocolate supply, to an animal disease research center in Manhattan, Kansas, built to survive the strongest tornadoes, and to a pristine spacecraft assembly room in Pasadena, California.

Quarantine is not just the purview of the World Health Organization or the Centers for Disease Control, as we discovered. Officials at the US Department of Agriculture and NASA also depend on it to stave off famine and to safely explore the cosmos. Quarantine is our most powerful response to uncertainty. It means waiting to see if something hidden inside us will be revealed. It is also one of our most dangerous, operating through an assumption of guilt. In quarantine, we are considered infectious until proven safe.

So again, their book is called *Until Proven Safe*, it was by Geoff Manaugh and Nicola Twilley, and it was released just this last year, but they've been working on it for years. So, good timing? Pretty good timing.

And you're like DadWard, are you trying to bum my ass out? And no, not at all. I'm just saying, the more words we put in our brains by people who are passionate enough to pitch and write a whole book about it, I mean, the better prepared we are to live life and enjoy the future, perhaps make it better for everyone.

So, I leave you, with an excerpt from an expert on awesome things, and how very simple gratitude can get you to appreciate what's in front of you even in the shittiest of times. Awesomeology guest, and author, and speaker Neil Pasricha, has become a dear pal after meeting him to record. And he

essentially said, dealer's choice when it came to an excerpt from his 2016, epic book, *The Happiness Equation*, which was published by Penguin. His book is packed with interviews and research on happiness, but I picked this little bit for you about things that you can do to boost yourself out of a bummer town. And one of the things he lists... is you can write. Neil writes:

Writing for 20 minutes about a positive experience dramatically improves happiness. Why? Because you actually relive the experience as you're writing it and then you relive it every time you read it. Your brain sends you back.

In a University of Texas study, "How do I love thee? Let me count the words," researchers Richard Slatcher and James Pennebaker had one member of a couple write about their relationship for 20 minutes, three times a day. Compared to the test group, the couple was more likely to engage in intimate dialogue afterward, and the relationship was more likely to last. So, what does the 20-minute replay do? It helps us remember things we like about people and experiences in our lives. If you can be happy with simple things, then it will be simple to be happy. Find a book or a journal, or start a website, and write down three to five things you're grateful for from the past week.

I wrote five a week one 1000AwesomeThings.com. Some people write in a notebook by their bedside. Back in 2003, researchers Robert Emmons and Michael McCullough asked groups of students to write down five gratitudes, five hassles, or five events that happened over the past week for ten straight weeks. And guess what happened? The students who wrote five gratitudes were happier and physically healthier.

Charles Dickens put this well, "Reflect on your present blessings, of which everyone has many, not your past misfortunes of which all have some." Remember, just like driving a car, throwing a football, or doing a headstand, you can learn to be happier.

So, that is from *The Happiness Equation* from Neil Pasricha, and so there you are with a giant list of great books, waiting for you or someone for whom you need a gift. I list them all at AlieWard.com/Ologies/Bookworm2 and our previous episode from 2019 is at AlieWard.com/Ologies/Bookworm. You can check your local bookstore to see if they have any of these books, they probably have all of them. Or if not, order them online. I included, on my website, links to each of them via Bookshop.org which is an excellent alternative to Amazon if you want to support local bookstores. But you can get them however works best for you; I'm not going to judge, just providing resources. So, gift 'em, read 'em, I hope they open up your world a little more.

And thank you to every guest who has ever been on to share your knowledge and make us all better people. And remember, there has never been a better time to think, "Hey, I'm going to ask some brilliant people some real basic B questions," because we're all going to die one day, you might as well cut some bangs and while you're at it, text your crush. Or you could write a book! What if you wrote a book?!

