Time for change in taxonomy

SIR—Biologists repeatedly complain about instability in classification and taxonomists repeatedly reply that their work aims at greater stability. For example, Hawksworth¹, a taxonomist, agrees with Crisp and Fogg² that name changes for taxonomic reasons are tiresome. We think the complaints are unjustified and that the quest for stability is mistaken. Change is an essential quality of taxonomy, which is a part of science, as pointed out by van Valen³ and Newman⁴.

There is good work and bad work in taxonomy as in all branches of science, but changes of classification are not always simply consequences of nomenclatural juggle or "mere changes of opinion"⁵. Classification is the means by which taxonomists describe scientific progress. Proposals to freeze renaming for periods of several years, as suggested by Barnett⁵, or to establish some international peer-review system to approve or reject proposed modifications^{1,5} overlook the benefits of change in taxonomy. Our present taxonomic system is burdened with a plethora of unnatural taxa conflicting with what is known about evolution and phylogeny. Taxonomists work at removing these offending elements, which are a persistent source of error in much biological research. In order to improve their own research, biologists should check the latest and best classifications of the groups they study and welcome improvements in

their reference system, rather than object to change for mere convenience.

The problem with taxonomic instability is not one of science, but of information. There is a vast amount of taxonomic information about the many organisms involved. It is difficult to keep track of all name shifts. But those are meant to improve our understanding of relationships, and we do not need means of retarding that process. Instead, we need international database systems carrying continuously updated taxonomic information and providing easy access to synonymy and recent literature.

Taxonomists should pursue their scientific venture and stop worrying about instability in classification. Taxonomy is not a service function for labelling organisms, but a science of its own, dealing with variation, relationships and phylogeny. Other biologists need to keep themselves informed, and should realize that removal of artificial groups and improvements in classification are desirable.

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Letter from Japan

SIR—Recent articles have addressed the opportunities for foreign scientists in Japan and asked why they are not very eagerly taken up (*Nature* **340**, 337 & 339; 1989). Differences in culture and problems with language have been suggested as part of the reason. Although some of the exchange schemes mentioned do offer funds to pay for language classes, after a day's work in the laboratory many may not have the time or energy to devote to a difficult language. A disincentive to study is the time required to reach a level where steady improvement is possible through everyday use.

I am part of a European Commission (EC) scheme to support European scientists for 12–18 months research in Japan. An important element of this programme is a three-month intensive language

course as a group in Tokyo, before starting research work. This not only teaches the basics of spoken and written Japanese, but also provides an opportunity to learn about Japanese culture and build contacts with other European scientists in Japan. As a group, we keep in touch through newsletters and meetings throughout our stay here and afterwards.

Hardened researchers may question if three whole months away from the laboratory is justified. But many months can sometimes be spent in research that leads nowhere. It is a question of making an investment and if one is not prepared to do so, perhaps one should not be thinking about coming to Japan. There is a new enthusiasm for basic science here, new money and beneficial ways of looking at problems and for solutions, which it may be beneficial for the visitor to learn. But understanding can come only through contact and participation. And who knows what inspirations may appear while learning to write the *Kanji*?

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AIDS in Canada

SIR—My dismay at hearing that Prime Minister Margaret Thatcher (*Nature* **341**, 181; 1989) had turned down a proposal to carry out a national survey of people's sexual behaviour to help to understand better the spread of AIDS through sexual transmission of human immunodeficiency virus (HIV) has now been tempered by the decision of the Wellcome Trust to support the proposal with a grant of £900,000.

We in Canada have faced a similar situation since our government has not responded much to the many research funding recommendations submitted, in April 1988, through the Royal Society of Canada's sponsored report entitled *AIDS, A Perspective for Canadians* (see *Nature* **335**, 2; 1988). We are still concerned that our country will fall behind in its fight against this deadly disease. Canada is a rich country which should make a contribution to the world pool of knowledge in order to help the hundred of thousands patients affected by AIDS.

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Fishy tale

SIR—Peter Newmark's otherwise limpid exposition of themes developed at the recent *Nature* conference on Gene Manipulation in Biology and Human Disease (*Nature* **342**, 221; 1989) was rendered somewhat confusing by his statement that "transplantation is a type of gene therapy . . . that cocks a snook at the sophistication of genetic engineering". Cocking a snook is a sophisticated achievement, indeed, if related to the transfer of genes (presumably from the Y chromosome) of a chicken, to "any of a family (Centropomidae) of percoid fishes of warm seas; esp. a large game and food fish (*Centropomus undecimalis*) of the tropical Atlantic". One initially imagines that the reasoning behind this experiment is that if the fish started to crow they would be easier to catch. It is hardly sporting of Newmark to give the bird to the fraction (presumably the majority) of *Nature*'s readers unprepared for such a uniquely British idiom.

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