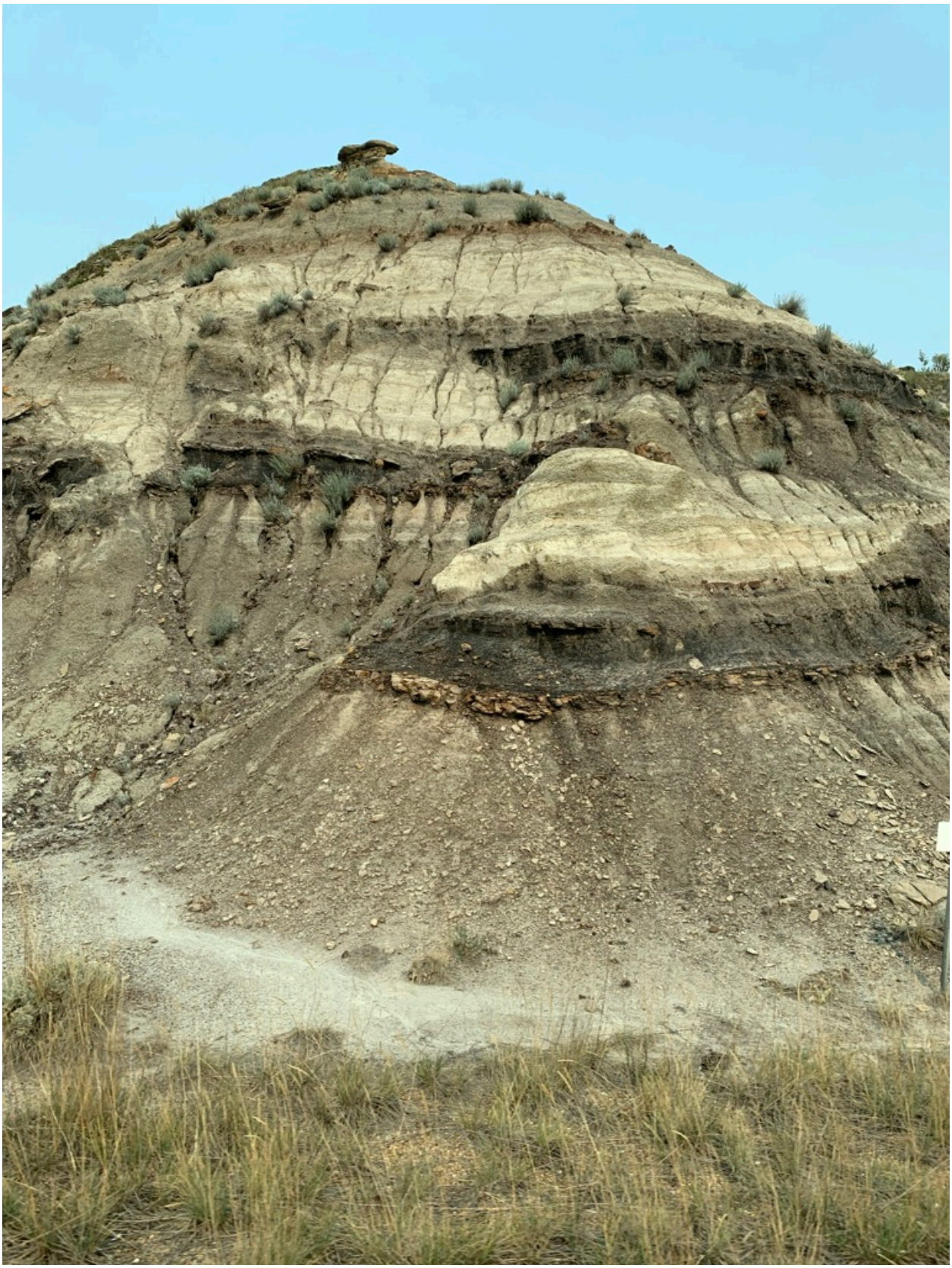
Kate & Jim's Travels with Charles

Episode #17 – Dino Central

One of the places we knew we had to get to when we set out on this journey was Drumheller and the Royal Tyrell Museum.

