Genetics has come a long way since Gregor Mendel mapped inheritance using peas: Deconstructing the muddle of genetics and inheritance

The year was 1900. Three European botanists — one Dutch, one German and one Austrian — all reported results from breeding experiments in plants.

Each claimed that they had independently discovered some remarkable patterns in inheritance that had been noticed by Gregor Mendel decades earlier and reported in “Versuche über Pflanzen-Hybriden,” or “Experiments in Plant Hybridization.”

Yet at the time, “there was no such discipline as genetics, nor was there a concept of the gene,” says Yafeng Shan, a philosopher of science at the University of Kent in England.

…

From the muddle of ideas, Shan says, those three reports at the dawn of the 20th century helped introduce Mendel’s work to other scientists in the fledgling field of heredity.

That set the stage for the development of Mendelian genetics as we know it today, and no doubt played into a century’s worth of developments in molecular biology, from the discovery of the structure of DNA to the sequencing of the human genome and the rise of genetic engineering.

…

The path to our current understanding of the inheritance and variation at the heart of modern biology has been far more winding than most biology textbooks reveal.

This is an excerpt. Read the original post here.