## Intel International Science and Engineering Fair

A program of Society for Science and the Public

## Getting the IV, STAT

In 2011, Emir Konuk and Emre Yilmaz, former college roommates from Middle East Technical University in Turkey, traveled to the U.S. to compete as finalists in the Intel Global Challenge at UC Berkeley, an international competition that gives emerging entrepreneurs the opportunity to present their business plans to venture capitalists and compete for USD 100,000 in funding.

It was not the first time these young innovators had made this kind of journey. Six years before, the two made a similar trip to the U.S. to compete as finalists in the 2005 Intel International Science and Engineering Fair (Intel ISEF). Their project at the time was the development of a digital ophthalmoscope designed for doctors to see blood vessels in the retina more easily.

Inspired by their experience at Intel ISEF, Konuk and Yilmaz expanded their research on medical imaging technology. The result: VeinScreen, a simple, inexpensive device in the form of goggles which employ both hardware and software to create infrared images of blood vessels in the human body. This visualization enables medical personnel to more accurately perform procedures such as starting an IV or drawing blood. VeinScreen can not only make patients more comfortable, but can also mean the difference between life and death when a critically ill patient needs an emergency IV.

Recognizing the potential for their new technology, Konuk and Yilmaz formed a company called Kaleidoscope. They are currently working to bring VeinScreen to market.



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