

Lamarck redux: Is epigenetics rewriting his legacy?

You know (or perhaps you take for granted or you've never thought much about it) that your body is really good at learning. Whatever it is that you persist in trying to do with your body, day after day over a period of time, your body gets better at it, stronger, more coordinated, more flexible, more skilled and versatile. (And conversely those potential strengths which you do not exercise will atrophy, and you lose them.)

You also know that you can't pass these strengths and skills on to your children. They have to acquire them anew with their own effort and their own habits. Whatever is innate in your own heritage can be passed along with your genes, but whatever you have acquired or developed must be developed afresh by each new generation.

Wouldn't it be great if we could get past this limitation? Imagine if you could bust your gut in Pilates class knowing that it wasn't just your own abs you were strengthening, but a legacy you could pass to future generations? Imagine if your children could pick up where you left off developing their health and their skills and their coordination and reflexes, each generation building on the last to reach for higher and higher goals.

And what a boon for evolution, this would be – if only it were real!

The process I'm describing is Lamarckian inheritance, an attractive hypothesis, a long-discredited mechanism of evolution.

Read the full, original story: [Lamarckian Inheritance: Passing what you have learned to your children](#)

Additional Resources:

- [Was Lamarck right? Epigenetic research suggests we might inherit learned traits. But how?](#), Genetic Literacy Project
- [Can we inherit fear of a smell? The latest on transgenerational epigenetics](#), Genetic Literacy Project