

Today on The Lerner Podcast we're talking with Mélina Mangal, author of *The Vast Wonder of the World: Biologist Ernest Everett Just*, a picture of a biography of the notable scientist who was also the first recipient of the NAACP Spingarn Medal in 1915. It's illustrated by Colombian artist Luisa Uribe.

Here's Mélina.

Well, I first discovered him through my daughter. At the time she was in kindergarten. And at her school, they had a Black History Month celebration in the evening. And I went. One of the things we picked up was a coloring sheet about a man named Ernest Everett Just, it was just a single page, very brief overview of him and his life with just about a paragraph of facts. I thought, "Who is this man?" because it said he was a marine biologist. And because I work as a school librarian, and I thought I knew about a lot of scientists, a lot of other people from history. So I started doing a preliminary search, found some websites and discovered that there was quite a bit of information about him written primarily for people in the academic arena. And the more I started to find out about him, the more fascinated I was because of his science research, but also because of his personal life. And so I read a really good academic book and just started digging deeper and finding out as much as I could about him, especially after I discovered that he was also on a US postage stamp. So I thought, you know, this is a man, this is the scientists that young people would probably be really interested in finding out more about.

He also studied literature and wrote poetry.

Ernest Everett Just really loved literature. And as a young child, he spent much of his time reading. He read whatever he could get his hands on. And then when he was a young teen, he went to boarding school in Orangeburg, South Carolina, he started writing poetry there. And when he was about 15, his poem, which was called "The Dawning of Emancipation Day," was actually published in a Washington, DC, newspaper, which was a really big deal at the time. That was a poem about the end of slavery and about the Emancipation Proclamation. So he started really thinking deeply about what was going on around him. And writing was just a really good way to capture and dig into those feelings.

When he went to New England to boarding school, he started learning the classics: Latin, Greek, French. He also became involved in newspaper writing for the school newspaper and actually became the editor in chief. It helped him as he went on to Dartmouth College, he published more short stories and a poem that led to his first publication in a scientific textbook. He saw the value of being clear, using clear language. It also was just fun for him. And that's what helped him when he became a professor at Howard University. He was hired as an English professor. He also started their drama department. He had been involved with drama at the boarding school at Kimball Union in New England, and really enjoyed it. It also gave him confidence as a public speaker. And he wanted to help students at Howard with that as well. So he started the drama club.

Writing for him was really a tool. It helped him record observations in the laboratory in meticulous detail. He noted size, movement, color of egg cells, for example. Writing, of course, was the way that most people corresponded with one another at that time, so he had to write in order to try and get funding. Writing helped him explain his work, explain his background and his training. It also helped him explain his ideas and his worth to so many people.

It was also a release for him. He was able to express his excitement. He loved being by the ocean, and he traveled back and forth from the United States to Europe. So he was often on a ship. And just thought nature and what he saw around him was so beautiful. Writing was really a way to express that, but also to help him express the feelings and the complicated emotions he had having to travel back and forth, and in

dealing with some of the political situations that he had to deal with. But his writing and the training that he had really helped bring his scientific observations to life.

How else was Ernest Everett Just different than other scientists of his time?

First of all, he was meticulous in his research as well as in the way he collected specimens for his research. A lot of other scientists did not collect their own specimens. And those that did were really careless in how they handled them. And when I say specimens, I'm talking about actual marine life, things like marine worms, sea urchins, sand dollars, those were the animals that he worked with primarily. And at the time, a lot of scientists would just collect them, those that did themselves, in a bucket, leave the bucket sometimes out in the beating hot sun, and were sometimes confused and perplexed as to why the animals were either sluggish or often dead.

And so he really took care to clean everything thoroughly. From hands to the work surface in the laboratory, to the actual containers, and the glassware, everything that would touch the animals or that he would use in the laboratory, he took really great care to make sure it was cleaned properly. And in collecting the animals, he would make sure that he kept them in as natural estate as possible. In the same ocean water, for example, and out of the beating sun.

He helped a lot of other scientists in their methods so that they too, could get the most out of their research, but also keep the live animals that they were using alive, and to study them in as natural habitat as possible.

He also traveled in some ways a bit more than his American counterparts because he felt the need to work in Europe. He was different because he was African American. And at the time, when he was doing his research, there were very few African American scientists engaged in basic or pure research. And because of that, he found he was able to do a lot more of his research more freely in Europe. And so he needed to travel back and forth across the Atlantic in a ship, because that's how people traveled at that time, a lot more than any of his counterparts did in the United States.

He also had beliefs that he tried to pull together into his scientific research. So especially towards the end of his research, his leanings included philosophy. He was trying to tie together lots of different theories and ideas. And he was influenced by a lot of the other European scientists who were looking at philosophy and other branches of science, to try and connect the dots.

Distilling the life of a notable person into a picture book must have been a bit of hard work. Can you tell us a bit about the process? And maybe a few other picture book biographies that you think do this well?

Well, first of all, it's really hard to bring so much information that you find about a person and a person who has done as much as Ernest Everett Just did into a picture book. But I think it's really important to get that narrative down so that young children can get a glimpse of this person and just get a little peek into what their life was like.

It started with my own curiosity, as I mentioned, and trying to get as much information about him from as many different sources as I could. What I discovered is that there are quite a few websites out there with information about him. But the deeper I dug, I discovered that a lot of those rehashed a lot of the same information from one or two sources. So really had to broaden my scope. And I spent a lot of time visiting other libraries and research institutions.

