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Today's publication of the draft mouse genome map puts an end to the "land grab" that once had researchers racing to patent bits and pieces of the information that defines the most common laboratory animal. Even before today, almost daily deposits of new discoveries in the publicly-funded Mouse Genome Sequencing Consortium (MGSC) database have armed lawyers with arguments against future grants of exclusive rights.

"One of the reasons why the data was being made public rapidly was to substantiate a date of first disclosure," said Q. Todd Dickinson, once the US Commissioner for patents and trademarks, now a Washington, DC patent lawyer.

"If a private entity now seeks a patent on a particular genome or fragment, assuming they meet the other tests, the question will be, are they the first to disclose it? The public database will be very important in knocking out applications because they were not the first to invent it."

But like the race to patent the human genome, the mouse genome stampede seemed to have cooled off considerably even before today's announcement.

Research commissioned by The Guardian newspaper in 2000 found that more than 1300 patents on pieces of the mouse genome were in the works. That count was by no means complete, given the huge backlog of biotechnology patent applications in the world's patent processes at the time.

But the world of genomics was younger then and Wall Street was still enthralled with the prospect that a chunk of the mouse genome would be the key to the next blockbuster drug. Merck & Co., which last year claimed to have found the mouse equivalent of a schizophrenia gene, has since abandoned its foundation, the Merck Genome Research Institute, set up to channel funds into genomics, including \$6.5 million to the MGSC.

"You don't hear about mouse genome patents the way you used to," said Paul R. Knight, life science technology analyst with Thomas Weisel Partners, a San Francisco-based merchant bank.

"Even from the human side, the importance of genetic patents has declined over the past couple of years as people realized you had to get to the protein level and put some function around that protein to own a target or an active product," said Eric Schmidt, a biotech analyst with SG Cowen Securities, a New York investment bank.

The profits needed to fuel a high level of patent activity are still far in the future, the analysts say, so today's publication is a cause to rejoice for the academics, not the investment bankers.

Tyler Jacks, a Massachusetts Institute of Technology genetic investigator and engineer of cancerprone mice hailed the availability of truly free, unpatentable data. "For those of us in the research world, that's a wonderful thing, because all too often we are faced with cumbersome protocols that slow things down in an amazing fashion," Jacks said. The lawyers, of course, are far from ready to throw in the towel. Even with today's publication, there's still a chance of landing a patent on cDNAs, complementary DNA strands synthesized from RNA templates and useful in molecular cloning and other experiments, according to Pilar N. Ossorio, assistant professor of law and medical ethics at the University of Wisconsin Law School.

But the days of feeding data into high-throughput screens and cranking out patent applications, she says, are over. "In some areas, they were using computer programs that had identified a gene with interesting characteristics to form the basis of patent applications," Ossorio said. "That kind of behavior has mostly subsided."

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