

## SRHMRA Submission 46 — Prof Rob Richards

I am greatly concerned about the change in emphasis away from basic biomedical research to applied (translational) research, particularly by the NHMRC. While there is no doubt that translational research is necessary, there is implicit in this shift in funding, an assumption that basic research does not contribute to health care and yet the major improvements in diagnosis have come from basic research – monoclonal antibodies, recombinant DNA, PCR, high-throughput DNA sequencing. Somehow the area of basic research needs to be supported in a manner that recognizes its vital contribution to health care. This is particularly the case now that the ARC has decided to redefine medical research such that basic research involving diseases is no longer eligible for research funding from this organization.

In many areas of human health we simply do not know what we do not know. E.g. even though the genes and their mutations, responsible for thousands of human genetic diseases have now been identified, the pathogenic pathways from the mutation to the clinical symptoms for most of these are (at best) poorly understood. There is a clear need to discover the steps involved in the pathways in order to target them for therapeutic leads. Nobody knows what they will find and how useful it might be until the pathway is uncovered, so the outcome is not guaranteed – but in the absence of this the families afflicted with these diseases are left with little hope that a treatment will become available.