Correspondence

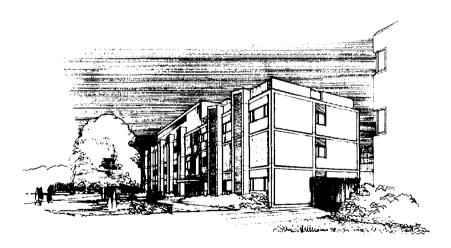
DEAR SIR.

MRC Institute of Hearing Research

We have received numerous enquiries from otolaryngologists and members of related paramedical professions about the development of the Institute of Hearing Research, and feel that many of your readers may be interested in a brief account of the history and current activities of the Institute.

In the late 1960s there was a strong feeling that sensorineural deafness was receiving generally scant attention in service provision and in research—a theme highlighted in the Chronically Sick and Disabled Persons Act (1970) which required the Department of Health and Social Security to collect evidence on possible ways of encouraging research in this area. In the early 1970s the Medical Research Council set up a Committee to consider problems of deafness and DHSS officials concerned with services for the deaf visited many audiological and otological centres in the UK, and sought the views of the voluntary organizations for the deaf and of the British Association of Otolaryngologists. The Department's findings were written up by Dr. Annette Rawson and published in a document entitled 'Deafness: report of a departmental inquiry into the promotion of research' (HMSO, 1973). In September 1974 the (then) Secretary of State, Mrs. Barbara Castle, committed the government to setting up an Institute of Hearing Research. The Secretary of State's views on the need for such an initiative had developed against the background of deep concern over the needs of the deaf on the part of many Members of Parliament-most notably Jack Ashley, Laurie Pavitt and Alf Morris, now Minister for the Disabled.

After further consultation with the DHSS, the MRC sought the advice of its



The Medical Research Council Institute of Hearing Research, Nottingham

sub-committee on deafness about the principal areas of research that were needed. The proceedings of that sub-committee, which included reports from its two working parties—on clinical and epidemiological aspects and on social and rehabilitative aspects—underlined the multidisciplinary nature of problems of deafness and it was clear that only a research programme which brought together several fields such as clinical otology, audiology, physiology, psychology and biomedical engineering was likely to lead to success in the type of research needed. The Council therefore agreed that an Institute should be set up comprising a headquarters building, which could house the Director and his immediate research team, and a number of out-stations where service-dependent and service-oriented research would also fall within the overall responsibility of the Director. These would be situated at suitable centres throughout the country in order to undertake multi-centre clinical trials, epidemiological surveys and rehabilitation studies. The MRC allocated the funding and advertised the director's post in these terms in the summer of 1975.

The Institute was formally founded with my commencement as Director from 1 January 1977, but planning had to begin as soon as my appointment was known in the summer of 1976. The immediate task was to define and plan the research objectives, negotiate the site for the headquarters building, and discuss with interested parties the possible locations, nature and structure of the out-stations. A wide range of factors was taken into account in determining the site for the headquarters of the Institute but the final choice was constrained by the need for both temporary accommodation and a permanent site. In the event, the permanent site selected was on the main campus of the University of Nottingham. The University and Medical School here encompass a wide range of scientific expertise relevant to the interests of the Institute—in particular the Departments of Community Health, Psychology, Physiology, Zoology, Physics and Electrical Engineering. The short-term accommodation made available by the exercise of considerable flexibility and goodwill by the Medical School is of high standard and, for the long term, an excellent site was available in the Applied Sciences area of the University with easy access to the Medical School and University Hospital complex. Much of the first year was spent in determining the design and details of the headquarters building of which an artist's impression is shown in Figure 1. Clearly, with only temporary accommodation in the short term and delays in locating specialist trained staff we have had to be content with a rather modest start to the Institute's programme. A staff list is appended, of which it should be noted that the majority joined us in the summer and autumn of 1978. There are still several out-station posts to be filled in 1978-79. Nevertheless it has been possible to set in hand projects on the perceptual bases of lip-reading, schemes for possible new types of hearing aid, speech audiometry, and validation of rehabilitation packages. However, as our main concerns have been to acquire equipment and define procedures for future large scale clinical projects, there is at this stage little scientific progress to report. Eventually we plan to circulate annual reports which will comprise abstracts from which reprints and preprints can be ordered; the reports will also contain an administrative note similar to this letter, but obviously briefer. We would be glad to hear from those who wish to be added to the mailing list.

In running such a research enterprise it was particularly important that we should have an otologist or medical audiologist with extensive research

experience to coordinate the clinical studies, and Dr. R. R. A. Coles of the Institute of Sound and Vibration Research (ISVR), University of Southampton, was therefore appointed from 1 January 1978 as Coordinator of Clinical Studies and Deputy-Director. He has kept his office at ISVR where he continues his clinical work as the audiological physician in the Wessex Regional Audiology Centre and with his own MRC-supported research team. He still makes a substantial, though reduced, contribution to the teaching of the audiology M.Sc. course and other short courses, and has recently been appointed Visiting Professor by the University of Southampton.

