

Scientific-Method Excerpts

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SELECTED EXCERPTS

ORIGINAL WORDING PRESERVED

ANNOTATED IN 2026

Why these excerpts

These entries were selected because they show the development of method-facing habits: operationalization, source-quality limits, correlation/causation restraint, competing ethical frameworks, research-bias awareness, and source-access boundaries. They are not presented as uniformly correct biology.

Module 4 • Measurement and source quality

I can honestly say that I am more amazed at the methods they notated to calculate food consumption over the consumption of food itself. The researchers measured the bite counts and got the mean value for each male and female giraffe by dividing the dry mass consumed by the number of bites taken. That's one equation I would have never thought of myself. I honestly had a difficult time reading the paper because the resolution is low. I'm sure I could have figured out if the results were clear or not if the resolution was a bit better.

2026 annotation: Strong historical signal: attention to how consumption was operationalized and refusal to overread a low-resolution source.

Module 7 • Correlation and transfer

This article covers the fact that dogs among the same breed have a higher predisposition to certain behavioral traits such as aggression, chasing, and trainability. In this study, they used over 14,000 dogs to find their correlations. It was found that 60 to 70 percent of the genes are responsible for the behaviors of dogs related to the previously mentioned traits. In traits such as energy level and fearfulness, only about 50 percent of the genetic variation contributed to these traits. While no specific gene was found that correlated to the tested behaviors of these dogs, certain variations were found to increase the predisposition for them. As always, correlation never implies causation, but I think this is a step in the right direction. I think that generic variances affect all kinds of beings, not just dogs. Genetics shape the way we learn to respond to stimuli, shaping our behavior throughout the years. Dogs are no different in this case.

2026 annotation: Strong historical signal: explicit statement that correlation does not imply causation. Limitation: the subsequent transfer from dog genetics to broader beings exceeds what the cited study alone can establish.

Module 8 • Agency, privacy, and ethical pluralism

Because of articles like these, I still can't believe that we have health practices as heavily privatized as we currently do. Of course, this type of problem faced here is not a problem for most residents of California when dealing with health insurance. However, this doesn't stop life insurance companies from using information acquired from genetic testing to disqualify you from rates or even prevent you

from buying into their insurance policy. This article hasn't changed my mind on genetic testing. I believe that we are still early and there is a lot to be learned still. While this article opened my eyes to additional moral and ethical dilemmas I had never considered before such as the utilitarian and libertarian perspectives, which I somehow agree with both. People should know, but they should also have the right to not know if they chose. This article makes a great argument at making everything ambiguous. I liked it.

2026 annotation: Strong historical signal: weighs utilitarian and libertarian perspectives and recognizes both a right to know and a right not to know.

Module 12 • Bias and parameter coverage

The article introduces the idea that research in biodiversity is biased in biodiversity data due to people's own societal preferences. The term used for this is taxonomic chauvinism, or taxonomic bias. The article states that depending on the researcher's background, more emphasis will be placed on certain species while neglecting other completely. The reason for this is due to each person's socioeconomic status as one of the major barriers according to the research. The suggestion to fix this is to allow all people to participate and give input to include species that may have been neglected otherwise. I believe that all research is inherently biased. Testing for more parameters is the only way to reduce bias, but this won't eliminate it.

2026 annotation: Strong historical signal: investigator/process bias is treated as something to detect and mitigate. Limitation: the literal claim that more parameters are the only way to reduce bias is too absolute.

Module 15 • Source-access boundary plus a preserved error

I don't have a Time subscription, so I can't see the article as it's behind a paywall. This is an interesting concept from what I can gather from the headline. The article suggests that we can prevent pandemics by preventing species from going extinct through caring for their habitats. Sure, this is something that we need to work on. We don't know what kind of prehistoric diseases will emerge from that melting permafrost. Although, this would have not been the way to go for COVID, since this was caused by humans mishandling livestock.

2026 annotation: Strong signal: explicitly states the source was inaccessible behind a paywall rather than pretending to have read it. Limitation: the later COVID/livestock assertion is unsupported and is retained here as an example of inference outrunning evidence.

Boundary

These excerpts demonstrate historical scientific-method orientation, not scientific mastery. The combination of useful methodological instincts and visible overreach is part of the provenance.