## The impossible punnett square

**Business** 



The simple art of crossing, exhibited by Gregor Mendel's dexterous play with mere varieties of peas, has been practiced to lay out the mischief of probability. The unpredictable nature of this branch of math seems to deceive all but one. With Mendelian genetics, probability, which takes genetics' treacherous role of weather, has become easily dealt. Scientists today believe the coexistence of genes, molecules, alleles, and traits do not just get distributed on a four-squared chart, but expand into the paradox of the vast, molecular level.

Where our modern geneticists prefer molecular genetics as their art of observation, genetics alone wouldn't have existed without Mendelian genetics. Mendel's methods have made genetics appear as if it could not be easier; molecular genetics has made genetics appear as if nothing is vaster. Together, the two forms of our paradoxical type of science form an impossible cross, an impossible Punnett Square – can the two ever coexist? Mendel was a priest, who yet again proved like many other scientists, that science can be observed by anyone. Starting his research around the year of 1860, Mendel became our basement of science by demonstrating fundamental terms, laws, and theories. To be able to describe this important leg of the tabletop of science is an amazing feat, thus, Mendel got the title he is more known as: "The Father of Genetics".

The eager scientist was first rejected by his priest circle to use rats for his experiments. Therefore, Mendel grew common peas (scientifically known as Pisum Sativum) to conduct (or at the time – explore) research for the answers to his doubts. He was able to define fundamental terms used by geneticists till today, and expanded our capable golf ball-sized knowledge of

science. Looking at this statement directly makes Mendel's discoveries' importance only to the value of the size of the golf ball changing minutely. However, looking at the chain of discoveries caused by Mendel's early achievements makes things look as if, perhaps, Mendel is responsible for making our golf ball-sized knowledge of science a basketball. That is where the controversy gets imported – does Mendelian genetics make a microscopic or a macroscopic change to science? With molecular genetics, modern scientists have explored the reason behind the shriveled appearance of peas, why the concepts of genetics do not accept mixing as an argument, or why abnormal body reactions happen.

The common interrogation – why – explains the hidden side of the moon. The many reasons of molecular genetics are like ice in a glass jar. Where Mendelian genetics is the glass jar itself, fertilizing the base support, molecular genetics cracks open the jar functioning like ice, exploring the inner filaments of the glass. To be working on such unimaginable concepts such as gene therapy and epigenetics, we must credit molecular genetics. "Push pins," also known as epigenetic marks in science, pinned on unpredictable places of DNA could not have been studied without the invention of karyotypes and electron microscopes. While Mendelian genetics opens the door and molecular genetics takes us to the other side of the room, what makes the collision of both molecular and Mendelian genetics so uncomfortable? The collision, like many other science topics, is a controversy hidden beneath the layers of confidence these topics have given us.

One such topic is epigenetics. Where Mendel thought the peculiar behavior between peas crossed was just the inner mechanism of the organism, he left https://assignbuster.com/the-impossible-punnett-square/

out the environmental factors that Darwin, and many other scientists henceforth revealed. One of the most evident examples of epigenetics taken place is identical twins that are not exactly identical(1: check works cited). Once born, the two offspring may face different environmental conditions that change their appearance, personality, and taste. Where one twin may be dieting, the other may have a huge appetite.

The two may be facing different experiences in life and therefore have different personalities. In fact, scientists are still pondering over the unusual case of the identical twins – Sienna and Sierra Bernal(2: check works cited), where Sienna is born with primordial dwarfism, and her sister, Sierra, is not. Mendelian genetics, which at the time may have seen on-dot, has fallen apart in acknowledging what might affect behavior "outside the inside" of the organism. In many places like this, the two types of genetics do not agree. The fight between our major ports of genetics – Mendelian and molecular genetics – ironically represents many other controversies which deal with the importance, value, and use of several topics, studies, and opinions. Many discoveries may not have been made without the existence of all.

However, our modern generation tends to unconsciously tilt to the technical side of genetics – molecular genetics. Today, Mendelian genetics may appear bootless, but we must realize it is what gives Molecular genetics its value. The cross of use and value, in this case, is impossible. Science displays, amongst the many other feats, an impossible Punnett Square, indeed. Works Cited 1: " Epigenetics.

Web. 11 Aug. 2014. 2: "Primordial Dwarf With Identical Twin Sister." ABC News. ABC News Go, n.

d. Web. 11 Aug. 2014

<sup>&</sup>quot; Epigenetics. N. p., n. d.