

News Digest

MASS High Tech

THE JOURNAL OF NEW ENGLAND TECHNOLOGY

ROBOTICS



Orders on a roll

Kiva Systems, maker of order-fulfillment robots, lands Staples as a client and launches its products publicly. Page 3

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Tech transfer

Andover's Eisai Research Institute obtains a tech-transfer license from UMass Medical to expand its drug-discovery targets. Page 4

ROCKET SCIENCE

Vertical lift

A Maine startup is designing a hybrid electric-jet engine to take off vertically and reach Mach 1. Page 5



INTERNET

Making waves

Is this the year that online radio pays off? Experts and one local entrepreneur say now is the time to turn on the web dial. Page 6

MARKETING

What's hot in 2006?

We asked hundreds of chief marketing officers around New England what technologies would drive their marketing this year. Here's what some of them said. Page 7



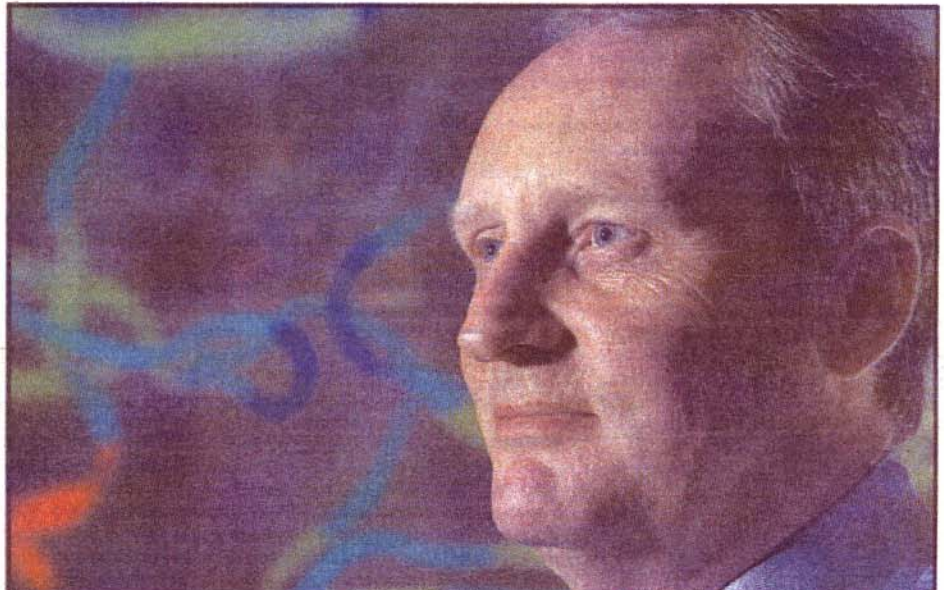
CLOSE-UP REPORT



Education & Training

Nearly half of the companies surveyed by Mass High Tech plan to boost budgets for sales training in 2006. Plus, a directory of universities and colleges that offer technology courses. Page 14

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STUART GARFIELD PHOTO

Phil Vickers, head of Pfizer's local R&D unit, said partnerships have led to hiring from biotechs as well as from academia.

R&D giants scoop up jettisoned biotech workers Pharma eyes biotech talent

BY DYKE HENDRICKSON
SENIOR STAFF WRITER

Local research-and-development divisions of biopharmaceutical corporations are emerging as safety nets for life-sciences professionals coming from biotechnology companies.

In recent years, major corporations have entered the Hub with the goal of developing their research and development units. Pharmaceutical companies that have settled in Boston or Cambridge include Merck, Novartis and Pfizer. Other major players have set up shop nearby, including AstraZeneca (Waltham), Serono (Rockland), Wyeth (Andover) and Abbott (Worcester).

The arrival of these R&D operations are proving useful on the hiring scene, for they are offering well-paying positions at the same time that several biotech companies have been laying off workers.

See *Pharma* on PAGE 13

Tech cos. funded for clamping down on crime

BY EFRAIN VISCARDOLASAGA
STAFF WRITER

Crime is paying for technology companies working to stop it.

Two Massachusetts companies expect to close funding as early as this month for technologies that will be used to stop theft in retail stores and criminals in the clink.

