

in his lifetime. While some of his contemporaries saw his work as an interesting investigation into plant hybridization, they failed to appreciate the larger implication—in effect, they missed the forest for the peas. Also, efforts by naturalists to duplicate Mendel's findings using other species often failed. Today we know the reason: Most traits are determined by several gene pairs acting in tandem. Relatively few traits, such as the shape of a pea seed, are determined by just one pair of alleles. And we know that some genes are passed down in groups.

Mendel died at the abbey on January 6, 1884, at the age of 61. It wasn't until the early 20th century that scientists rediscovered Mendel's work and recognized its significance, including the implications for evolutionary biology. In the 19th century, skeptics of Darwin had argued that physical characteristics do not remain constant from one generation to the next. But Mendel's laws of inheritance demonstrated that a trait could breed true for multiple generations, eventually becoming common in a population if it enabled survival.

While Mendel posthumously garnered acclaim, his garden did not fare as well. Under communist rule in the 1950s—when classic genetics was deemed *scientia non grata*—officials shuttered the Abbey of St. Thomas and dismantled the remains of Mendel's greenhouse. The precise location of his pea beds was lost. But, by 1965, the political climate had changed to the point that Mendel was honored with a symposium celebrating the 100-year anniversary of the friar's initial lectures on his research. The greenhouse foundations were excavated and scholars pinpointed the likely site of the garden, which is just through a gate in the convent walls.

For visitors who wish to see the garden for themselves, Brno is only a two-hour drive from Vienna or Prague, and trains from Budapest to Berlin regularly stop there. Cobble streets in the town center lead up a hill to the abbey.

"The architecture is absolutely striking," says Fankhauser, who confesses to feeling quite moved when he walked the path around the foundations of the friar's greenhouse. "The garden is mostly a ghost of its previous features, but one can almost imagine Mendel working there," he says. A bed of peas sometimes grows on the patch of land, depending on the season.

A small museum adjacent to the garden houses a set of 19th-century grafting and pruning tools, Mendel's brass microscope and some notes that he kept, just like any gardener, on weather patterns and conditions.

At the far end of the garden, a statue of Mendel is almost hidden by overgrown trees. One hand rests on a pedestal laden with pea vines; the other is open as if gesturing to say he understood that recognition would eventually come his way. "I knew," he wrote to a colleague in 1867, "that the results I obtained were not easily compatible with our contemporary scientific knowledge." **BETH PY-LIEBERMAN**

Evolution Museum

Questions for *Cristián Samper*, director of Smithsonian's National Museum of Natural History

What place has made you appreciate evolution?

I realize now I've been an evotourist all my life! Clearly the Galápagos is one of the places. But some of the sites I saw as a young biologist in Colombia were also important. There's a site north of Bogotá where you see fossils of ammonites and marine reptiles. What was so striking to me was that this site is 7,000 feet above sea level—seeing these incredible reptiles and understanding that all this was once the ocean bed, and it's now way up in the mountains. It's not a legendary site, but it really opened my eyes as a young scientist.

Why is it important to understand evolution?

Because, first, we are the product of evolution through natural selection. The science has come so far, through both the fossil evidence and the genetic evidence, that we are really starting to understand our own human history. Also, because evolution through natural selection shaped the whole world around us, including many of the plants and animals that we use for agriculture. We are also having an impact on evolution by accelerating the rate of extinction of a bunch of species. In many ways, our activities are shaping the future of life on earth.

Your favorite evolution feature in the museum?

We have so much throughout the museum—you could almost call it the Evolution Museum. I think the Hall of Human Origins has the most comprehensive and up-to-date treatment. It not only showcases the evidence of evolutionary change, but it talks about environmental change and adaptation. Often evolution is sort of distant, like the fossils of extinct dinosaurs. But this hall shows where we came from. We have a 5-year-old daughter, and she's been through it so many times that she can give a pretty good guided tour. She'll walk through it and talk about the Turkana boy and how he had an abscess and that's why she has to brush her teeth.





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