



Innovation called vital for biotech to survive

<http://www.sfgate.com/cgi-bin/article.cgi?f=/c/a/2009/06/25/BUG018DE0E.DTL>

By Tom Abate, Chronicle Staff Writer

Friday, June 26, 2009

Biotech firms need a new burst of innovation in fields like diagnostic testing and biofuels production to adapt to a changing marketplace, a veteran biotech financier told about 200 industry leaders in Santa Clara Thursday.

"I'm afraid that innovation is declining. We're losing it at a time when we need it the most," Stelios Papadopoulos said in the opening address of the BioEconomy Summit.

Papadopoulos, chairman of the Bay Area biotech firm Exelixis and one of the industry's original investment bankers, said biotech did well in the past by developing novel medicines.

He said five of the world's top-10 selling medicinal compounds were developed by biotech firms, a remarkable achievement considering they compete against much larger pharmaceutical companies.

But biotech enjoyed those successes because the industry arose at a time when Wall Street was willing to risk huge sums on 10-year-long efforts to develop blockbuster drugs. Now, Wall Street has lost its appetite for such long-term bets, forcing biotech firms to invent new tactics and explore new markets, he said.

"Diagnostics is a huge opportunity," Papadopoulos said, adding that another area is the development of biofuels.

"I'm personally reinventing myself into an energy person," he said.

Biotech firms have already gotten the message, said Matthew Gardner, president of BayBio, the South San Francisco trade group that represents more than 900 firms in the region and organized Thursday's event.

"We're seeing a fundamental change that is just beginning to show up in business models," Gardner said.

As money becomes tighter, biotech firms are keeping their core staffs lean and outsourcing every function they can to stretch their cash. Many companies also are moving beyond drug discovery - which can have huge payoffs but takes a long time - into fields like creating diagnostic tests that help determine with greater precision whether a patient is likely to respond to a given remedy.

"This is one of the best ways to control medical costs and improve medical outcomes," said Jeffrey Peterson, chief executive of Target Discovery, a Palo Alto firm that is developing diagnostics to guide ovarian cancer treatments.

One panel at the summit explored the potential for developing new biofuel processes that would be more energy efficient and environmentally sustainable than the current practice of turning corn kernels into ethanol.

UC Berkeley plant scientist Chris Somerville said it is already technically feasible to convert the entire cellulose content of perennial grasses into biofuels. These grasses don't require irrigation or fertilization, making them less expensive to grow and easier on the soil. But Somerville said it costs about \$10 per gallon to produce these biofuels, and it could be eight years or so before large-scale production becomes economical.

Some biotech firms hope to get into the energy business sooner by developing nonedible grasses that could be burned in coal-fired power plants to produce electricity.

Neal Gutterson, chief executive of Mendel Biotechnology of Hayward, attended the summit to talk about efforts to develop grasses into fuels that would release about the same amount of carbon when burned as they absorbed from the atmosphere while growing.

"We could start burning within three years," he said.