# correspondence

### International transfers

SIR.—The following document is communicated for publication on behalf of the 52 Fellows of the Royal Society whose signatures appear below. No doubt other members of the scientific community in this country and throughout the world will wish to affirm their support for the same principles. Those who share our concern about these matters may wish to know that a Study Group on Scholarly Freedom and Human Rights has been established by the Council for Science and Society (3/4 St Andrews Hill, London EC4V 5BY) to give further consideration to the issues involved. It would be particularly valuable to the work of the Study Group to have further detailed information or well informed opinion from any of your readers.

Yours faithfully,

J. M. ZIMAN

and M. F. Atiyah, C. H. Andrewes, C. Auerbach, J. F. Adams, J. G. Bolton, J. Baddiley, K. G. Budden, C. A. Clarke, S. Curran, R. E. Davies, F. Dainton, C. D. Darlington, K. G. Denbigh, L. Essen, C. A. Fleming, G. Fryer, G. Herzberg, W. Hudson, A. Haddow (deceased), J. T. Houghton, J. H. Humphrey, W. K. Hayman, A. Klug, A. Keily, H. Kornberg, O. A. Kerensky, B. Lockspeiser, L. F. La Cour, H. Lipson, J. D. McGee, E. H. Mansfield, J. Mandelstam, K. Mahler, A. Neuberger, J. Needham, L. E. Orgel, A. G. Ogston, M. R. Pollock, J. W. Pringle, W. S. Peart, G. Rochester, A. Robertson, R. A. Raphael, N. Sheppard, G. Series, M. Seaton, M. Swann, M. Symarc, R. Whittam, M. Wilkins, F. Young.

The following statement is proposed for consideration and adoption by learned societies, academies, governmental bodies and private corporations involved in the practical arrangements for the international transfer of scientific information by written communication and by personal travel. Although not intended to be legally binding, this statement indicates the basic principles by which we consider that particular agreements and actions in this sphere ought to be judged.

**International Scientific Communication** 

The claim of scientific knowledge to universal validity can only be tested and maintained by international intercourse between scientists. All nations which make use of scientific knowledge benefit by the rapid diffusion of information about new discoveries, and by the submission of new ideas to the widest circle of competent critics. The free exchange of knowledge and ideas is fundamental to the health and vitality of science as an enterprise of all mankind.

The individuals and corporate bodies who benefit directly from this intercourse

should be bound by certain common courtesies and mutual obligations. Although these courtesies and obligations are normally taken for granted, their neglect or violation can cause much ill will and damage to science as a whole. We therefore believe that there is value in stating the following general principles, which are based upon the experience of communities in which science has flourished in many different historical and political circumstances.

#### A. Written Communications

1. The published literature of science should be free to circulate, without hindrance or censorship, within and between nations.

2. All efforts should be made to ensure that relevant scientific information published in any one country be made available, as rapidly as possible, in the most convenient form, to scientists and to scientific institutions in all other countries.

3. The originality of published scientific work should be respected throughout the world by fair practices of citation or other attribution.

4. The legal rights of authors and publishers of scientific journals and books should be protected under the International Copy-

right Agreement.

5. All national scientific communities should contribute to the financial support and management of international facilities for the transfer of scientific information such as abstracting and indexing services.

### B. Individual Travel

 Scientists acknowledged by their colleagues as experts should be free to travel within and between different countries for the exchange of unclassified scientific information.

2. Acknowledged scientific experts making such visits should be given intellectual hospitality in the form of access to open research institutions and to individual scholars.

3. The services of scientific experts from all countries should be made available to assist in the activities of the international scientific agencies.

4. Bilateral financial and administrative arrangements for the exchange of scientists between two countries should not be regarded as excluding or limiting visits arranged by other means.

#### C. Conferences

1. The appropriate national scientific organisations should be encouraged to participate in open international scientific conferences by facilitating the attendance of well-qualified scientific experts in the relevant subjects.

2. All countries should endeavour to contribute to the material facilities for international scientific conferences by way of hospitality and financial support.

3. Every bona fide participant in an international scientific conference should be accorded freedom of entry to the meeting place of that conference.

4. The expert authority of properly constituted international committees of scientists should be respected in such matters as the choice of participants and speakers at international scientific conferences.

### Genetics at the OU

SIR,—The article by Professor Steven Rose on the new genetics course offered to Open University students (Nature, 259, 437; 1976) is misleading. In particular, it does not refer to the existence of a Consultative Committee, of which we are members, appointed by the Nuffield Foundation to advise on the development of the course, and to the sharp disagreement between that committee and Professor Rose about the suitability of the materials now being distributed for use by students at large but also by Open University students.

The Joint University Genetics Course launched in 1973 with grant of £20,000 from the Nuffield Foundation with the objective not merely of developing an outstanding course in genetics but also of proving mechanism by which the Open University and other universities might collaborate in the development of educational materials. At the same time the Foundation appointed a Consultative Committee to advise the course team on academic matters and to advise the Foundation on the progress of the work. Apart from members of the course team, the committee included Professor D. Lewis (University College, London) as chairman of the committee, Professor W. Bodmer (University of Oxford), Professor J. Jinks (University of Birmingham), Professor D. Jones (University of Hull), Dr H. Kacser (University of Edinburgh), Professor R. H. Pritchard (University of Leicester) and Professor J. Sang (University of Sussex). In March 1974 the total amount of the grant from the Nuffield Foundation was increased to £88,000.

