Scientists urged to raise lobbying efforts

[STRASBOURG] Members of the European Parliament (MEPs) would find it easier to secure more money for science if scientists were to lobby more actively, a meeting in Strasbourg was told last week.

Claude Desama, a Belgian MEP and former chairman of parliament's research, technological development and energy committee, said that greater input from scientists would have helped parliament in its battle last year with the European Council over the budget for the European Union's fifth Framework programme (FP5).

Desama pointed out that lobbying by scientists, scientific institutes or scientific organizations "can at best be described as discrete, at worst, barely existent".

At a meeting organized by Euroscience, a 'grass roots' association of European scientists, he said that big companies lobby hard and efficiently. In contrast, he added, "MEPs feel that they are working without a safety net — unsure of ourselves — when we have so little direct contact with scientists.'

"Scientists should get together and put us under pressure," says Christof Tannert, speaker of parliament's socialist group on FP5 and life sciences. If they want to influence political reality, he says, they need to lobby alongside industry and pressure groups like Greenpeace. This would strengthen parliament's position by giving it confidence that it has the the scientific community behind it.



He welcomed efforts by Euroscience to create new forums for establishing contact. Euroscience had timed last week's debate its first such initiative — to help ensure that science is an issue in campaigns for the European parliamentary elections in June.

During the debate, several MEPs revealed their frustration with the stance taken by the European Council, whose members are made up of EU member states. "Debates over FP5 were like bargaining in a souk, with each member state discussing what its own yield on each item would be," said Desama.

Dutch MEP Elly Plooij, a member of the liberal group and research committee spokesperson, said there had been a "regrettable tendency towards renationalization" in the council, with each country looking out for its own interests.

When we came to debate the PHARE programme [which supports research in central and eastern Europe], some delegates argued for a lower budget so that 'there would be more left for us'," she argued.

Members of Euroscience used the meeting to argue for more money to be allocated to European-level research in the sixth Framework programme, due to begin in 2003.

As Europe moves closer to political integration, "the timing is right for a change in the distribution of European funds, so that the European Union provides a much larger proportion of total European research spending," said Peter Tindemans, a physicist who was director for research and science policy in the Netherlands ministry of education before retiring earlier this year.

The FP5 budget represents only six per cent of total European spending on research, with other European-level research laboratories, such as the European Laboratory for Particle Physics (CERN) and the European Molecular Biology Laboratory, together representing a further six per cent.

Tindemans said that these proportions should increase significantly, and that the issue should become political. Other MEPs are sympathetic to this view, aware that in the United States basic research is funded at the federal level Alison Abbott

Bioinformatics institute plans public database for gene expression data

[MUNICH] In a bid to speed up the exploitation of human genome sequencing efforts, the European Bioinformatics Institute (EBI) - an outstation of the European Molecular Biology Laboratory (EMBL) - is planning to launch a publicly accessible repository for DNA microarray-based gene expression data.

It hopes to create a single location where all the data on gene expression obtained from microarray technologies can be stored. But some scientists doubt whether the technology is sufficiently developed.

The EBI is organizing an international meeting later this year of representatives from laboratories that use such technologies. It will take place at the Wellcome Trust Genome Campus in Hinxton, near Cambridge, UK, where the EBI is based. It hopes to set up working groups to develop standards for

microarray-based gene expression data and analysis.

DNA microarray, or 'chip', technology, allows scientists to rapidly monitor which genes are being expressed in a particular tissue in a highly automated way. The microarrays are coated with a mixture of cDNAs (or synthetic oligonucleotides identifying particular genes) whose sequences have been identified through genome sequencing projects. These bind mRNAs, the specific messengers made by a gene when it is turned on.

Expression patterns can then be compared between healthy and diseased tissues, providing clues to the genetic complexities of diseases such as cancer.

It is not enough to know whether a gene is present in a disease, says Annemarie Poustka, senior molecular geneticist at the German Cancer Research Centre (DKFZ) in

Heidelberg. It is also necessary to know whether it is switched on, and whether it stays on through all the stages of a disease. As much data as possible needs to be pooled for this, she says.

"The microarray gene expression repository may become one of the most important databases in bioinformatics," says Alvis Brazma, a staff scientist at the EBI.

Although DNA microarray technology is in its infancy, it has already created a large amount of data, which are either held privately or scattered across the Internet. "As more laboratories acquire this technology, the amounts of large-scale gene expression data and profiles will grow rapidly," says Brazma. "This could lead to an explosion in gene expression data that may dwarf even the human sequencing projects."

But some researchers think

the move may be premature. Poustka agrees that a central public database is needed, and that the EBI is an ideal host, but says that different laboratories have not yet developed the tools to make comparisons between their data straightforward.

But the EBI, which has discussed its plans with European and US laboratories that use these technologies, is confident that the time is right to develop resources and standards.

"The database will allow us to cross-validate data obtained by different technologies, to characterize various techniques, and to establish error rates, benchmarks and gold standards," says Brazma.

EBI scientists, along with European colleagues, are applying for grants to develop the database, and hope it will become an international, not just a European, effort.