

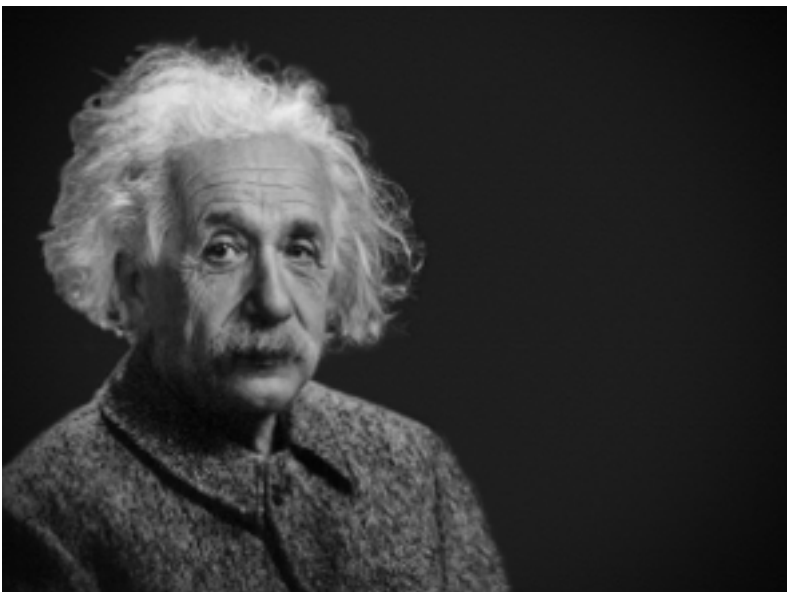
1. Hardy-Ramanujan



Perhaps one of the most well-known examples of collaboration is that of Srinivasan Ramanujan and G. H. Hardy. Ramanujan was a shipping clerk and self-taught mathematician in Madras, India. In 1913, eager for recognition, he decided to write to professors at Cambridge University, UK with his theorems. Among those he contacted was G. H. Hardy, who was so impressed with Ramanujan's work that he arranged for him to be sent to Cambridge University, where he

worked. Hardy remained Ramanujan's mentor for many years. The story also goes that once, while visiting Hardy in London, Ramanujan told him that his taxi number was 'rather dull'. Upon hearing that the number was 1729, Hardy immediately said that it was a very interesting number – the smallest number expressible as the sum of two positive cubes in two different ways. This gained popularity as the 'taxicab number' in mathematician circles. Many years later, Ramanujan's work on Fermat's last theorem and elliptical curves was discovered, which now finds applications in cryptology and Internet security.

2. Einstein and Marcell Grossman



Take one of the greatest geniuses in history, Albert Einstein. Little do we know that he was no lone genius – he collaborated with two of his fellow students at ETH Zurich, Marcel Grossmann and Michele Besso. Discussions among the three helped Einstein derive the special theory of relativity. It's told that Einstein once told Grossman, "You must help me, or else I'll go crazy." Grossman was a gifted mathematician, whose notes helped Einstein greatly. Both of them published a joint paper in 1913 known as the 'Outline of a Generalized Theory of Relativity and of a Theory of Gravitation". The

Einstein-Grossman theory was a precursor version to the final theory of general relativity.

3. Watson, Crick, Wilkins and Franklin



The double helix structure of DNA was discovered thanks to the combined effort of four people James Watson, Francis Crick, Maurice Williams and Rosalind Franklin. Watson and Crick met at the Cavendish laboratory (Cambridge University) in 1951, where they began to study the structure of DNA together. Rosalind Franklin and Maurice Williams obtained high-resolution photographs of DNA through X-ray crystallography at King's College London. This data was used by Watson and Crick in their own research. That Franklin did not get the credit she deserved is a topic much

debated about, but nonetheless, all of them contributed to this breakthrough discovery.

4. Swami Vivekananda and Nikola Tesla



One of the more unusual collaborations was between the spiritual leader Swami Vivekananda and scientist Nikola Tesla, which brought modern science and the ancient philosophy of Vedanta closer. Tesla met Vivekananda in the late 1800s. Swami Vivekananda hoped that Tesla would be able to prove scientifically that matter is just potential energy, which is one of the aspects explained in Vedic cosmology. While Vivekananda used the terms force and matter for Prana and Akasha, Tesla

understood them as energy and mass. He understood that when mass increases, speed must increase. However, he was unable to map the equation between energy and mass (which Einstein found later on). But it is remarkable that two different minds from different continents and backgrounds could work together and find a connection that might have led to a fundamental understanding of how the universe works.

5. Procter and Gamble



One of the world's largest FMCG groups that make everything from batteries to shampoo was founded by two brothers-in-law. William Procter was a candlemaker from England and James Gamble was a soap maker from Ireland. Both of them moved to Cincinnati in USA, where they met and went on to marry the Norris sisters. It was their father-in-law who persuaded them to become business partners. The company, during its initial years, manufactured soap in a big way. Since they sponsored many radio programmes back in the day, the

programs came to be known as 'soap operas'! P & G is a great example of a company that was formed through collaboration between two individuals, with only two products at first. Eventually, they diversified into a wide range of products being sold worldwide, and now P & G is a household name.