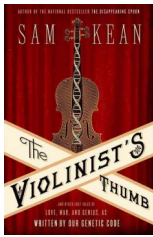


The Violinist's Thumb



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OK, I selected this book based solely on its title, but boy did I luck out. What an incredibly gifted writer Sam Kean is. In *The Violinist's Thumb: and Other Lost Tales of Love, War, and Genius as Written by Our Genetic Code*, he translates dense scientific concepts into lucid, beautiful prose. He also knows how to tell stories. The first chapter contrasts the biographies of two of DNA's discoverers, Mendel and the less well-known, Johannes Friedrich Miescher, who because he studied fish slime had to work in very cold conditions so that his material would not deteriorate before he could examine it. And who knew that Mendel joined a monastery so he could secure a university education? His passion for raising peas taught us so much about human inheritance. This book tackles and at least partially answers many of life's great questions including: Why did it take eons for life to become complex? What is our most ancient DNA? Why do humans have no more DNA than so many smaller, less complex creatures? Why did we almost become extinct? Why did we break away from monkeys? Is the impulse for art conveyed by our DNA? Why are identical twins not identical?

Not only is Kean an intelligent writer but he's also very clever and good at penning chapter titles. Who can resist one called "Humanzees and Other Near Misses"? The humanzee experiment was the quest to create a chimp/human hybrid. In 1924, the Pasteur Institute gave Russian scientist Ilya Ivanovich Ivanov permission to use their primate station in French Guinea for Ivanov to experiment artificially inseminating chimps with human sperm. Unfortunately, the chimps were not yet fertile. Later, he continued these experiments, at one point planning to inseminate African female hospital patients with chimpanzee sperm without their knowledge. Stalin himself approved more of Ivanov's experiments in southern Russian. But luckily none came to fruition.

Another chapter examines how humans, unlike other primates, have only 46 chromosomes. This is because long ago in humans chromosomes 2 and 4 fused. Kean provides an interesting discussion about how this fusion affected heredity so that humans with 48 chromosomes eventually had a slim chance of reproducing.

Kean never veers to the abstract and impersonal. At the very beginning of the book he describes visits to his grandparents' home where he watched his grandmother care for his grandfather who suffered from Parkinson's disease. This image of this shaking, debilitated grandpa haunted him and made him debate taking a DNA test himself. But how could he study the subject and not explore his own?

A book that examines similar issues but on a more personal level is Jeff Wheelwright's *The Wandering Gene and the Indiana Princess: Race, Religion, and DNA* about a woman (Native American and Spanish) whose diagnosis of breast cancer led to discovering her unknown Jewish ancestry.

Posted by Dory L. on March 13, 2013