Just a few hours south of Edmonton, (depending on how many scenic detours you take), it was our next planned stop. We really had no idea what to expect, so when we started seeing huge valleys and odd land formations, after miles of relatively flat landscapes, we were amazed.

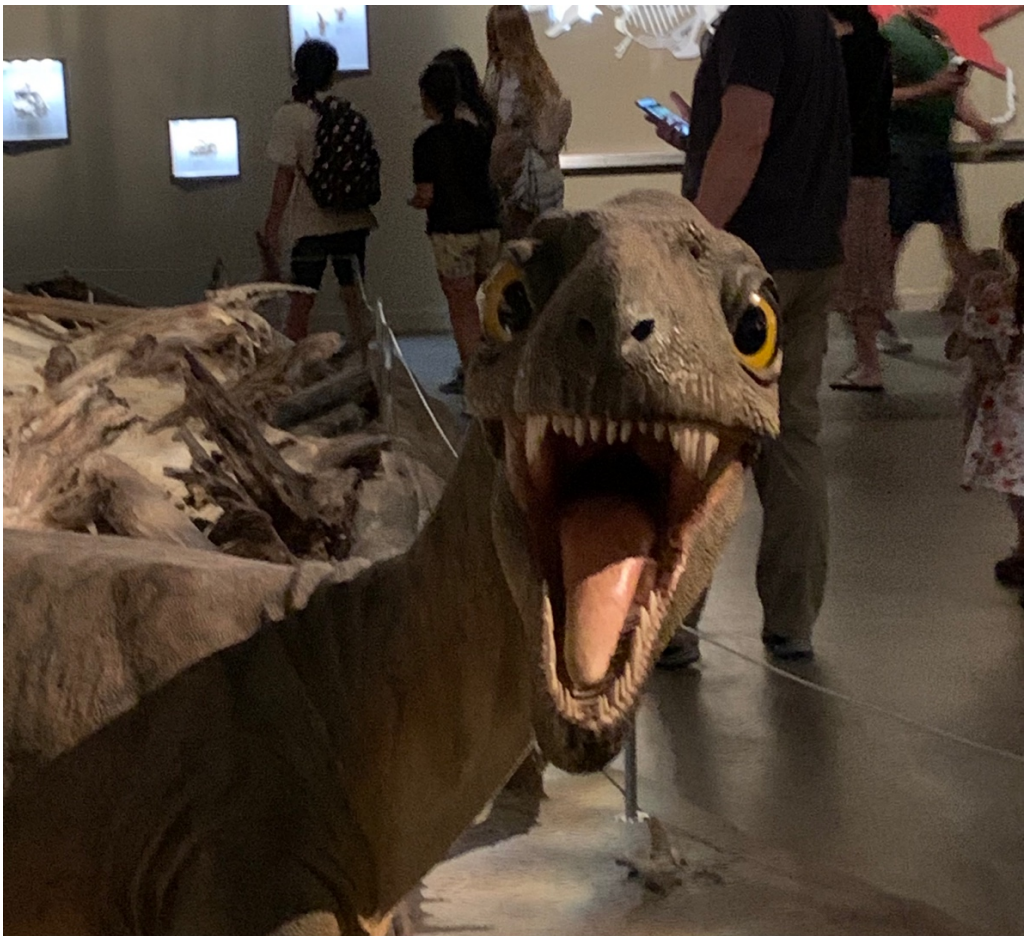


The campground we chose to stay in was called Dinosaur Trail RV Resort, not too far from the museum. And along with a pool and other entertainments, kids had the opportunity to ride their bikes up onto some of the berms, which I'm sure was a real kick.

The next morning, we went right to the museum. We expected great things and were not disappointed! It's a fantastic museum, huge and beautifully laid out, with all kinds of opportunities for adults and kids to be engaged and awed by all the incredible specimens on display.

