

## The Jack Andraka Story

Jack is a 16 year old American High School student. When Jack was 13 years old a close family friend died from pancreatic cancer. Jack was devastated and wanted to understand. He was a completely ordinary boy, average IQ, never shone at school, never had exceptional grades. Jack was horrified to find out that the current test for pancreatic cancer is 60 years old, costs \$800 and is so inaccurate that by the time most people are diagnosed they only have a 2% chance of survival. With youthful optimism he thought he could do better. Jack didn't even know what a pancreas was so he started as every school child does with google and Wikipedia. But Jack didn't stop there. He spent thousands of hours trawling the internet and reading research papers. He continued to research and he says that he had his eureka moment when he was reading a paper he had smuggled into a biology class under his hoodie. Jack says that his biology teacher was droning on and he was reading the paper and it suddenly hit him. At this point the teacher confiscated his research paper! Undeterred, Jack wrote a 35 page document outlining his idea and started sending it to university professors. In the end he emailed 200 professors. The first 199 rejected his idea but the last one agreed to meet him. Jack went into the meeting with a huge pile of documents that he dumped on the professor's desk hoping to impress him. It didn't work, but as the professor questioned him Jack held his own. He said that he had to guess a lot of the answers, a bit like in his SATS where if he didn't know the answer he wrote C! But the professor agreed to help him and give him some lab time. By the age of 15, Jack had invented a test for pancreatic cancer that gives results in 5 minutes, costs 3 cents and is over 90% accurate. That's 168 x faster, 26000 times less expensive and over 400 times more sensitive than current diagnostic tests. Jack is an incredible example of the amazing things that ordinary people can do if they have enough determination and motivation to really work at something but there is lots of evidence to show that hard work consistently triumphs over natural ability.