CORRESPONDENCE

Overpopulation

SIR,—It may be true that neither this country nor the whole western world will be overcrowded in the foreseeable future. It may also be true that further efforts to reduce the birth rate might (if this country were a closed system) have serious economic consequences. But we are surrounded by an overpopulated and impoverished world. One service the wealthy nations could perform for that world would be to reduce their birth rates and make up the difference by immigration. Evidence from many countries suggests that a substantial reduction in birth rate to below replacement level can be achieved simply by making all methods of control freely available. Thus without any restrictive legislation and at negligible cost to ourselves, we could make a significant contribution towards stabilizing the world's population. The direct effect would be multiplied by the removal of young people to environments which would tend to lower their own fecundity, and by making our support of birth control in the underdeveloped parts of the world look more genuine.

Yours faithfully,

R. H. PRITCHARD

Department of Genetics, Adrian Building, University Road, Leicester LE1 7RH

Publication Speed

SIR,—I was very interested to read Mr Griffiths's letter (Nature, 234, 425; 1971) on the speed and efficiency of the processing of articles submitted to learned and technical journals. I would be the very first to agree that the refereeing procedures for many learned and technical journals can be speeded up, and the examples quoted in the letter indicate a lack of efficiency in some quarters. However, the letter does indicate a failing common to many authors of "wanting to have their cake and eat it".

Quality journals have to maintain a stringent refereeing procedure. The task of reading and judging a high-class technical paper of, say, 8,000 words is no mean task. One must also bear in mind that referees are doing this work often in their spare time and are, in the majority of cases, receiving no fee. When one also takes into account that individuals in some much-researched fields receive numerous papers for adjudication from various separate journals, it is not difficult to see how delays occur.

It is, in my experience, a fact that many papers that "go wrong" in the course of refereeing do so because the author has not taken sufficient care in preparation and presentation. I would commend authors first to read carefully the guide to authors for a particular journal, and to ensure that the paper submitted follows the requirements in such matters as relevance of subjectmatter, length, number of copies required, form of illustrations and so on. The requirements will have been included for a good reason, and often in the interest of ensuring speed of publication. I would emphasize the question of relevance of subject-matter, since this has been particularly commented on in Mr Griffiths's letter. In these days of high specialization, it is not always apparent to the editor that a paper is outside the subject field of his journal, and it may need a specialist referee to point this out. Particular examples of this occur in highly mathematical treatises.

Secondly, authors should take steps to obtain advice from colleagues, as to whether the paper would be likely to be accepted by the journal concerned. Too many authors seem prepared to send in a badly prepared paper as a "trial run". Such papers obviously waste a lot of referees' time and are generally more time-consuming to look through and assess than a well prepared paper.

I must register a strong reaction to the suggestion that authors might indulge in submitting a paper to more than one journal at a time. Apart from being contrary to the publication rules of most learned and technical journals, this again means that more referees are tied up in assessing papers. This is quite separate from the fact that two or more journals could simultaneously accept the paper, and possibly start a long and protracted copyright wrangle among themselves before it could be published.

Finally, an author who particularly requires speedy publication would be well advised to submit a short letter on the subject to one of the "Letters" journals in order to get his work "on the record" and then to follow this up with a carefully prepared full-length paper submitted to a journal relevant to the subject-matter of the paper.

Yours faithfully,

J. D. ST AUBYN

Institution of Electrical Engineers, PO Box 8, Southgate House, Stevenage, Herts SG1 1HQ

First Biophysicist

SIR,—In his recent article "When does Information become Knowledge?" (Nature, 235, 86; 1972) Dr Wyatt commences with the comment "It is generally accepted that biophysics began with Avery". I find it surprising that such a subjective opinion should have been allowed to intrude in an otherwise objective paper. The accolade of being the first biophysicist has been popularly bestowed on all manner of individuals from Baron von Frankenstein to Francis Crick. In this department, however, we have our own prejudice on the matter. Perhaps a prophet is indeed not without honour except in his own country (or even in his own country, it would appear).

Yours faithfully,

JOHN E. LYDON

Astbury Department of Biophysics, University of Leeds, Leeds LS2 9JT

Research Contracts

SIR,—I have been following with interest the recent proposals to alter the present system of science in Britain. Having experienced the present system in the United States at NASA and two medical institutions, I have observed the following situations, when science is contracted out.

(1) Much expensive duplication by rival competitors occurs. (2) Responsibility for the end product becomes indistinct when several contractors are involved in a single undertaking. (3) Many scientists carry out their own basic research clandestinely whilst on contract to provide a single service. (4) Technicians at a lower level in the contract system become less efficient because of the monotonous performance of a single task whose end result they never witness. (5) There is a general tendency to underemployment of individual capabilities of most of the scientists involved.

The contract system works for a specific technological task in which the basic research has already been established. However, as a national philosophy of science, the contract system leads to an unstructured bureaucracy and an uncontrolled military-industrial complex. Before changing the system it is necessary to establish a national priority list of scientific aims.

Yours faithfully,

BARBARA WOOD

M.D. Anderson Hospital and Tumor Institute, University of Texas, Houston