Place of science on European agenda

Sir — Your leading article of 1 January (*Nature* 391, 1; 1998) voices warranted concern over the fate of fundamental research endeavours of the European Union, which you trace back to the Rome Treaty of 1957. But you erroneously credit the treaty with the creation of the European Commission, which was created only in 1968.

The 1957 treaty created two institutions. One, considered the most important at the time because of the Suez oil crisis, was the European Atomic Energy Community (or Euratom), with its Euratom Commission. The other was the European Economic Community (also known as the Common Market), with its Economic Commission. In 1968, the two communities merged, together with the pre-existing Coal and Steel Community, to form the European Community, headed by the single European Commission.

So, from 1957 to 1968, there was a separate Euratom Community, with its own commission, to which the Rome Treaty had

assigned the creation of a European nuclear industry. Despite the industrial goal, or rather because of its obvious requirements, fundamental science was not absent from Euratom directives. Research and education are written into the treaty, which even includes the creation of a European University. In fact, a large part of the research enterprise at that time was connected to nuclear establishments, in the United States, in other developed countries and in developing countries.

Euratom research and development was carried out in two ways. On the one hand, a Euratom Common Research Centre was set up, including the research establishment at Ispra, Italy, where the Orgel prototype reactor was designed and built, the Bureau of Nuclear Standards at Mol, Belgium, the European Trans-Uranium Institute in Karlsruhe, Germany, and the research reactor at Petten, The Netherlands.

On the other hand, Euratom created associations with national institutions (public or private) in the realm of nuclear

reactor prototypes, fusion (culminating in the Joint European Torus, JET, project), isotopic geology, radiobiology and so on. There was also a major US-Euratom agreement with an important research and development component. The teams were multinational, and the knowhow and results were made available to all member states. The Common Research Centre is still active, as are some major associations (JET, for example).

So, when the European Commission was created, in 1968, it is not so much that, as you say, "science was unfortunately not on their agenda". Rather, science was dropped from the primary agenda, after 11 years of turmoil and opposition to an inspired and in many ways successful European research and development programme (see, for example, *Sciences et Avenir*, pp 214–217, March 1969).

Maurice Guéron

BIOP, Ecole Polytechnique,
Palaiseau, France
e-mail: mg@pmc.polytechnique.fr

Order and justice in French universities

Sir — Your report "Battle to boost the status of French universities" rightly points out that French universities have been the poor relation of the *grandes écoles* (*Nature* 391, 6; 1998). This is correct in terms of economic evaluation and may be explained by the leading administrative positions occupied by former students of these *écoles*. I take exception, however, to your statement and tone when you say that "until now French universities have played second fiddle in science to the public research organizations" and that "university staff often have almost no time for research".

To begin with, all French researchers are educated and trained in the universities before they enter research laboratories located, mostly, on university campuses, less frequently in public research organization buildings and almost never in the *grandes écoles*. Second, these trainees have undergone ruthless selection processes in the university graduate schools, where fewer than 5% of initial graduates are accepted for PhD programmes. Third, at every stage of their training, these future researchers are 'supervised' by university staff who teach through their own example the way in which research and education in science are intimately associated.

Finally, it should be recognized that the great majority of laboratories at any of the

leading public research institutes in France are directed not only by university graduates but more strikingly by university staff and professors. That these talented teachers have been operating in less than favourable conditions when compared to their more fortunate colleagues from the other research organizations is certainly true and this is where it is to be hoped that the education minister, Claude Allègre, will introduce order and justice.

A. D. Strosberg

Institut Cochin de Génétique Moléculaire,
UPR-0415 du CNRS,
22 rue Méchain, 75014 Paris, France
e-mail: strosberg@icgm.cochin.inserm.fr

Risk and benefit

Sir — The assessment of any new technology demands a balanced consideration of both the possible associated risks and the perceived social benefits. All too often, however, regulatory apparatus provides only for the scientific assessment of risk, thus concealing the corresponding consideration of wider issues.

We note that, under the provisions of the Convention on Biological Diversity, negotiations about an international 'Biosafety Protocol' for the regulation of the use and transfer of genetically modified organisms are approaching conclusion. Whether or not this protocol will provide for the consideration of social and

economic issues is as yet undecided.

As individuals involved in either the development or implementation of risk-assessment frameworks for biotechnology, we are unhappy with the unspoken expectation that we should assess not just the possible risks associated with the commercial release of a genetically modified organism but also, tacitly, the broader social implications. We submit, therefore, that new regulations should permit the overt consideration of socio-economic issues before the environmental release or transboundary movement of genetically modified organisms.

Implementation of such provisions may not be straightforward, but their inclusion would at least allow open discussion of issues that many regulators are currently obliged to consider implicitly.

Tom Crompton

UNIDO/ICGEB Liaison Office,
Vienna International Centre, Austria
e-mail: tcrompton@unido.org

John Barrett

Department of Genetics,
University of Cambridge, UK

Chris Gliddon

University of Wales, Bangor, UK

Julian Kinderlerer

Sheffield Institute of Biotechnological
Law and Ethics, University of Sheffield, UK

George Tzotzos

UNIDO Investment and Technology
Promotion Division,
Technology Service, Vienna, Austria