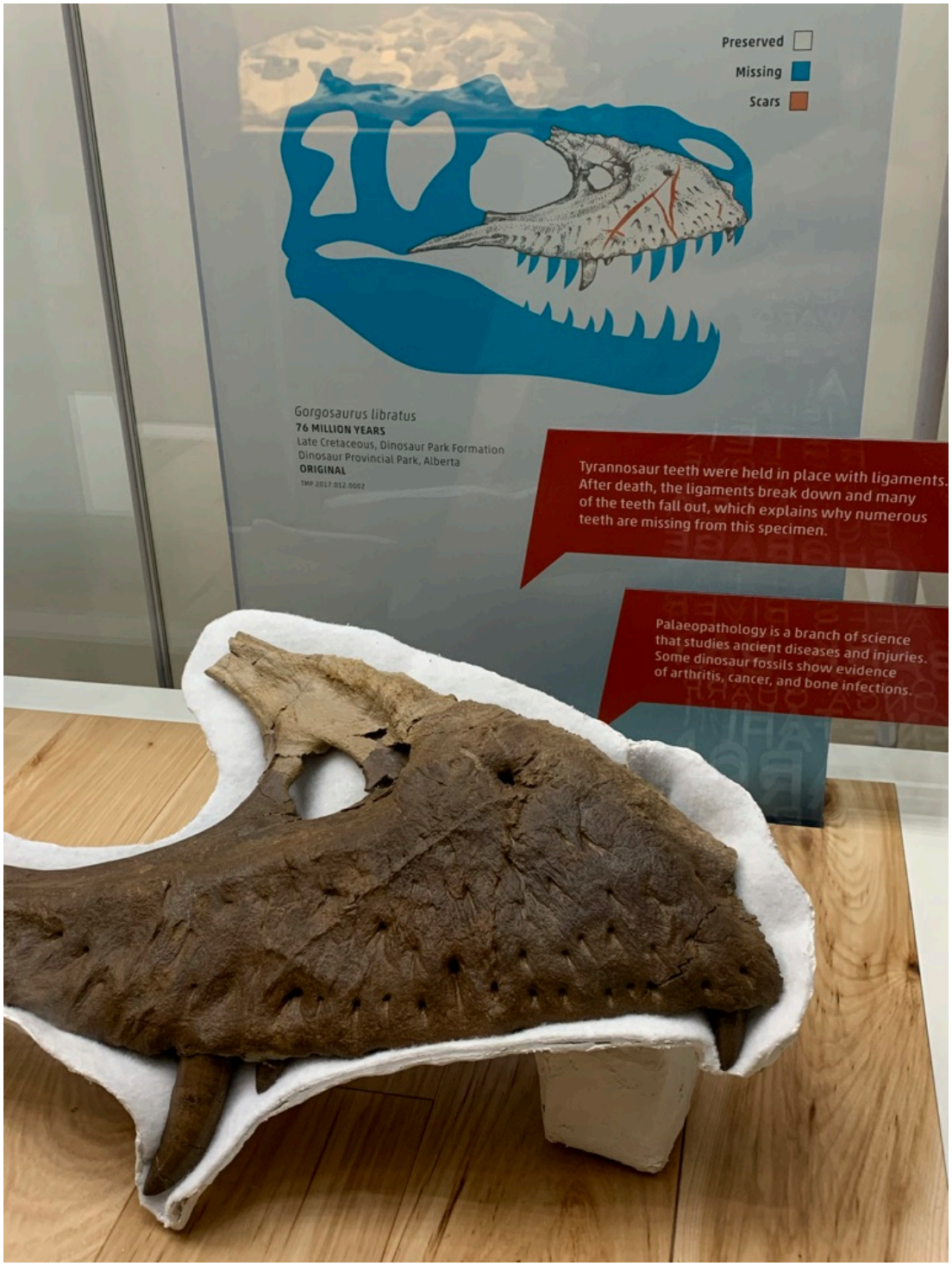
Although I knew there had been amazing dinosaur discoveries in the Drumheller area, I had no idea of the magnitude of the fossils that had been unearthed, and what they meant to the understanding of diversity of dinosaurs and other prehistoric creatures that had existed in North America. It's massive.

From the moment you walk in, you can't help but be enthralled.