You know what, like last time, I'm going to let this episode be some kind of cosmic sign that you should start it. Maybe it's a collection of poems, or short stories, or a memoir, or some kind of drippy romance, maybe, or a creepy mystery. Just write. I think about Dr. Adam Becker of the Quantum Ontology episode so often, so I'm going to read his advice again. In his episode we talked about how he had ADHD, he's an astrophysicist who has written lauded books such as, *What is Real? The Unfinished Quest for the Meaning of Quantum Physics*, which came out in 2018 and is a total mindbender and amazing. And he said what he does is he decided:

The only way I'm going to get through this is if I plan it. And then only pay attention to what is in front of me because I can't write 90,000 words. But I can write 600 words a day, and if I do that for a while, eventually I'll have 90,000 words.

And he did and his book is amazing. So, if you have a story to tell, I hope you tell it and maybe one day, you can have it bound in leather, made of your own flesh... Wait, what?! Where the fuck did that come from?

Okay, I forgot, one more book. Anthropodermic biocodicologist, Megan Rosenbloom is a librarian, she's an author who is one of the world experts in books bound in human skin (including some authors who had their books bound in their own skin after they died!). And in her 2020 book, *Dark Archives: A Librarian's Investigation into the Science and History of Books Bound in Human Skin,* which was published by Macmillan, she covers this as snugly as, I guess, bookbinding. There are a lot of very, very creepy stories about this but she picked an excerpt from *Dark Archives* and it's a reminder that experts have got to start somewhere, and science and writing isn't always smooth as silk, or as leather and she wrote:

Tabor led me to an area of the Munger building I had never seen, where his colleagues from the conservation department stood stone-faced around some dark, leather objects on a table. I could tell they were just as uncomfortable with the situation as I was. Most librarians would feel squeamish about removing pieces of antique books, regardless of the purpose. I wished I had worn something more clinical than my cheery, yellow cardigan. Something like a white lab coat might have been more reassuring. Little did they know that this was my first time wielding the knife.

So, her book goes on to talk about how they figure out which ones are human skin and who would want their own work bound in that, or I guess in other people's skin. Anyway, what's my point? My point is: write a book. Maybe do not have it bound in your own skin, but there's a lot of books out there and you should write one also.

So, buy all these books at the link in the show notes, AlieWard.com/Ologies/Bookworm. You can get all up in the first one again AlieWard.com/Ologies/Bookworm. And I want to thank sisters, Boni Dutch and Shannon Feltus of the podcast You Are That for handling merch at OlogiesMerch.com. Thank you to Emily White of The Wordary, professional transcriptionist who makes these episodes transcribed. They're available for free on our website. You can check out AlieWard.com/Ologies/Extras for those. There's also bleeped episodes up there, thank you, Caleb Patton, for those. Smologies episodes come out every few weeks and they are small, truncated episodes that are classroom safe. Thank you to Zeke Rodrigues Thomas and Steven Ray Morris for working on those.

Huge thanks to birthday girl Noel Dilworth and Susan Hale for helping me for literally months to compile all of these clips, this episode would not exist without you. Thank you to Erin Talbert for adminning the *Ologies* Podcast <u>Facebook group</u> full of lovely, curious folks. There's also, by the way, an offshoot, The Ologite Book Club, and they're on Facebook and Instagram. Thank you to lead editor and sole husband, Jarrett Sleeper of Mindjam Media for putting this all together for me. [to Jarrett:] Jarrett you're wonderful, I have gratitude for you, I love you.

Jarrett: Merry Ch- Merry- Merry Christmas... I love you.

[laughs] That was really cute.

I'm @AlieWard on <u>Twitter</u> and <u>Instagram</u>. We're <u>@Ologies</u> on <u>both</u> and the theme music was written and performed by Nick Thorburn of the band Islands.

If you stick around until the end of the episode, you know I tell you a secret. This week's secret is this really took so much longer than I thought. I was like, "Oh this week is going to be so easy, I just have a bunch of excerpts to read." And it turns out, editing a lot of excerpts and then also segues and just... I dunno. Anyway, this is coming out on a Thursday, I'm really sorry.

