CORRESPONDENCE

Brain Drain

SIR,—After eight years in North America, I have recently accepted a full-time academic appointment at a postgraduate medical institution in India. It was with considerable interest therefore that I read the article by Mr Ashok Parthasarathi (*Nature*, 230, 87; 1971).

Although Mr Parthasarathi has suggested comprehensive measures for the prevention and reversal of the brain drain, in my opinion he has not taken into consideration certain human aspects of the problem. I wish to point these out briefly.

I firmly believe that Indians in North America who do not intend to return fall into one or more of the following groups. (1) Probably the largest group is made up of those who after leaving India initially suffered the pangs of socio-cultural adjustment, but are now too comfortably rehabilitated to risk retracing their steps. (2) Those who have Western wives, a vast majority of whom will not

be able to adjust to the socio-cultural realities of Indian life. Equally difficult is the problem of Indian children born and brought up in a Western society when they have to make psycho-social adjustments in their "own" society. (3) The truly first-rate scientists to whom the facilities to pursue their ideas and the right intellectual atmosphere are far more important than the geographical location of their laboratory. (4) Those who believe that they can meet their economic obligations towards their family in India much more effectively by staying in North America. They also believe their children deserve a "better deal". (5) Religious minority groups from India who naturally prefer to suffer minority-disadvantages in an affluent society rather than in a poor society. (6) That undefinable group which habitually recites all the ills in the Indian society: overpopulation, corruption, language problems, poverty and so on. They either wish to stay away from these ills or wish them away.

The question therefore is, how do the

measures advocated by Mr Parthasarathi—laudable though they are—stand up against these real problems?

The measures he suggests to prevent uncontrolled brain drain appear too dictatorial in conception and are most likely to be misused.

Perhaps there is a moral in my personal experience. I came to the US in 1963 after attaining the highest levels of training then available in India. I was in the Government Service for at least 5 years. As an exchange visitor, US immigration did not permit me to stay more than 4 years. I emigrated to Canada in 1967 and did well. I am at present under no compulsion or obligation to return but am doing so of my own free will. That is the crux of the matter.

Yours faithfully,

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Obituary

Sir Lindor Brown

THE death of Sir Lindor Brown, FRS, on February 22, 1971, is a great loss to Hertford College and to physiology. G. L. Brown graduated in physiology

from Manchester University and later qualified in medicine in 1928. His inclinations, however, remained on the scientific side of medicine, and he joined B. A. McSwiney's department in Leeds as a lecturer in physiology. During his stay there he spent a brief sabbatical period in Oxford, where he was to return many years later as professor.

In 1934 he was invited by H. H. Dale to join his research group in the MRC laboratories at Hampstead. This move came at a crucial time in those laboratories. In the short space of four years between 1933 and 1936 Dale and his collaborators provided the experimental evidence for transmission by chemicals, rather than electric currents, of activity from nerves to the cells they innervate. To this work G. L. Brown contributed superb experimental flair allied to an astute intuitive ability to see how to obtain direct convincing evidence from simple experiments. When H. H. Dale retired in 1940, Brown became head of the physiology and pharmacology division and guided it through the difficult war-time period with outstanding success. In 1949 he became Jodrell professor of physiology at University College London, and there began his research work on the transmitter at sympathetic nerve endings which was to continue actively at Oxford

right up to his death. This represents his second major contribution to our understanding of the function of efferent nerves.

In 1946 he was elected to the Royal Society and became biological secretary in 1955. In 1960 he left University College to become Waynflete professor of physiology and Fellow of Magdalen College, Oxford. In 1967 he became principal of Hertford College, Oxford.

G. L. Brown's scientific work falls into three phases. In the first, an apprenticeship in B. A. McSwiney's department, in which he studied the complex effects from stimulation of autonomic nerves in the gut, he may well have been depressed by the difficulties of interpreting such experiments; certainly, after his brief period in Oxford (where he worked with Eccles on the effects of the vagus on the heart), his subsequent publications increasingly emphasized the advantages of electric measurement of response at a cellular level rather than the final response of the organ. His most important work was done in the Hampstead laboratories of H. H. Dale. There a brilliant group of investigators from several countries—Dale, Gaddum, Feldberg, Brown, Vogt and Bacq—in a very few years laid the experimental foundation for the theory of chemical transmission, and chemically