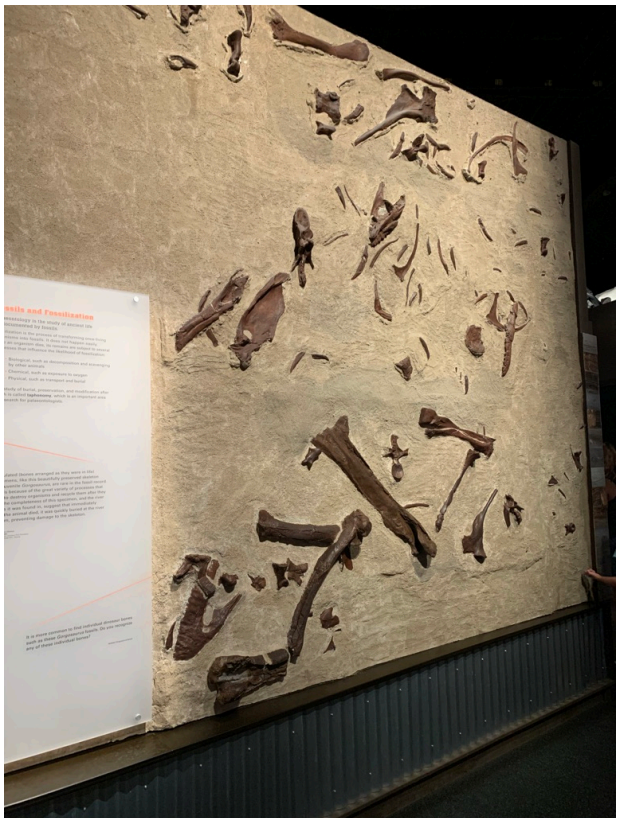
As compelling as the mocked-up dinosaurs are, what really grabs you is the actual specimens (or castes) of fossils that have been found in the area. They're millions of years old and they're stunning.

They do a terrific job of showing and explaining what you're seeing, so you can put it in context.



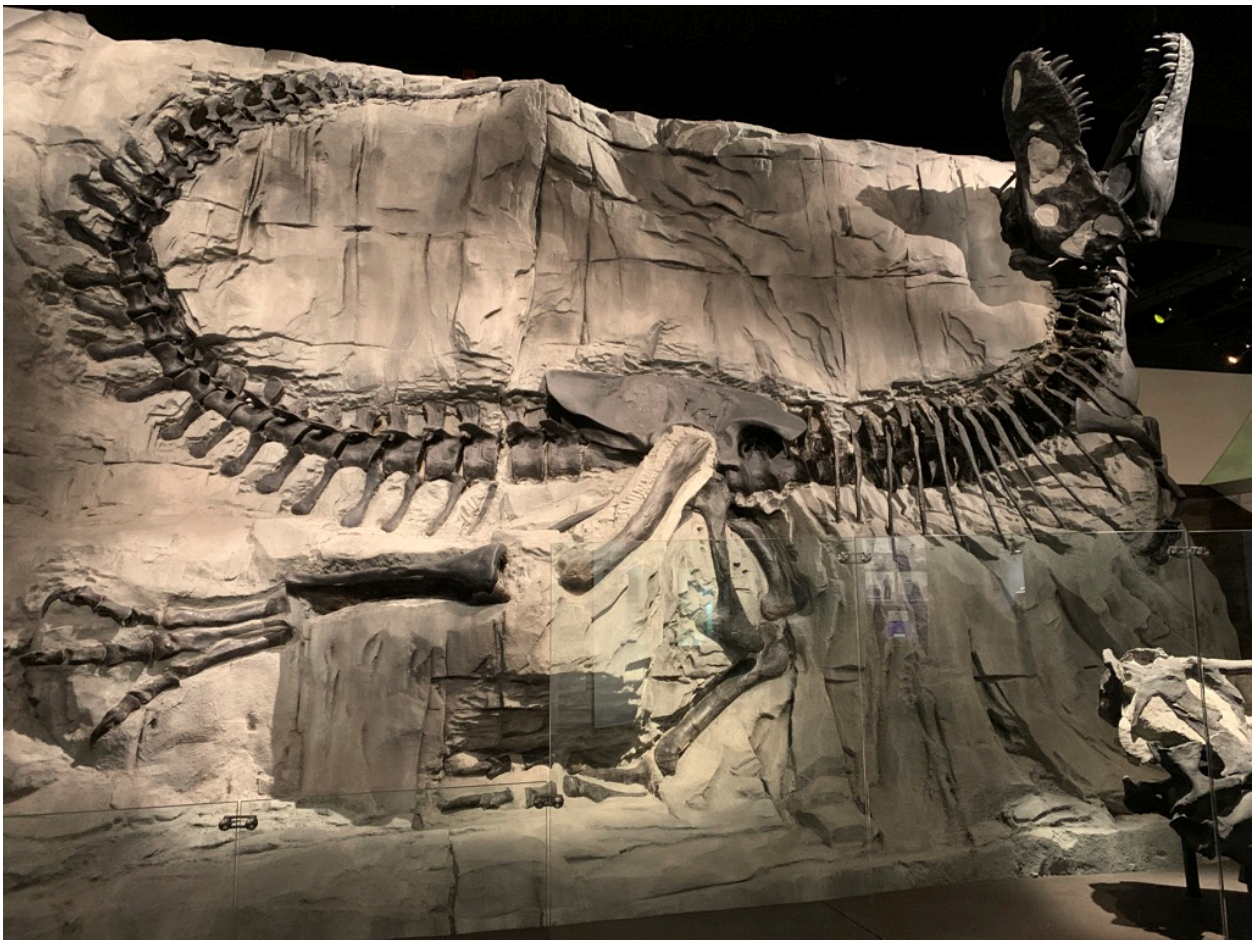
And they share the experience of how the fossils were discovered and how they carefully unearth them.

