

Canine neuroscience: Exploring what shapes dog personalities

Some dogs love to play fetch, while others watch the tennis ball roll by with little interest. Some run circles around their owners, herding them, during walks, while others stop to sniff everything in their path.

It begs the question — why do dogs behave so differently, even within their own breeds?

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Dogs, according to [human evolutionary biology professor Erin] Hecht, have the potential to teach us a lot about brain development, having been domesticated roughly 20,000 to 40,000 years ago — a blip on the evolutionary timeline. For context, modern humans emerged roughly 300,000 years ago. Because domestication was relatively recent, modern dog breeds live alongside ancient breeds, making comparison possible.

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“There was one study that collected C-BARQ data on 32,000 dogs from 82 different breeds and then performed clustering on the survey responses. And the data clustered more on the body height of the dogs than on breed relatedness. So size was a better predictor than breed in predicting temperament scores on this C-BARQ assessment,” Hecht said.

She added that just because certain dogs have brain makeups that suggest a certain disposition, it doesn’t lock them into those behaviors. That goes especially for working skills.

[**This is an excerpt. Read the full article here**](#)