Oh yeah, here's my little, here's my tip and my secret. Okay, it's the holidays, there are Hanukkah parties, there's Christmas parties, Festivus parties, New Year parties and maybe you're like, "I don't want to drink much, or at all." And may I suggest sparkling water and bitters? It's not a good fit for anyone totally avoiding alcohol because bitters does have alcohol in it, kind of like a vanilla extract would. But you only add two to three drops in a glass. There are so many flavors of bitters, there's woodsy Angostura bitters, there's Peychaud's, kind of like licoricey and floral, there's all these artisanal bitters and cherry and orange. You can make your own. If you add a few shakes of Angostura bitters and a shake of cherry to sparkling water, you pretty much have something that tastes like a Dr. Pepper with no calories and no weird stuff in it, and like, a trace of alcohol. Just saying. So, maybe just treat yourself to bitters and a SodaStream.

And if you use a Bed, Bath & Beyond coupon in the store, they never expire, just saying, so you can get 20% off the SodaStream. This is not an ad for them, I just love a SodaStream and bitters and a discount. Sometimes with my Bed, Bath & Beyond coupons, I give them to other people in the checkout line, I'm like, "Look at all these coupons I've got! Save a little on that."

Anyway, I've talked too much. Curl up with whatever beverage you want, under whatever blankie you have, crack into a book, or write one. 2022 goals. Who knows? We might be in pajamas again all year, JK, JK. Get your booster. Okay. Berbye.

Transcribed by Aveline Malek of TheWordary.com

ALL THEM BOOKS

2019's Audiobook Mixtape 1 episode

A donation went to 826LA.org

Gabe Cook - Ciderology (DELICIOUS APPLE BEVERAGE)

Episode: Ciderology

Book Title: Modern British Cider

Publisher/Date: CAMRA Books, released 09/06/21

Dr. Robin Dunbar - Philematology (KISSING)

Episode: Philematology

Book Title: <u>"The Science of Love"</u> **Publisher/Date:** Wiley Nov 2012

Upcoming book: "Friends: Understanding the Power of our Most Important Relationships"

Publisher/Date: Little Brown and Co, UK. Jan 2022

Dr. Emily Willingham - Phallology (PENISES)

Episode: Phallology

Book Title: Phallacy: Life Lessons from the Animal Penis

Publisher/Date: Avery, 09/22/20

Upcoming book: The Tailored Brain: From Ketamine, to Keto, to Companionship, A User's Guide to

Feeling Better and Thinking Smarter **Publisher:** Basic Books, 12/14/21

Dr. Oné Pagán – Planariology (VERY COOL WORMS, I PROMISE)

Episode: Planariology

Book Title: "The First Brain: The Neuroscience of Planarians"

Publisher/Date: Oxford University Press, 04/17/14

New book: <u>Drunk Flies and Stoned Dolphins: A Trip Through the World of Animal Intoxication</u>

Publisher/Date: Benbella Books, 11/16/21

Eric Eaton - Spheksology (WASPS)

Episode: Spheksology

Book Title: Wasps: The Astonishing Diversity of a Misunderstood Insect

Publisher/Date: Princeton University Press, 03/09/21

Dr. Sara Lewis - Sparklebuttology (FIREFLIES)

Episode: Sparklebuttology

Book Title: <u>Silent Sparks: The Wondrous World of Fireflies</u> **Publisher/Date:** Princeton University Press, 04/26/16

Dr. Gene Kritsky – Cicadology (CICADAS)

Episode: Cicadology

Book Title: Periodical Cicadas: The Brood X Edition **Publisher/Date:** Ohio Biological Survey, 02/26/21

Also his app! Cicada Safari

Chris Morgan – Ursinology (BEARS)

Episode: <u>Ursinology</u>

Book Title: Bears of the Last Frontier: The Adventure of a Lifetime among Alaska's Black, Grizzly,

and Polar Bears

Publisher/Date: Stewart, Tabori and Chang, 04/01/11

Dr. John Bates - Oology (EGGS)

Episode: Oology

Book Title: The Book of Eggs: A Life-Size Guide to the Eggs of Six Hundred of the World's Bird

Species

Publisher/Date: University of Chicago Press, 03/28/14

Jess Phoenix – Vulcanology (VOLCANOES)