I expect there are hundreds of kids each day who leave there thinking it would be so cool to become an archeologist one day. (I would've.)

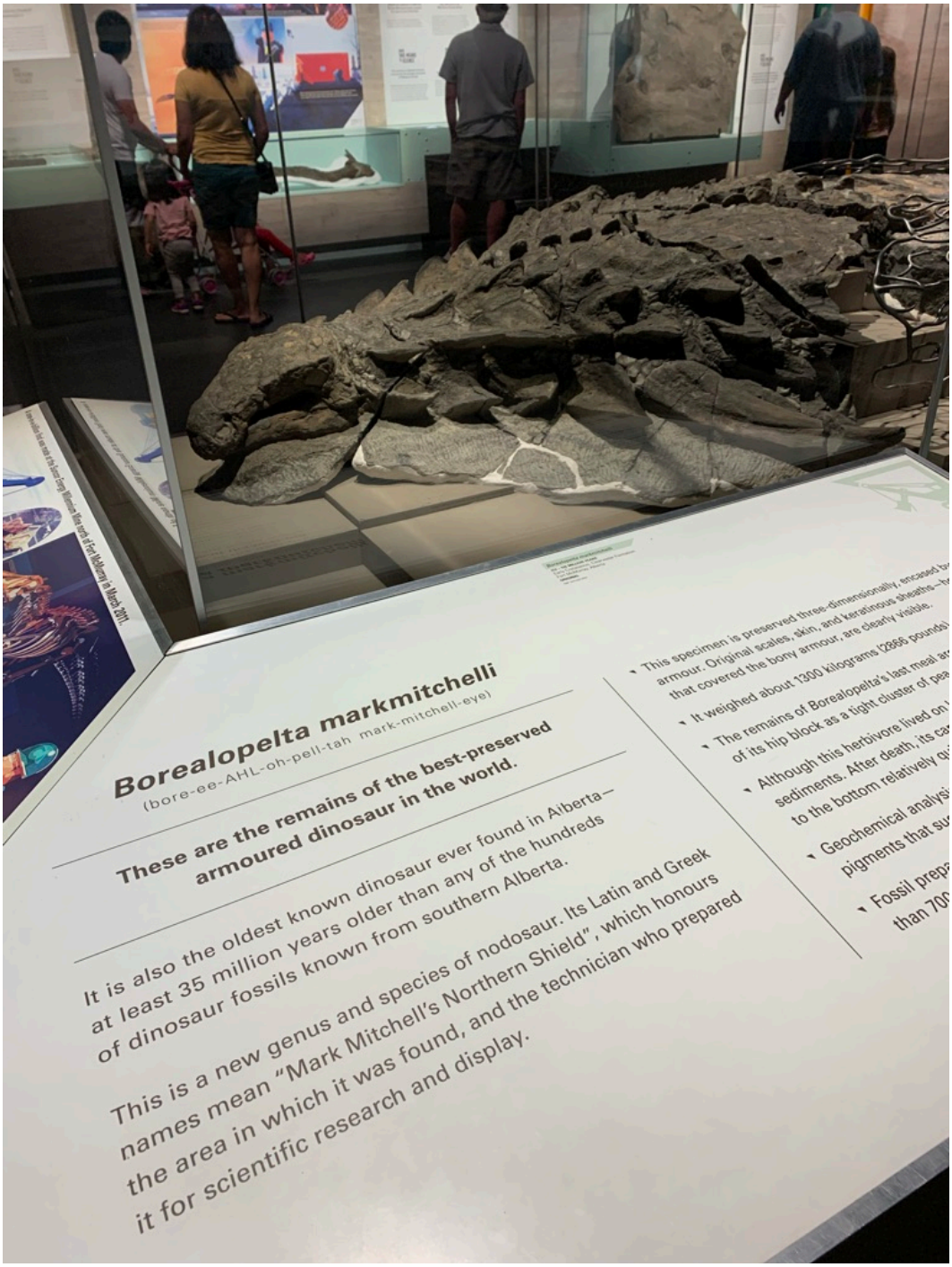


Fossils like this are amazing. It's difficult to get a sense of the size of this shell, but if you look closely, you can see my reflection in the glass, and it