And going to the source was extremely important. I really wanted to focus and find out more about Ernest Everett Just's early years, about his childhood. So I was able to travel to Charleston, South Carolina, where he was born, and just for myself, walk down the same streets that he lived on, go by boat and travel in the areas that he would have traveled by boat in, visit institutions like the Avery Research Center for African American history, and go to the schools he attended, and meet with the archivists and the people who are in charge of the documents there.

I also got to interview experts in the fields and molecular biology. For example, I interviewed scientists who could help me understand the context of Dr. Just's work. And also family members, I was able to meet a niece and interview her with some really interesting details about the end of his life that other people didn't have. That took quite a bit of time. That took over five years, collecting the information, interviewing people, and throughout the whole process, writing it down, and then rewriting trying to find a starting point because I had quite a few different ways that I could start the story. I basically, practiced tried different angles, and kept writing, reading aloud to hear how it sounded. Because hearing a picture book biography read aloud is really important.

And I kept coming back to what was the most important, what I really wanted young people to take away from his story, and then started to chisel. I kind of look at it like sculpting. I think of the words as basically the clay. And after I'd amassed quite a few details, I started chipping away at what wasn't most important for the book to move forward. And of course, I was helped by my editor, Carol Hinz, who helped guide me and helped ask me questions that really got me to think about what what direction I wanted the book to go in. So that was a lot of hard work. But it's also extremely interesting work, the more you have to edit and chip away and rework your story, the more you think about what is important that it helps you, I think arrive at the most essential part.

There are lots of other picture book biographies I enjoy that inspired me, that I just enjoy reading for myself, as well as my students. And some of the newer ones are books like there's a new picture book biography about Barbara Jordan. And it's called *What Do You Do with a Voice Like That? The Story of Extraordinary Congresswoman Barbara Jordan*, written by Chris Barton and illustrated Ekua Holmes. That one talks about the congressman, congresswoman, excuse me, from Texas and her life, and it focuses on one of her most distinguishing assets, which was her voice.

There's a book I really like, called *Sweet Dreams, Sarah*, written by Vivian Kirkfield and illustrated by Chris Ewald, and it's about one of the first African American women to receive a patent as a furniture maker.

There's a new picture book biography about librarian Pura Belpré as well. As a librarian of course, I really love hearing about other librarians. And this book is called *Planting Stories: The Life of Librarian and Storyteller Pura Belpré*. It's written by Anika Aldamuy Denise and it's illustrated by Paola Escobar.

A few older ones I really enjoy. There's one by Carole Boston Weatherford, a poet. She has written a lot of picture book biographies in verse, and one I particularly like is called *Voice of Freedom: Fannie Lou Hamer, Spirit of the Civil Rights Movement*, and she captures Fannie Lou Hamer's life with honesty and bravery because Fannie Lou Hamer had a very tough life. But Carole Boston Weatherford does not shy from--away from providing all the details that made her a remarkable woman.

And one of my all-time favorites is called *Seeds of Change: Planting a Path to Peace* by Jen Cullerton Johnson and Sonia Lynn Sadler, and that's a beautiful book about Nobel Prize-winning environmentalist Wangari Maathai, and her work with the greenbelt movement and reforestation Kenya. So those are just a few of the picture book biographies that inspire me.

We will link to those in the blog post around this podcast episode.

Finally, when you're not writing, you work as a school librarian.

Yes.

Can you tell us how your work influences your writing and how you've encouraged your students to keep reading and learning over the summer?

Sure, well, first of all, my daytime work influences my writing in a huge way because I get to read and see all the great books that are out there. And so I'm exposed to a range of books every day, which I absolutely love. I'm able to read books out loud to students on a daily basis. And it's wonderful to see their reactions to see how they react emotionally and intellectually to what they hear and what they're exposed to. So it influences my writing a great deal, because it's very direct. I can see what students are interested in as well, they will tell me. They'll of course tell me what they're not interested in as well, which, of course, is sometimes challenging. But I get to hear beautiful language, I get to learn new things every day. And it helps me connect with students, when I find a book that they love. There's nothing more satisfying and connecting a reluctant reader, someone who's not interested in reading or who hasn't had success, it is so fulfilling to be able to put in their hands a book that I think they would like, and then for them to actually like it and want to read more. That's one of the best parts of my job. And that's what also fuels what I write. When I see that there are few books about a particular subject or person or group, then that makes the wheels turn in my head about, "Oh, I should be writing about this person." Or, "This would make a great subject that I think my students would be interested in."

And summer always poses a challenge because students are not typically reading or in school, learning the kinds of things they normally do. I gave each one of them a reading log and information about the public library's programs. I've also book talked a number of books for my students, and gave each one of them a free book that I'd collected through book giveaways and some I had bought through used bookstores and through funding through the PTO. I made sure that every student that wanted one was able to take home a free book just to get them started. So I encourage them to keep reading and I've asked them to come back ready to talk about what they've enjoyed reading. Because I also have a writing club at my school. I've encouraged kids to write their stories down as well. But I'm looking forward to hearing what they have to say about the books they've read and the books they've hopefully written as well.

That's awesome. Thanks so much for joining us on the podcast.

Thank you so much for having me. I've enjoyed talking to you, Libby.

Thank you for joining us here on The Lerner Podcast. Tune in again next time for more author interviews and the stories behind the books.