In Cambridge, IntelliVid Corp. is working

with retailers to stop thieves. In Quincy, a new company called **Binj Technologies Inc** is working with corrections officials to control the prison system's No. 1 technological problem: illegal cell phones.

They join a growing cluster of companies in New England whose technologies are being used to thwart crime.

Such companies include Viisage Inc. of Billerica, which makes facial-recognition software being used

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FROM PAGE 1

Crime: Technologies clamp down on crime, from prison cell phone use to shoplifting

by the Essex County Sheriff's Department as well as within prisons, and badge and insignia maker V.H. Blackinton & Co. Inc. of Attleboro Falls, which has deployed a radio frequency identification (RFID) platform for identifying counterfeit badges.

In addition, Asys Technology Group, a consultancy in Peabody, has developed a software platform to manage the internal bank accounts of prisoners while Xwave Solutions Inc., a Canadian software company with U.S. headquarters in Augusta, Maine, offers offender management applications for both police and corrections organizations.

Corrections.com in Quincy has become the online portal of the corrections industry, offering news and services to corrections staff and administrators. The company is run by the husband-and-wife team of Joseph and Laura Noonan and has carved itself a niche as an industry voice, as well as a developer of new products.

"Corrections is a big industry," said Joe Noonan. "It's not sexy and is a pretty close-knit community, but it is about a \$43 billion industry."

Last year, the Federal Bureau of Prisons approached Joe Noonan looking for a way to curb illegal cell phone use inside jails and prisons. Noonan scoured his industry contacts, and when he couldn't find an effective solution, he leaned on his experience in electronics surveillance and counter-



IntelliVid president and CEO Patrick Sobalvarro, left, and vice president of marketing Paul Cataldo aim to be superheroes by proxy, deploying software that makes traditional video surveillance a real-time crime fighting tool.

STUART GARFIELD PHOTO

SOFTWARE

IntelliVid Corp.

Business: Video analysis software
CEO: Patrick Sobalvarro
Employees: 26
Location: Cambridge
Web: www.intellivid.com

NETWORKS

Binj Laboratories Inc.

Business: Cell-phone detection and location
CEO: Joseph Noonan
Employees: 12
Location: Quincy
Founded: 2005

measures and decided to come up with a product himself.

Binj Laboratories was born. It expects to receive institutional funding through the Small Business Administration and other entities by next month that could go as high as \$5 million, Noonan said.

The product, called CellScan, is a cell phone-locating network for prisons and jails. Noonan has been testing proto-

type systems with several state and federal agencies in New York, Massachusetts, Kentucky and other places, and expects to have a production version ready by the end of the month.

"Cell phone use within prisons is one of the biggest problems facing the corrections industry, and concern is growing nationally," said Alex Fox, director of security technology for the

Massachusetts Department of Corrections. "(Using a cell phone) criminals are continuing their criminal activities inside, or planning escapes or contacting victims on the outside."

Organized retail theft is a growing problem nationwide. It accounts for as much as \$34 billion across retail sectors, says the Coalition Against Organized Retail Theft in Washington, D.C.

IntelliVid's software enables retailers to immediately index closed-circuit video and track people or items throughout a store, giving them the ability to stop thieves as they operate.

"To stop theft, you need to know who is doing it and where it is taking place, immediately," said Patrick Sobalvarro, president and CEO of IntelliVid.

The software can separate people and objects, and track them from camera to camera, as well as index the video for future use. The company is also developing a wireless application that will let security personnel view live video on a handheld device from the store floor.

Flagship Ventures in Cambridge created the company in 2002, based on indexing software from MIT. IntelliVid has since filed for 10 more patents and closed two funding rounds totaling \$9.5 million with Flagship, Egan Managed Capital and DJF New England.

Sobalvarro said the company plans to announce its largest funding to date later this month.

FROM PAGE 1

Pharma: As regional biotech hiring falters, local pharma R&D divisions take in talent

Biotech companies such as Biogen Idec Inc., Millennium Pharmaceuticals Inc. and Epix Pharmaceuticals Inc. were cutting workers in late 2005. Yet R&D divisions of pharma corporations are hiring.

