

**Tight squeeze:**  
Small  
biotechs  
finding a  
dearth of  
ready lab  
space.  
**P12**



# MASS HIGH TECH

THE JOURNAL OF NEW ENGLAND TECHNOLOGY



**Cash Rx:** Forerun finds funds for  
expansion from MTDC. **P3**

## SECURITY

**PEITER "MUDGE" ZATKO** says that the security holes in systems — like the T's CharlieCard pass — haven't improved since his days as a renowned hacker with L0pht Heavy Industries.



STUART GARFIELD

Networks are likely to be even less secure now because **security hasn't improved** and the online presence of companies and organizations has grown larger.

**Peiter "Mudge" Zatk0**, security researcher at BBN Technologies Corp. and former member of 1990s hacker supergroup L0pht Heavy Industries

# The hack IS BACK

**BY BRENDAN LYNCH**  
STAFF WRITER

**H**ackers getting a free T pass may be the least of our worries — local hackers-turned-security experts suggest RFID keycards, wireless networks and medical devices implanted in the body are also vulnerable to hacks.

At last week's Defcon hacker convention in Las Vegas, a team of researchers showed it was possible to get information such as Social Security numbers and medical diagnoses, and change the settings on an

## ALTERNATIVE ENERGY

# Microbial fuel cell research blooming

**BY EFRAIN VISCAROLASAGA**  
STAFF WRITER

Everything seems to be going organic these days, from baby food to motherboards. Now, local researchers and entrepreneurs are working to bring definitively inorganic fuel cells into the organic fray.



**Crookes**

No fewer than four groups in Massachusetts are racing to bring so-called microbial fuel cells to market through a variety of applications. None has been commercialized yet, but industry insiders say microbial fuel cells

hold the potential to become a major part of the renewable energy equation.

**Hy-SyEnce Inc.** in Fall River, for example, is working to generate large-scale power from the wastewater of food-processing plants, while **IntAct Labs LLC** in Cambridge is applying its technology to generating power and recycling waste products during space missions.

A research group out of **Harvard University**, on the other hand, is hoping to provide power for lighting and