

Intel + UC Berkeley Technology Entrepreneurship Challenge (IBTEC)

2007 Winners, Where Are They Now?

The Intel+UC Berkeley Technology Entrepreneurship Challenge (IBTEC) is designed to showcase global business opportunities that have the greatest potential for a positive impact on society through the deployment of new and truly innovative technologies.

Learn about what some of the 2007 winners are doing now:

Surgic Eye (formerly Navaris Medical) 2007 First Prize Winner	Surgic Eye is committed to developing innovative, integrated, computer-aided solutions for surgical procedures. The first of SurgicEye's creations is a novel imaging and operational procedure to improve precision in breast cancer surgeries.
Algae Biofuels (formerly NRG Fuels) 2007 Second Prize Winner	Algae Biofuels is a clean-tech developer of innovative microalgae growth technology for biodiesel production.
Qmodule 2007 People's Choice Prize Winner	Trivial presents vEye, a navigation system to be used in outdoor environments and based on tactile feedback (vibration) provided by mobile phones.



Surgic Eye
www.surgiceye.com

In an effort to enhance medical procedures via the latest computer technologies, researchers in the computer science and nuclear medicine departments at Germany's Technische Universität München collaborated to form SurgicEye, formerly Navaris Medical, a company committed to developing innovative, integrated, computer-aided solutions for surgical procedures. The first of SurgicEye's creations is a novel imaging and operational procedure to improve precision in breast cancer surgeries.

Specifically, the technology provides intra-operative, three-dimensional, functional imaging that can be applied before, during and after an operation, allowing a surgeon to more precisely locate and extract marked lymph nodes. The benefit to patients is more precise treatment and, as a result,

better outcomes.

For this work, the SurgicEye team – led by co-founders Joerg Traub, Managing Director, and Thomas Wendler, Clinical and Scientific Director – won first prize at the 2007 IBTEC competition as well as subsequent honors at Science4Life and MBPW, two German competitions dedicated to innovative life science technologies.

"Our team had its first 'real world' experience when presenting to the IBTEC judges," says Wendler. "The feedback from them was critical, but always constructive, addressing aspects such as content, presentation, and clarity of idea. The discussions with other participants, the seminars, and the exchange with people from the investment world also provided valuable feedback. Further, the prize put us in the news and has served as a door-opener for investors and the public in general."

In short, says Wendler, "IBTEC put us on the map. It taught us a lot and pushed us to start with big hopes and the confidence that it was the right time, the right idea, and the right team."

Since IBTEC, Wendler reports, SurgicEye has attracted financial backing for startup and become an operating business. Additionally, the company has begun clinical trials and plans to have its first complete certified system working by the end of 2009.



Algae Biofuels (formerly NRG Fuels)
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Biodiesel remains one of the most promising ways to reduce reliance on fossil fuels and address global warming. However, existing biodiesel is produced primarily from crop-based feedstock, raising ethical concerns about using limited agricultural land for fuel versus food. Additionally, current biodiesel crops consume fresh water resources, can be grown and harvested only part of the year, and are expensive to produce.

In contrast, algae can be grown on non-agricultural land, hydrated by seawater, and harvested year-round. Further, algae significantly outproduces other viable plant sources in oil and carbon dioxide absorption, thereby offering an optimal biomass source for biodiesel, as well as a promising method to combat climate change.

Algae Biofuel, formerly NRG Fuels, is a clean-tech developer of microalgae production technology for biodiesel production. Using an innovative closed system and cutting-edge technology, the company has found a way to maximize biomass production and carbon dioxide sequestration, while overcoming obstacles such as contamination risks and up-scaling.

The company's pioneering technology is driven by the work of Shoshana Arad, President of Ruppin Academic Center and a leading researcher in the biotechnology engineering department at Israel's Ben-Gurion University of the Negev, as well as a veteran authority on microalgae agriculture, metabolism and genetic engineering. The business plan – developed by BGU grad students Avi Avidan, Roeel Arbel, Noga Bar-El and Daniel Eisen – won prizes at Israel's Biztec and Europe's NOVATech competitions before placing second at IBTEC 2007.

"IBTEC was a beneficial experience," says Avidan, founder and CEO of Algae Biofuel. "As a young entrepreneur, the exposure to investors – including venture capitalists and investment companies – as well as the opportunity to present to an experienced audience and participate in a Q&A session were priceless."

After IBTEC, Avidan reports, the company revamped its business plan "with real innovation around both the technology and the business strategy." Since then, the company has partnered with BDB Technologies and High-Tech Investments LTD, a company specializing in the development of green technologies, and continues to raise capital from investors for a pilot program.



Qmodule
www.qmodule.com

The energy required to run many electronic devices is often smaller than that created by simple mechanical actions, observes Martyn Nunuparov, physicist and founder of Qmodule. To illustrate the point, he notes that the amount of mechanical energy expended by a person pushing the button of a hand-held calculator with one finger exceeds the amount of electrical energy required to energize the electrical circuit of the device and engage in the desired function by more than ten times.

It is this concept that drove Nunuparov and his Qmodule team to delve into the development, production and marketing of battery-free electronics. Already, the company holds four basic international patents and has demonstrated the feasibility of Qmodule technologies via an array of working prototypes in the fields of consumer and industrial electronics. Specific applications include: electronic locks that will not freeze up due to discharged batteries; battery-free electronics for industrial automation that do not require maintenance time for replacing or recharging batteries; reliable sensors for use in military or security operations; and "green" electronics for consumers.

As a result of this innovation, Qmodule garnered prizes at the Russian Innovation Contest 2004 and BIT 2007 before winning the People's Choice prize at IBTEC 2007.

"The IBTEC experience was helpful," says Nunuparov. "The judges helped us to deeply understand the position of venture capitalists and investors and the kind of value proposition they are looking for from us." Further, he adds, though the honor came with a cash prize, "what was much more significant for us was media exposure helping Qmodule to gain recognition from both investors and customers."

"Our participation and success at IBTEC has attracted many young collaborators on our projects from technical and business universities," says Nunuparov. Moscow State University now offers an educational program with business cases based on Qmodule technologies.

Since IBTEC, the company has moved forward with the launch of three start-ups based on different product applications.