



A Spotlight on Young Innovators

This summer, Maschoff Brennan launched an Orange County student innovator scholarship as part of the OCBJ's Innovator of the Year Award. We will award up to three \$2500 scholarships to undergraduate or graduate students who demonstrate outstanding innovation in any field. We invite nominations through August 20, through our website, www.mabr.com/student-innovator.

As we approach our selection of our first young innovators, we reflect on the relationship between youth and innovation. Curiosity and rebelliousness are signature characteristics of youth. With open eyes, the made world becomes malleable. What is fixed, becomes challenged.

We are no stranger to the creative power of youth. At the age of 26, **Albert Einstein** published four papers, on the photoelectric effect, Brownian motion, special relativity, and the equivalence of mass and energy. **Louis Braille**, at the age of 15, invented handwriting for the blind. In the 1920s, **Philo Farnsworth**, as a high school student in rural Idaho, conceived the idea of projecting recorded images by scanning electrons on a glass screen. At the age of 21, he made the world's first working television. Innovation is the will to turn conception into a new reality.

Today's youth are no less impressive. You just have to look to submissions by high school students in national science competitions. **Maria Elena Grimmer**, at the age of 14, discovered a way to use recycled plastic beads to purify water of harmful antibiotics that build up in rural water supplies, for which she won the 2015 Siemens Competition in Math, Science and Technology. **Jack Andraka**, a 15-year-old high school freshman, discovered a test for early detection of pancreatic cancer, winning him the grand prize of the Intel International Science Fair in 2011. **Param Jaggi**, a 17-year-old senior at Plano East High School, developed a mechanism inserted into the exhaust pipe of a car that uses photosynthesis to convert carbon dioxide into oxygen. **Raymond Wang**, at the age of 16, created a device that changes how air is circulated in an airplane to reduce germ transmission by 55 times, winning him the top prize at the Intel International Science and Engineering Fair in 2016. In 2018, **Gitanjali Rao**, age 11, won the Discovery Education 3M Young Scientist Challenge for inventing a sensor that can detect lead in water more efficiently than traditional methods.

Orange County has been a hub of innovation beginning in its early days. **Clarence Leonidas Fender**, the inventor of the Stratocaster, was born in Orange County to parents who owned an Orange Grove near Anaheim. In a single year, 1995, UCI became the first university to have two of its professors win the Nobel Prize in separate fields. **Frederick Reines** and **F. Sherwood Rowland** were awarded Nobel Prizes in physics and chemistry, respectively. Professor Reines discovered the neutrino; Professor Rowland discovered that chlorofluorocarbons contribute to ozone depletion.

In the business arena, Orange County has been blessed with many visionary innovators. **Jim Jannard**, founder of Oakley sunglasses and Red Digital Cinema, revolutionized eyewear and digitized film production, transforming two industries. **Reza and Maryam Rofougaran**, a brother and sister dynamo, hold over 1000 patents, making them among the top 20 inventors in the world. They have been pioneers in the development of Wi-Fi, Bluetooth, and other communication technologies. Through Movandi, an Orange County-based venture, they are developing revolutionary applications in 5G and other next generation communications technology.

Recent winners of the OCBJ's Innovator of the Year Award confirm that the well of innovation has not run dry in Orange County. Past winners include **Stan Rowe**, the Chief Scientific Officer of Edwards Life Sciences, whose work helped revolutionize the heart valve to substantially reduce mortality rates among patients with heart problems. **Dr. Benjamin Park**, UCI Professor and founder of Enevate, has developed a fast charging lithium ion battery for electric vehicles recognized as a leader in its field. **Stuart McClure**, the CEO of Cylance, Inc., developed a cybersecurity solution using algorithmic science and machine learning to detect and prevent attacks with greater proficiency. The list of innovators is long; it is regrettable there is so little space here in which to showcase them. Which brings us to the future. We honor the notable achievements of individuals. But we ignore at our peril the deeper truth that innovation is a collective endeavor. The passion to inquire and to buck tradition is a force that must be nurtured and re-inscribed in each generation. That effort begins with the smallest of gestures, words of encouragement to the young misfits, heretics, and freethinkers among us who have the audacity and courage to challenge convention, and in doing so, to change our world.

Maschoff Brennan

Maschoff Brennan is a leading 50-lawyer IP and Commercial Litigation boutique law firm with offices in Park City, Irvine, and Salt Lake City. Michael Katz, a shareholder in the Irvine Offices, is a trial lawyer who handles patent, trade secret and other business litigation involving diverse technologies, including semiconductor, pharmaceutical, fiber optic, medical device, automotive, and software. He has been named a Southern California Super Lawyer every year since 2004 and listed in Best Lawyers in America in IP and Commercial Litigation. He is also a published poet.