gives you an idea of just how huge and magnificent it is.

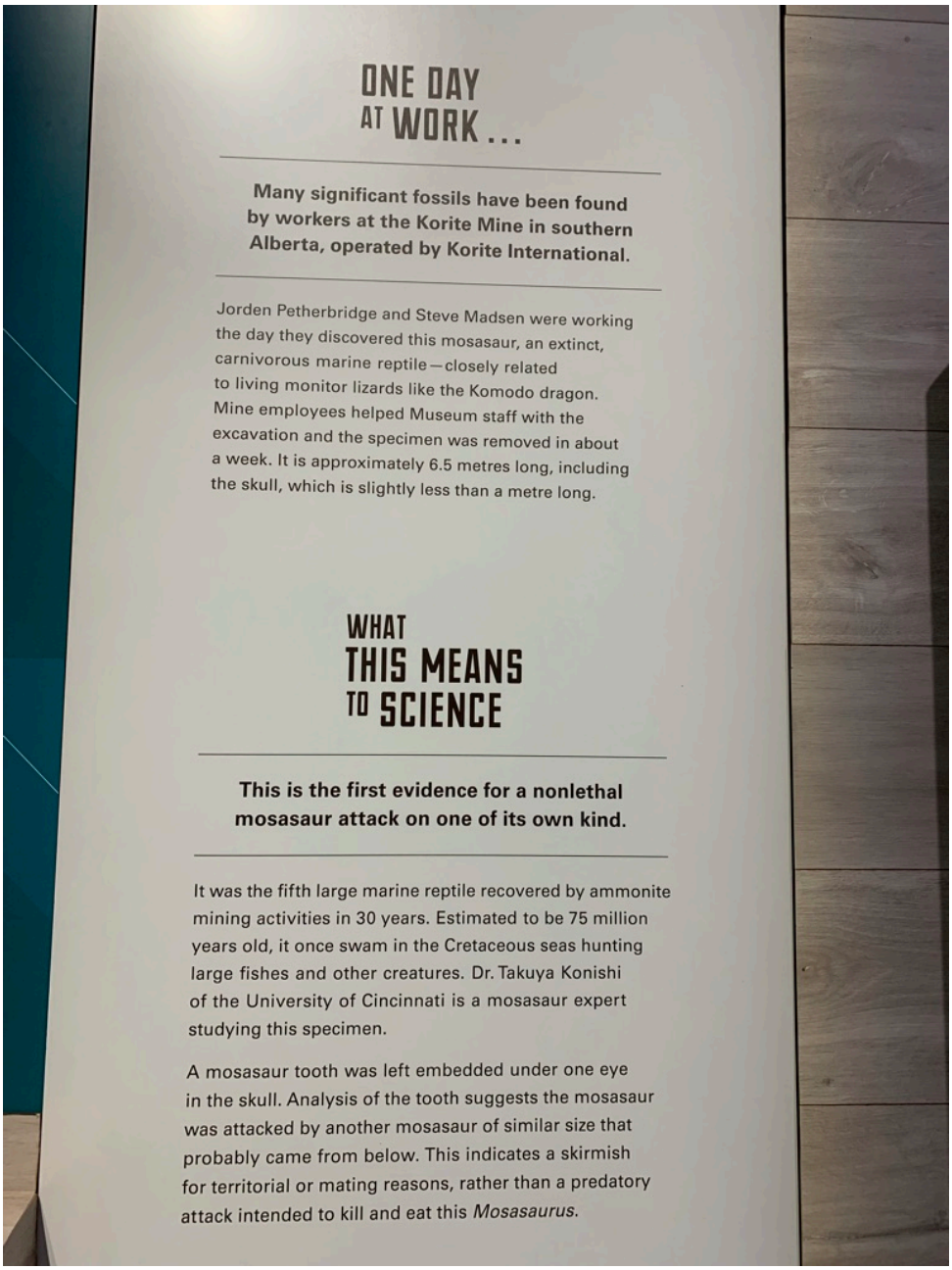
This one is stunning. The first shot gives you a sense of its size, relative to the people in front of it. Then, you can see it without obstruction. Breathtaking. I kept wondering what it must have been like to make discoveries like this.