"The companies classified as biotech and pharmaceutical manufacturing lost about 800 jobs in the last year that we have figures for," said Zvi Rozen, deputy director of the John Adams Innovation Institute, which is a part of the Massachusetts Technology Collaborative.

"The organizations involved in research and development did show some growth. Biotech itself is not a fast-growing sector."

If biotech is not growing rapidly, the pharmas that have settled in Massachusetts are hiring with regularity. Merck, for instance, is adding employees weekly as it sets up a 500-person operation in the Longwood Medical area of Boston.

Novartis, which arrived in 2003, is closing in on its goal to hire 1,300 employees for its R&D center in Cambridge. Pfizer, which has offices and labs on Memorial Drive in Cambridge is hiring the last of 50 additional workers, including scientists.

That would bring the total number of Pfizer employees in Cambridge to 175. Company officials say that during their last hiring initiative, the company advertised 25 positions and received

| Biotechs partner up, pharmas hire up | | | |
|--------------------------------------|----------------------------|---------------------|-----------------|
| BIOTECHNOLOGY COMPANY | PHARMACEUTICAL CORPORATION | RESEARCH TARGET | INITIAL PAYMENT |
| Amylin Pharmaceuticals Inc. | Novartis AG | RNAi therapeutics | \$56.6M |
| BioTrove Inc. | Schering-Plough | Assay development | N/A |
| Caliper Life Sciences Inc. | Pfizer Inc. | Microfluidics | N/A |
| Coley Pharmaceuticals Group Inc. | Pfizer Inc. | Cancer | \$10M |
| Idenix Pharmaceuticals Inc. | Novartis AG | Hepatitis C | \$255M |
| Infinity Pharmaceuticals Inc. | Novartis AG | Drug discovery | \$10M-plus |
| Vertex Pharmaceuticals Inc. | GlaxoSmithKlein | Pain treatment | \$20M |
| Vertex Pharmaceuticals Inc. | Merck & Co. Inc. | Solid tumor cancers | N/A |

Source: Massachusetts Biotechnology Council, Mass High Tech Research

more than 2,500 responses.

"We have collaborations with institutions such as MIT, Harvard, BU and the teaching hospitals," said Phil Vickers, Pfizer's vice president of research and head of the Cambridge unit. "We've also been able to hire top people from academia or the biotech companies."

Another pharma that has established a presence is Schering-Plough Corp. of New Jersey, which is acquiring NeoGenesis Pharmaceuticals Inc. to establish a Cambridge presence.

And Organon, the pharmaceuticals unit of Dutch drug conglomerate Akzo Nobel NV, will open a new research center in East Cambridge.

"The pharmas are playing a bigger

role, and it is a positive role," said Tom Finneran, president of the Massachusetts Biotechnology Council. "They want to get closer to some of the new research that the biotechs are working on. And the biotechs that do develop collaborations benefit, because these small companies can't develop a drug by themselves, and certainly they aren't prepared to market and sell them."

The convergence of pharmaceutical R&D operations and biotech companies has been notable in recent months, as two of the area's largest biotechs have announced cutbacks.

Millennium Pharmaceuticals in Cambridge is cutting about 600 jobs over a two-year period as part of an initiative

to develop drugs rather than platforms. Biogen Idec announced it will be laying off about 250 employees locally as part of a retooling of its research targets. Epix Pharmaceuticals, also in Cambridge, is laying off several dozen.

As such layoffs are announced among biotechs, the pharmas are stepping in, according to industry observers.

"We were in contact with many of employees affected by layoffs at Biogen Idec," said Jeff Crown, a managing partner of Essex Partners, an executive search company whose different divisions handle positions from middle managers to senior executives.

"We brought in representatives from companies like Pfizer, Novartis, Merck and others, to showcase the resumes of some of these people who were looking. There were many capable people suddenly available, and in that way the pharmas act as kind of a safety net for the sudden changes."

Genzyme Corp., although technically a biotech company, is acquiring the financial leverage once reserved for the pharmaceutical companies. It continues to grow, both organically and through acquisitions.

Genzyme, which has more than 8,000 employees worldwide, has recently developed partnerships with ViaCell and RenaMed as it seeks to diversify its own pipeline.