At the end of 1975, nearly three months before Professor Rose's article appeared, the committee informed the Nuffield Foundation that it was dissatisfied with the outcome of the previous three years' work and asked that the course should not be published, or even used by Open University students, without further consideration, restructuring and amendment. The Nuffield Foundation has informed the Open University of the committee's discontent but no agreement has yet been reached between the Foundation and the University.

The length and depth of the course was thought to be far beyond the capacities of the intended students. The Open University states that the study time for the average "unit" is 12 hours. Furthermore, these 12 hours must be completed, on the average, in one week since the course is a half-credit. This, for a part-time student, means a minimum of two hours daily study after normal work for the whole of the academic year. It is also a second level half-course. It was the committee's considered opinion that this is an impossible task if understanding at a university level is aimed at. In their experience, the course, as it stands, would be a demanding one for fulltime students having no second halfcredit to cope with and enjoying much greater academic support than Open University students. The committee suggested that the university should cut the course in half or offer two alternative (half-) courses.

In spite of the original remit to write a course which is suitable for other than Open University students, the Consultative Committee has not been presented with any evidence that this problem has been seriously considered. One of the principal claims for obtaining support from the Nuffield Foundation was that it was not a purely Open University exercise but that other institutions would benefit equally. It is extremely doubtful if this objective is in any way near realisation. (One of the obvious deficiencies of the course soon to be offered for general sale is that the practical manual that students at universities other than the Open University will need has not been published, or even written.)

The Consultative Committee jointly with the Nuffield Foundation suggested a number of changes which would have gone some way to meet these criticisms, but they were not accepted by Professor Rose.

It is not appropriate to comment at length about the many doubts and criticisms which the committee had both about the nature of some of the units and the manner in which the course was produced. Suffice it to say that it is the opinion of the committee that the adherence to a timetable, set down before the magnitude of the problem was appreciated, made it almost mandatory that no fundamental thinking could inform the writing of the course. We have sadly come to the conclusion that a great opportunity has been lost in making use of the generous provision of the Nuffield Foundation.

Yours faithfully,

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## Birds on the Chagos Bank

SIR,—The Great Chagos Bank, 6°15'S, 72°E is all that remains of a once gigantic atoll. The dry land now consists of eight small islands set on the rim of the atoll and an outlying group of six other islands collectively called Egmont. Together they constitute a terrestrial habitat of only 828 ha, of which Eagle and Egmont Islands make up 80%.

Records indicate that at some time between 1813 and 1937 all the islands came under the influence of the copra industry. Only Nelson island was left in its "natural" state which included colonies of nesting sea birds, the eggs of which were collected to supplement the diet of the copra workers on the nearby Salamon group.

Recent surveys show that:

- on all the islands broad-leaved forest is beginning to replace the coconut plantations;
- on all islands other than Eagle and Egmont there are large populations of nesting sea-birds, numbering in total more than 100,000 pairs—dominantly terns and boobies, but including 15 species in all;
- on Eagle and Egmont there are feral brown rats and only a few hundred birds; the vegetation is, however, similar to that of the other islands.

In order to realise the full potential of the island group to nesting seabirds we suggest the removal of the rats from Egmont and Eagle Islands using a combination of methods such as "warfarin" and Liverpool virus. The islands are remote from any large centre of population and are rarely visited. Such action could allow the already overcrowded bird colonies on the local islands to expand and new species to move in from further afield. For instance, pairs of Abbots Booby were seen in the vicinity of the islands on two occasions. This is the rarest of the Indian Ocean's gannets, whose only contemporary nest site on Christmas Island is threatened by development and ecological change.

We estimate that if such action were successful the total nesting population of birds in the area could rise to in excess of 0.5 million pairs.

We are planning, subject to legislative approval, to attempt to exterminate the rats on Egmont and Eagle Islands in early 1977. We invite comment on the desirability and feasibility of this course of action.

Yours faithfully,

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## **Bugs Bunny**

SIR,—Schedule 1 of the Conservation of Wild Creatures and Plants Act 1975, passed recently by the UK Parliament, provides the best way of giving full protection to any animal whose survival is threatened. To be included an animal must be given a common and a scientific name ("Naming the Loch Ness Monster", *Nature*, 258, 406; 1975). Thus, after ten years of searching, we would like to present the evidence on which we base our description and naming of the "Model E Rabbit".

The best photograph shows the head of the rabbit obscuring the DNA bands of an analytical caesium chloride gradient (below). This gradient was run in a Beckman Model E Analytical Ultracentrifuge (Wells, R., and Ingle, J., Pl. Physiol., Lancaster, 46, 178–182; 1970), and the rabbit must have obscured the light path while the plate was exposed.

We feel that previous failure to observe these rabbits, for surely there must be a breeding population, is due to their shy and retiring nature; the DNA on this occasion was from cucumber hypocotyls and their inordinate fondness for these may have led to this rash exposure.

In the interest of protecting this rare and endangered species we have decided to name it *Oryctolagus barbifugenter* because of the curious and distinctive beard-like structure characteristic of the species and because the animal so readily flees from view. It has been pointed out to us that this binomial is an anagram of "Centrifuge laboratory bugs", but this is thought to be entirely coincidental. We hope for the support of the World Wildlife Fund in our efforts to preserve and study this unique rodent.

Yours faithfully,

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