Episode: <u>Volcanology</u> **Book Title:** <u>Ms. Adventure</u>

Publisher/Date: Workman Publishing, 03/02/21

Dr. Alice Gorman — Space Archaeology (SPACE JUNK)

Episode: Spacearchaeology

Book Title: <u>Dr. Space Junk vs The Universe</u> **Publisher/Date:** The MIT Press, October 2019

Dr. Kevin Peter Hand – Astrobiology (ALIENS)

Episode: <u>Astrobiology</u>

Book Title: Alien Oceans: The Search for Life in the Depths of Space

Publisher/Date: Princeton University Press, 04/7/20

Sarah Scoles – UFOlogy (UNEXPLAINED AERIAL PHENOMENA)

Episode: <u>Ufology</u>

Book Title: They Are Already Here: UFO Culture and Why We See Saucers

Publisher/Date: Pegasus Books, 03/03/20

Dr. Samantha Montano – Disasterology (DISASTERS)

Episode: Disasterology

Book Title: Disasterology: Dispatches from the Frontlines of the Climate Crisis

Publisher/Date: Park Row, 08/03/21

Dr. Amy Christianson — Indigenous Fire Ecology (GOOD FIRE)

Episode: Indigenous Fire Ecology

Book Title: First Nations Wildfire Evacuations: A Guide for Communities and External Agencies

Publisher/Date: Purich Publishing, 03/03/21

Dr. Ayana Elizabeth Johnson - Oceanology (OCEANS)

Episode: Oceanology

Book Title: All We Can Save: Truth, Courage, and Solutions for the Climate Crisis

Publisher/Date: Penguin Randomhouse, 09/2020

Dr. Kara Cooney - Egyptology (ANCIENT EGYPT)

Episode: Egyptology

Book Title: The Good Kings: Absolute Power in Ancient Egypt and the Modern World

Publisher/Date: Nat Geo, 11/21

Anna Gifty Opoku-Agyeman – Economic Sociology (MONEY/FREAKONOMICS)

Episode: Economic Sociology

Book Title: The Black Agenda: Bold Solutions for a Broken System

Publisher/Date: St. Martin's Press, 02/01/22

Dr. Robert Proctor – Agnotology (IGNORANCE)

Episode: Agnotology

Book Title: Agnotology: The Making and Unmaking of Ignorance

Publisher/Date: Stanford University Press, 2008

Rose Eveleth – Futurology (THE FUTURE)

Episode: Futurology

Book Title: Flash Forward: An Illustrated Guide to Possible (And Not So Possible) Tomorrows

Publisher/Date: Abrams, 04/20/21

Flash Forward event: Dec. 17th, 5PM PT

Stephen Hanks - Genealogy (FAMILY TREES)

Episode: Genealogy

Book Title: "1619 -- Twenty Africans (2020)," and "Akee Tree (2013)" and "Three Brothers - 1626:

The Ancestry of the World up to 1626 and Beyond to Our Day" (March 2021)

Publisher/Date: Inkwater Press

Dr. Joseph R. Ferrari — Volitional Psychology (PROCRASTINATION)

Episode: <u>Volitional Psychology</u>

Book Title: Still Procrastinating? The No Regrets Guide to Getting It Done

Publisher/Date: Wiley, 09/01/10

Geoff Manaugh and Nicola Twilley - Coronasode: QUARANTINOLOGY

Episode: Quarantinology

Book Title: Until Proven Safe: The History and Future of Ouarantine

Publisher/Date: MCD, 07/20/21

Neil Pasricha - Awesomeology (GRATITUDE FOR LITTLE THINGS)

Episode: Awesomeology

Book Title: The Happiness Equation

Publisher/Date: Penguin Publishing Group, 12/2016

Megan Rosenbloom - Anthropodermic Biocodicology (HUMAN SKIN BOOKS)

Episode: Anthropodermic Biocodicology

Book Title: Dark Archives: A Librarian's Investigation into the Science and History of Books Bound

in Human Skin

Publisher/Date: Macmillan, 10/20/20