And this exhibit is incredible. If you read the text you'll see why.



There was a whole room devoted to the “One Day At Work” exhibit, which told of the accidental discoveries that resulted in this brilliant museum. Today, all mining companies, constructions companies, and people who dig into the ground for any reason are bound by law to report any finds, and bring in archeologists or museum experts to deal with the discoveries.



ONE DAY AT WORK...

Many significant fossils have been found by workers at the Korite Mine in southern Alberta, operated by Korite International.

Jorden Petherbridge and Steve Madsen were working the day they discovered this mosasaur, an extinct, carnivorous marine reptile—closely related to living monitor lizards like the Komodo dragon. Mine employees helped Museum staff with the excavation and the specimen was removed in about a week. It is approximately 6.5 metres long, including the skull, which is slightly less than a metre long.

WHAT THIS MEANS TO SCIENCE

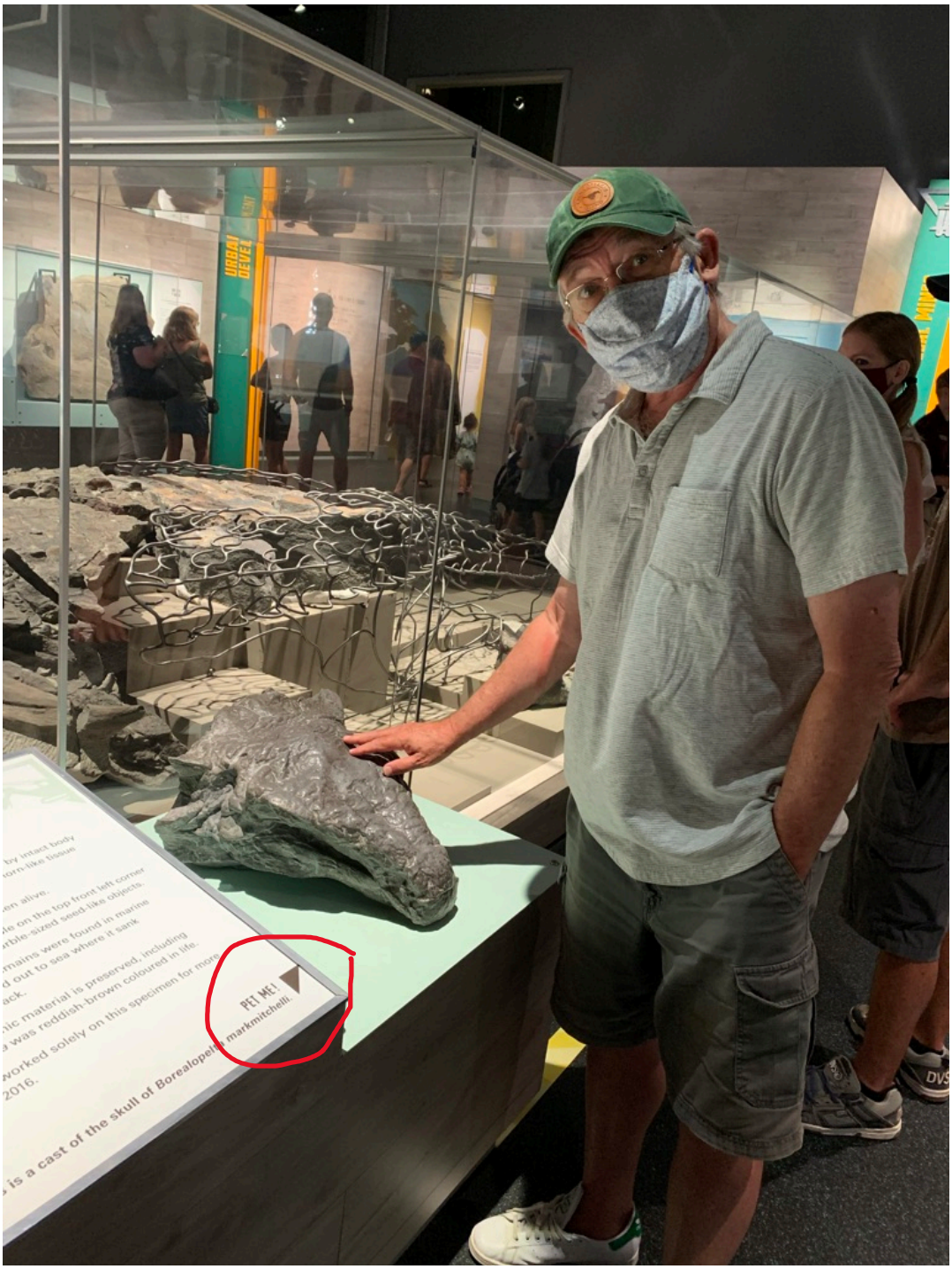
This is the first evidence for a nonlethal mosasaur attack on one of its own kind.

