



Transcript for *The Dinosaur Expert* (Schwartz & Wade Books, an imprint of Penguin Random House) Preview Video

Preview (0:00 – 7:28)

Hi everyone! It's Colleen from the KU Natural History Museum, and I just want to remind you about tomorrow's Story Book Science. I am going to be reading a book called *The Dinosaur Expert*. It's written by Margaret McNamara, and it's illustrated by G. Brian Karas. And we'll be reading it with permission from Schwartz and Wade Books, which is an imprint of Penguin Random House. So thank you to them for the permission to read this book!

Now I love this book, and I'm so excited to read it with you! It is about a girl named Kimmy, and she absolutely loves collecting fossils. They are her favorite things to study! And Kimmy gets really excited because she goes on a class field trip to the natural history museum. And at the natural history museum, there are a lot of fossils. So she is excited to learn more about fossils and share everything she knows with her classmates. But there is one classmate who isn't really nice. And he tells Kimmy that girls can't be paleontologists; they can't be scientists at all. And that makes Kimmy feel really bad. It makes her feel really sad. But thankfully, she learns that girls can be paleontologists! And in fact, anyone, no matter their gender identity, can be a scientist, whether it's a paleontologist or any other field of science. And we're going to learn about that tomorrow when we read the book.

Now one of the things that we will discuss are some of Kimmy's favorite paleontologists. And some of them are on my wall. And I wanted to share with you the cool things that they study because, although they're all paleontologists, and they all study fossils, or the living remains – or I'm sorry – the remains of living organisms from a past geological age; they all study different things because fossils – there's so many things to study!

So the first scientist I want to talk about is Dr. Lisa White. Now Dr. White is a micropaleontologist. And what that means is she studies fossils that are really small. Micro means small. So in order to study the fossils, she has to use a special tool called an electron microscope. And this is a photo of what an electron microscope image of fossils might look like. And I thought that was so cool that you can have these really tiny fossils that are so small you can't see them with the naked eye. You have to use a special microscope to see them!

Now the next scientist I want to talk about is Dr. Zulma Brandoni de Gasparini, and she is a paleontologist from Argentina. And last week we talked about Argentina is a country in South America. So maybe you remember the map we looked at! And Dr. Gasparini, she has led many digs to find many different organisms. And in fact, she discovered many of these organisms, and one of them is named in her honor! And that is the *Gasparinisaura*. So that's a picture of the dinosaur named in her honor.

Now another scientist is Dr. Karen Chin, and there's her picture. And she studies coprolites. So last week we learned coprolites are trace fossils. So they're things that an organism from a past geological age either made using its body or made in its body and then expelled it. And that's a trace fossil. Coprolites are good examples of this because it's something the organism made in its body and then expelled; and that is an indication of a trace fossil. A coprolite is fossilized poo. This is a photo of one. And this fossilized poo is that of a dinosaur, *Tyrannosaurus Rex*. So you can study coprolites of dinosaurs. But other organisms, they can make fossilized

poo, and we can find them today. And this is an example of a fossilized poo of what is likely a shark. So there are all these different coprolites that can be studied.

Now lastly, we are going to talk about Dr. Stephanie Pierce, and she is a vertebrate paleontologist. So what that means is she studies fossils of organisms that had a backbone. That's what we mean when we say vertebrate: there's a backbone. Now there are many different fossils of vertebrates. But when I think of vertebrate paleontology, I always think of dinosaurs. And I have a couple of casts or replicas of dinosaur fossils that are body fossils, so they came from the body, that I want to share with you.

This is the first one. So this is the toe claw of a *Tyrannosaurus Rex*. As you can see it is quite large! And that makes sense because the Tyrannosaurus Rex was the largest Carnosaur, which means it was the largest meat-eating dinosaur that was bipedal, or walked on two legs. And this is what its toe claw looked like.

Now when I say that a *Tyrannosaurus Rex* was a meat-eater, it would need to have teeth that are good for eating meat. So it would need teeth that are long, sharp, and narrow, that can shred and rip meat so that the *Tyrannosaurus Rex* can eat. And I have a cast of a *T. Rex* tooth, and we're going to look at it to see if it is long, sharp, and narrow, and it has that shape that a *T. rex* would need to eat meat. So let me grab that. And I'll give you an opportunity to look at it for just a moment. Now when you look at this do you notice the long, sharp, and narrow tooth? Because I see how it's long, it's sharp and narrow. So we know that that's good for the *T. rex* in order to shred and rip the meat that it would need to eat.

Now I hope you join me tomorrow for Story Book Science. Again, we'll be reading *The Dinosaur Expert*. And we'll talk about female paleontologists, and we'll even look at a couple more fossils! So I hope you join me tomorrow, and I'll be here on Facebook Live at 10am. I'll see you then! Bye!