NIH files counter-patent in breast cancer gene dispute

London. The US National Institutes of Health (NIH) has decided to challenge the patent filed last month by the University of Utah and Myriad Genetics on the breast cancer gene BRCA1 by filing its own patent application on the same gene.

According to Harold Varmus, the director of NIH, the organization has taken this action because the original application, based on the work of a team headed by Mark Skolnick, omits the names of researchers from the National Institute of Environmental Health Sciences (NIEHS), even though they are on the paper published in *Science*.

In contrast, the NIH application includes the names of two NIEHS researchers, as well as seven other key scientists from the university and Myriad. Negotiations are now taking place between the two sides, one possible outcome being an amalgamation into a single application.

Researchers at Myriad Genetics, which holds an exclusive license with the university to any patents resulting from their joint research, say that NIEHS scientists — J. Carl Barrett and Roger Wiseman — were excluded because their contribution was not considered central to the work.

But Varmus says that the main reason for filing a separate patent is his fear that, without the name of NIEHS researchers on it, a patent application would be ruled invalid. "It is in everyone's interests to have a clear and correct patent," he says. "It creates chaos to have patents overturned."

In addition to the intellectual argument over who should be credited with the discovery of the gene, Varmus also acknowledges that NIH's name on the patent will give the agency a say in how the licensing of the gene should be handled — and how any royalties should be split.

Before the announcement of its patent application, for example, Varmus had received a letter from Representative Ron Wyden (Democrat, Oregon), questioning the omission of the NIEHS researchers from the Utah application and claiming that this would deprive US taxpayers of any direct return on their investment in the research.

Varmus claims that, even if the NIH is eventually acknowledged as a co-owner of the patent, this will have little bearing on the way that it is licensed. But he declined to comment on the details of the application.

In particular, he will not say whether its coverage is as broad as that of the Utah/Myriad patent, which claims the rights to the BRCA1 gene and to all possible mutations that can give rise to the disease.

Even researchers at Myriad are uncertain whether the US Patent Office will accept an application with such broad coverage. They justify the inclusion of the gene (and the mutations) as part of the knowledge required to develop a diagnostic kit.

But the application has angered other researchers in the field. If granted, it would give the University of Utah and Myriad the rights to any other mutation that may be discovered, even though this could be the result of many years of work by scientists and with families that have no link with Utah.

"I have a number of families under my care," says Bruce Ponder of the University of Cambridge, whose own group had also been involved in the race to discover BRCA1, and is still searching for mutations in the gene. "If I wish to offer them a prediction service based on the techniques I have developed, I do not see why I should pay a license either to Myriad or the NIH to do that."

Partly in reaction to the way that the BRCA1 patent is being handled, a number of research teams in both the United States and Europe currently engaged in the search for mutations have decided to form themselves into a loose-knit consortium that will agree to share family data and primers between themselves. "The idea is to make our efforts complementary and not competitive," says Ponder. □

Varmus speaks out on need to boost clinical research

Washington. Harold Varmus, the director of the US National Institutes of Health (NIH), last week asked the American Association of Medical Colleges to suggest an ombudsman to help him resolve a "crisis of confidence" in US clinical research.

By clinical research, Varmus said he meant that in which doctor and patient remain in the same room, rather than a clinician working with, say, a tissue sample. He said that concern about clinical research has existed since the 1970s, but is more pressing today because of the growth in the clinical applications of basic research.

Since his appointment as head of the NIH, Varmus says he has received a barrage of letters about clinical research, some worrying that the discipline is going to waste, others concerned that it is reviewed less favourably by NIH than basic research.

Varmus says that he has yet to decide whether to appoint a top-level panel for clinical research. But he has already appointed a committee to assess how fairly clinical research is peer reviewed, following complaints that MDs fare less well than PhDs in applications for NIH research funds, and that study sections are prejudiced against the high cost of patient-orientated research.

This committee will report in December. But Varmus says there is no evidence of prejudice against MDs and denies that patient-orientated research is losing out because of its cost. Nevertheless, the NIH finds it difficult to recruit clinicians to serve on study sections reviewing clinical research.

The committee assessing peer review for clinical research has also been looking at the training of MDs. Varmus says he is concerned by reports that medical schools teach laboratory work rather than patient-orientated research. He advocates optional courses on how to carry out clinical research which would teach prospective investigators about the role of the institutional review boards that decide whether protocols conform to guidelines and the importance of proper consent forms and of monitoring patients for adverse effects.

Both of the latter issues have recently been in the spotlight. For example, health activists and congressional committees criticized the consent form drawn up by the National Surgical Adjuvant Breast and Bowel Project for not spelling out fully the risks associated with taking the anticancer drug tamoxifen in a breast cancer prevention trial (see *Nature* **369**, 515; 1994).

The project also came under fire for not properly monitoring the data collected by investigators. The NIH is now conducting a survey of how grant administrators monitor clinical trials. **Helen Gavaghan**

Microbial collections 'need a policy'

London. **The 11 repositories that make up the United Kingdom's microbial culture collection should be brought together under the aegis of the Biotechnology and Biological Sciences Research Council to protect a "major national asset". This is the conclusion of an independent review commissioned by the Office of Science and Technology and published last week.**

The review panel concluded that the diversity and geographical separation of the institutes responsible for the different collections was a major factor in producing a resource respected for the authenticity and purity of its samples.

But with nine parent organizations involved in funding and maintaining the 11 institutions, and with uncertainty hanging over their future because of government pressure to increase the effectiveness of its research efforts, the committee says that a national policy would now be "opportune".

Recommended changes include a coordinated development and marketing strategy. The government is considering the report's conclusions. □