It was the fifth large marine reptile recovered by ammonite mining activities in 30 years. Estimated to be 75 million years old, it once swam in the Cretaceous seas hunting large fishes and other creatures. Dr. Takuya Konishi of the University of Cincinnati is a mosasaur expert studying this specimen.

A mosasaur tooth was left embedded under one eye in the skull. Analysis of the tooth suggests the mosasaur was attacked by another mosasaur of similar size that probably came from below. This indicates a skirmish for territorial or mating reasons, rather than a predatory attack intended to kill and eat this *Mosasaurus*.


Greg Fisher and Lorne Cundal uncovered this marine reptile specimen during routine mining operations in the Syncrude Canada Base Mine near Fort McMurray in 1994.
A 100-ton electric shovel accidentally exposed Nichollessaura 10 metres below ground surface in sandstone. It is only missing its left forelimb and shoulder blade.
WHAT THIS MEANS TO SCIENCE
This is one of the oldest and most complete Cretaceous plesiosaur fossils ever found in North America.
It was named a new genus and species of carnivorous marine reptile in 2008. Nichollessaura lived in the marine waters that were part of the Western Interior Seaway, 112 million years ago.
Due to its exquisite preservation, the three-dimensional skull was CT-scanned, allowing researchers to see details of the inside of its braincase. The discovery of this 2.6-metre-long carnivore filled a 40-million-year gap in the plesiosaur fossil record.

It’s great how “hands on” the displays are. Here, Jim is just doing what he’s been told to do.



And just when you think you've seen it all, they take you through a time tunnel and explains all the different periods. And each tunnel leads to another display, and another tunnel.

It went on and on, and frankly it was a bit too much for us to take in. But at every turn they ensured that there were new and interesting ways for their audience (especially kids) to interact with the exhibits, so I imagine there are many families who return over and over to explore different parts of the museum more closely.

It was great to see parents engaging with their kids to help them understand the significance of what they were seeing.

Through and through a world-class museum, with beautiful, fun, interactive exhibits, in a huge, welcoming space. Made us very proud.

After going through the museum, we went through the town of Drumheller. Of course, everything is about dinosaurs. You can't miss the Visitor Centre.

One of the things I thought was very cool was the school that was fairly close to the museum – St. Anthony's school. This isn't a great photo of the school, but I couldn't help noticing how they'd mimicked the terrain of the area in the design of the school.

All in all a great visit in Drumheller.