# NINETY YEARS AT IMR

Of the centers which currently comprise the SEAMEO-TROPMED infractructure in Southeast Asia, the Institute for Medical Research (IMR), Malaysia is the oldest (although in terms of regional institutions Institut Pasteur in Ho Chi Minh City, Vietnam, is 10 years senior, having celebrated its centenary in 1991). It was thus with distinction that IMR placed on public record on 23-25 June 1992 its achievements of 90 years, in an international seminar in Kuala Lumpur.

At the time IMR was founded Kuala Lumpur was a tin mining town of 32,000 people, rubber not having been introduced until 1906. Beri beri was claiming its victims by the thousands in that period of history. Eight of fourteen wards in Kuala Lumpur hospital being reserved for its treatment. Dysentery and other infectious diseases posed problems without specific solutions (Ramanathan *et al,* 1976).

In his report in this issue of the Journal the present Director reviews current and past work at IMR, reflecting on what 90 years of research have yielded for the benefit of Malaysia and of mankind in general. The compendium is large and long of the achievements that reflect the changing panorama of health in Malaysia over the best part of a century.

Today Malaysia basks in pride at its attainment of one of the world's highest economic growth rates, having reached a *per capita* GNP of nearly US$2,500 in 1992. While this wealth is not evenly spread, the nation can boast very substantial advances in dissemination of health care and education in recent years, and a widespread increase in living standards. To a significant degree it can be argued that the economic growth reflects expansion of export-oriented manufacturing industrial output, following massive domestic and foreign investment in a country rich in natural resources. This changing industrial scenario is gradually altering the disease patterns in many areas of the country, presenting new challenges for the Ministry of Health and for the IMR, the Ministry's centerpiece of research and development. For this reason it was of prime importance that the review process should highlight this moment, rather than awaiting passively for another decade until the centenary bells ring, reflecting an impatience for change.

For it is the ability to respond to change that marks the relevance of research centers as instigators and promoters of new ideas and new strategies. It was thus hearkening to hear the Director of IMR and the Director-General of Health announce moves to expand IMR activities in the clinical arena, in chronic disease epidemiology and in technology development. It is salutary that WHO's special input into strengthening epidemiology and immunology in recent years is now shifting to augment the Institute's capabilities in nutrition together with its implications in the environmental equation. In a different frame of mind, for example, in an era when road and industrial accidents loom high on the list of causes of morbidity and mortality, we may ask what can a research institute contribute to their reduction? Is this an IMR function or would pursuance of such a question dilute the research effort too tangentially?

In a sense IMR should be in a good position to answer the new challenges, if it can devise appropriate ways of staff retraining and mobility of expertise. For its whole lifetime it has been devoted to practical issues affecting the health of Malaysian populations, translating basic ideas and technologies to field control programs. It has not been a closeted ivory tower. For much of this lifetime, however, the main challenge was considered to be infectious diseases, especially infections peculiar to tropical regions, with emphasis on vector-borne problems such as malaria, filariasis, scrub typhus, but covering the gamut of infections: viral, bacterial, rickettsial, mycotic, parasitic. The annals of IMR history have recorded compendia of contributions in this broad field, as well as in nutrition, with others in fields such as genetics and cancer being added in more recent times.

One of the dilemmas faced by IMR and by many similar institutions in the tropical world is that of pursuing the conquest of infectious diseases in the face of rising incidence of chronic illnesses and other diseases of affluence related to environmental change and to extended lifespan. Any institute must *focus* to achieve excellence, yet perceived priorities change rapidly in a more mobile world with its global economy in which the competitive advantage of nations is a compelling force (Porter, 1990). The rapidly increasing dominance of urban centers over rural expanses changes the

perceived priorities of health care, even though the rural heartland continues to contribute substantially to economic growth, albeit a diminishing proportion thereof. Pressure is thus generated to give thought to changing strategies for infectious disease control, requiring a more judicious selection of appropriate technologies, including epidemiologic modelling as well as diagnostic and therapeutic modulations.

In this context the critical issue of infectious disease surveillance, following the control phase, requires also careful economic modelling, to make better use of manpower, facilities and technology. There is no reason why economic analysis and forecasting cannot be coupled with epidemiologic planning: both are more mature sciences now than in the earlier period of IMR history. But in reality the question is partly one of political economy, for it is not easy to argue for continuing large budget allocations for control of infectious diseases affecting fewer and fewer people, even though the experts know that diminished surveillance carries the risk of renewed (and explosively expensive) epidemic activity. The case has to be for more sophisticated strategies than in the past with respect to technology, manpower and economic returns, as well as providing accuracy in prediction of risks.

The gradual evolution of IMR's attention to computer-based epidemiologic strategy development and to human behavioral research has yielded a thrust with potential to move in this direction. The expansion of capability in biotechnology is also encouraging, though it is perhaps still to early to estimate its full potential across the disease spectrum. Yet it is probably the potential for IMR to influence the health system as a whole, from primary to tertiary care, that is most important in the years immediately ahead. For this objective to be realized, the increased clinical interface being encouraged is critical, since this will allow permeation into the clinical arena of the quantitative guidelines of epidemiologic planning and evaluation, as well as of collaborative development and application of newer technologies *per se*.

Few countries in the tropical world are fortunate to have an institution like IMR positioned so critically between the academic and pragmatic spheres which are both essential for advancement of health care in the national perspective. Although some conceptual shifts in infrastructure may be needed to provide the necessary freedom of movement to adapt to competitive demands, it has a justly proud history and is gearing up to an even more challenging future. We congratulate the Institute for Medical Research and the community of people who guide and carry out its work, offer the utmost encouragement for tackling the exciting period ahead and look forward to the centenary bells a decade from now.

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## References

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