Other appointments have included a statistician who will aim to establish more precise figures on the incidence of hearing impairment within a more satisfactory classification system; he will also provide mathematical, statistical and data-processing advice generally. However, to avoid the wastefulness sometimes experienced in large population studies, the epidemiological project is being built up slowly and being planned on a modest scale, centred on the outstations and closely integrated with other types of project. The research to be conducted through the out-stations falls into three main categories: the first comprises the multi-centre epidemiological study already mentioned; secondly, the out-stations will provide the basis for field trials of new psychoacoustic methods of assessment, and of rehabilitation techniques including hearing-aid designs that will arise from research at IHR headquarters; thirdly, the outstations will provide the basis for both multi-centre and local therapeutic trials. Those planned at the present time, but not yet finally approved, are a controlled trial of sodium fluoride therapy for the treatment of labyrinthine otosclerosis, a study of the causes and treatment of sudden deafness, and controlled trials of calcitonin and other new drugs in cases of Paget's disease where the temporal bone and the cochlear and/or vestibular labyrinth is affected.

Progress with the establishment of out-stations has been steady since the middle of 1977. Appointments of NHS staff are now being made in the first three out-stations—at the Royal South Hants Hospital in Southampton, at the Southern General Hospital in Glasgow and at University College Hospital, Cardiff. The MRC scientist-in-charge at Southampton (Dr. Roger Thornton) has already taken up his appointment. In addition he will be coordinating clinical electrophysiological work in the Institute as a whole. Scientists-in-charge are currently being sought for Glasgow and for Cardiff. The site of the fourth out-station is currently under negotiation and there is a possibility of a fifth. We may well experience difficulties in recruiting staff for the out-stations—a reflection on the current shortage of suitably qualified audiological personnel in the UK—but we expect the research of the out-stations to be materially under way by mid-1979.

In each out-station there will be an MRC scientist-in-charge who is locally responsible for the scientific integrity of multi-centre projects, and for the general allocation of out-station resources including the time of the non-clinical staff. Working in parallel with him, or her, will be a consultant or senior lecturer in otology or audiological medicine, either full-time or part-time, with a mixture of research and clinical responsibilities. Mr. G. Browning has been appointed in Glasgow and in Cardiff the retiring Senior Consultant, Mr. A. Thomas, has been appointed on a temporary basis to help establish the activities of the out-station while staff in all other grades are being sought. The pattern and

arrangements surrounding these consultant posts will necessarily vary considerably from one out-station to another. One long-term effect should be to open up a number of more academic consultant posts in this field with consequent long-term benefits both to research and to the development of clinical services. The consultant posts are supported by Health Department Special Medical Development Funds, as are the other NHS support posts, which generally comprise an audiological scientist, two technicians and a secretary. The activities of the new hearing therapists may be integrated into the rehabilitation research work in some of the out-stations, but at present we are more concerned to provide the scientific basis of what they may do in the future than to intervene directly in the development of their role.

Many of our projects are long-term ones and involve the juxtaposition of advanced techniques from more than one discipline. These are the more difficult projects which have not been done precisely because they are both complex and time-consuming. As a result of the inevitable delays in recruiting and training staff it will take us until about 1982 to grow to full strength, and the financial stringency imposed in 1976 could mean that the Institute will not grow to the scale originally envisaged in 1975. However, there is much challenging work to be done which can be accomplished with the resources allocated. The overheads in planning their effective use are considerable and delays between the inception of planning in 1976 to effectiveness in 1979–80 have conferred benefits as well as frustrations.

Institute of Hearing Research, Medical School, Clifton Boulevard, Nottingham NG7 2UH Dr. M. P. Haggard, Director

Present Research Staff of the Institute

Headquarters

Jorge Bocca (Systems Programming)

Dr. Gregory Bock (Auditory Neurophysiology)

Dr. Ross Coles (Deputy-Director and Coordinator of Clinical Studies)

Dr. Adrian Davis (Statistics and Epidemiology)

Mariano Fernandes (Clinical Audiology)

John Foster (Research Assistant)

Dr. M. P. Haggard (Director)

Norman Hoare (Electronic Instrumentation)

Dr. Quentin Summerfield (Speech Science)

Dr. Karen Steel (Genetics and Anatomy)

Julian Trinder (Communications Engineering and Signal Processing)

Dr. Richard Tyler (Psychoacoustics)

Elizabeth Wood (Part-time Research Assistant)

Dr. Graeme Yates (Biophysics)

Deputy-Director's Team (ISVR, Southampton)
Dr. Mark Lutman (Middle-ear Mechanics)
Elaine Saunders (Electrophysiology)
Dr. D. J. Parker (Electrophysiology)

Southampton Out-station, Royal South Hants Hospital
Dr. Roger Thornton (MRC Scientist-in-charge; Electrophysiology)
Ian Bell (NHS Audiological Scientist)

Glasgow Out-station, Southern General Hospital
Mr. George Browning (NHS Part-time Consultant in Otolaryngology)
Dr. Stuart Gatehouse (NHS Clinical Physicist: Audiology)

Cardiff Out-station, University Hospital
Alun Thomas (NHS) Part-time Consultant in Otology

Attached Staff—Bedford General Hospital
Frances Iredale (Part-time Research Assistant)