

A hot niche in law: Scientists move to courtroom for patent work

By Maryclaire Dale, Associated Press Writer | May 20, 2007

PHILADELPHIA --In a span of seven years, Loretta Weathers moved from a plasma physics laboratory at MIT to a federal courtroom, trading long days of crunching data for the adrenaline rush of high-stakes litigation.

The daughter of a Detroit autoworker, she had been tinkering with gadgets since she was a child. But after a few semesters in the prestigious Ph.D. program at the Massachusetts Institute of Technology, she abandoned the solitude of the lab for a journey that took her to law school and an unexpected career as a patent lawyer.

It's one of the hottest niches in law: the lawyer-scientist who understands technology and can explain it to a jury.

"It's maybe not as sexy as defending a murderer, but it's sexy in a different way," said Weathers, 31, who clerked with the federal appeals court in Washington that handles patent disputes.

Even in her first year on the job, Weathers got to work on a copyright-infringement case involving an insurance company that resulted in an award of nearly \$19 million. She put her science and math skills to work behind the scenes, building a database of more than 1,000 acts of alleged infringement.

Demand for these specialists is being driven by an explosion in patent applications in recent years and a growing need for lawyers to protect old patents or challenge new ones. The U.S. Patent Office estimates that 450,000 patent applications will be filed this year, up from about 350,000 five years ago.

Law professors say they're seeing more students with strong science backgrounds make the leap to law, where recruiters are snapping them up.

For at least some students who might otherwise gravitate toward a science career, the promise of much bigger paydays is a powerful lure. Others say the opportunities in academia are not as certain as they once were.

"It's an exciting area of legal practice right now," said University of Pennsylvania law professor R. Polk Wagner. "Every year I see more and more people coming into law school with technical backgrounds."

"It almost scares me," said Wagner, whose proteges include Weathers. "Who's left in the lab?"

Stanford University law student Dan Knauss left the lab at least in part to spread his wings. Knauss, who earned a Ph.D. in microbiology from the University of Wisconsin, thought academia would force him onto too narrow a path.

"One thing I didn't like in pure science was how much you had to specialize," Knauss said. "People who leave technical fields and go into law, they want to be in the interface, where science meets society."

The U.S. Supreme Court has also become interested in patent law, taking up more than a dozen

cases, and it issued a highly anticipated ruling last month on the question of "obviousness" that could make it easier to challenge existing patents.

Congress, for its part, seems ready to address the issue of patent reform. Critics say that patents are being granted too easily and invite litigation that stifles, rather than rewards, innovation.

Stanford professor Mark Lemley, a noted patent lawyer involved in two of the recent Supreme Court cases, sees the legal landscape changing even within his classroom. Next to the more traditional law students with liberal arts backgrounds, he now finds a growing number of science majors of varying ages and backgrounds.

Last year, 140 students piled into his Introduction to Intellectual Property course, making it the largest class at the school.

"That's the kind of thing that 15 years ago would have been inconceivable," said Lemley, whose recent work includes a friend-of-court brief in a Supreme Court patent-infringement fight involving eBay.

To harness that interest, Stanford is joining the handful of law schools that have started joint degree programs in science and law.

Stanford's law school dean, Larry Kramer, sensed the need for the program after moving to the Silicon Valley from New York University a few years ago.

"This is what the industrial revolution was two centuries ago, and it will have that kind of significance in the world," Kramer said.

The field is also lucrative, especially compared with an academic career in the sciences.

Newly minted lawyers will earn \$160,000 at the nation's top firms this year, and perhaps more with a postgraduate science degree or federal clerkship. The leading intellectual property firms plan to match or top that figure.

"You do make quite a bit more money than you do as a researcher or scientist," Weathers said, "but I wouldn't say that was my motivation."

Among other things, she missed using her writing and communication skills. "I got to the point where I no longer wanted to sit in front of a computer terminal going over graphs," Weathers said.

At Woodcock Washburn, a three-city intellectual property firm with 90 attorneys, the dress is casual and most colleagues share her science background. She has worked on cases that directly touch on her physics training, such as a patent fight over blue LED lights, and on litigation that lets her dabble in different kinds of technology.

Ramon Tabtiang, 36, a native of Thailand, earned a Ph.D. in biochemistry at the University of California-San Francisco and spent two years at MIT doing postdoctoral work. But he, too, ultimately pursued a law career, earning a degree while working full time as a technical specialist at Fish & Richardson, a firm in Boston.

Tabtiang came to feel that future breakthroughs in the life sciences would be incremental at best. And while academia offered intellectual freedom, he found it came at a price -- the far lower salary.

"I think every individual, at one point or another -- having a family or wanting a different lifestyle -- is forced to confront the question of whether they really want to work in the pure sciences," said Tabtiang, a married father of two.

At his firm, Tabtiang can apply his scientific training in new ways -- perhaps helping a university form a startup company, or a pharmaceutical firm seek a new drug patent.

It's hard stepping away from the lab, he said, "but once you do, you realize there's sort of alternate universes with their own attractions and flaws." ■

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