

Intel Global Challenge at UC Berkeley 2011

In November, 2011, winners of the 7th annual Intel Global Challenge were announced at UC Berkeley. The winners were selected from 28 finalist teams, representing 20 countries, that presented groundbreaking ideas in such fields as healthcare, technology, energy conservation, and disaster management. Their innovative business plans included solutions for detecting ultraviolet radiation, making packaging out of coconuts, fighting alcoholism, and improving fire detection and protection. Competition judges included representatives from leading Silicon Valley venture capital firms, including Intel Capital, who provided the teams with valuable feedback on their ideas.



First-Place Winner: Forward (Gaitu)

Gaitu is an e-commerce platform that allows one-stop shopping for customers, from design to printing, letting them submit their work and transform it into art or commercial print work. Designed for the Chinese market, Gaitu matches photographers with designers who process and enhance their work. It allows users to add special effects to their photos without expensive, complex photo editing software. Gaitu then allows customers to share their images, turn them into oil paintings, or have them printed on mugs or other merchandise. Gaitu also offers design services such as business card and logo design, as well as online printing.

gaitu.com.



Second-Place Winner: Maxygen-mobile DNA

Maxygen has taken the slow, expensive process of DNA testing and made it portable, fast, and affordable. Maxygen's mobile DNA test can be used at the point of care in private medical practices, small and medium-sized medical centers, and rural sites, which used to find portable DNA testing prohibitively slow and expensive.

Maxygen's solution incorporates numerous innovations in device engineering and DNA testing chemistry. Medical personnel simply place the biological sample in a disposable Maxygen cartridge and load the cartridge into the Maxygen test device. The device automatically performs all tests and displays the results within 10 minutes.

Previous tests could take 40 minutes or more, or samples might have to be sent to an offsite facility for analysis. This test can detect most infectious diseases and thousands of genetic predispositions in humans, and more than 100 pathogens on farm animals and plants.



Third-Place Winner: NanoDiagX

The hepatitis C virus (HCV) infects up to four million people worldwide each year. Early identification and treatment are critical to reducing transmission of the disease, but the most common method of detecting active HCV requires two tests that can be expensive and time-consuming. To help solve this problem, NanoDiagX developed the HCV nanogold test, which uses gold nanoparticles to detect the disease in less than an hour and at one-tenth the cost of current commercial tests.

The nanogold test could improve global efforts to combat the spread of HCV, particularly in parts of the world where infection rates are high and resources limited. The company plans to adapt its technology to detect other infectious agents, such as tuberculosis, as well as cancer biomarkers.