It is clearly in Australia's interest to build a viable, internationally competitive HMR sector. Only by contributing in a major way to the primary discoveries and participating in a meaningful way to international multi-centre clinical trials, will Australians be able to access the best new medicines and medical practices.

I have worked as a medical researcher in Germany, the USA and Australia. In my experience, the Australian infrastructure for medical research is excellent and state-of-the art. What seems to be lacking is the ability to capitalize on untapped creativity and talent, particularly that of early- and mid-career scientists. For these scientists, many of whom are stuck in seemingly endless post-doctoral positions, the chances of obtaining funding as independent researchers are greater (although still far too low) if they stick with "safe-bets", proposals for which the outcome is almost certain, although not necessarily exciting. For a nation renowned for being risk takers, it would seem counterproductive to only fund studies in which the outcome is highly predand the well-established researchers. The process of continually applying for short-term grants that are underfunded with respect to salaries and the real costs of doing research, bringing in just enough to cling on to highly educated and trained staff from one year to the next is demoralizing and far too time-consuming. Although it is difficult to envisage a funding model which would be completely free from these negative aspects, a large increase in funds and funding types (with an emphasis on improving the funding for less well-established researchers) would free up time and energy for creative research and allow effort to be put into building and nurturing productive collaborations.

The future of a career in medical research looks pretty bleak to the student I mentored today as a member of her PhD committee. This excellent student, and many others like her, do not see that it will be possible to make the transition to obtaining their own research funding and running their own research laboratory. The majority of the laboratories in the Parkville precinct, with which I am familiar, have survived and grown by expanding the number of PhD students they take in. These students have, in turn, all graduated themselves and are looking to make their way in their chosen career but many leave science altogether as it proves too difficult to obtain independence.

How might health and medical research be best managed and funded in Australia?

As outlined in the preamble, economies of scale are a clear benefit of the formation of large teams or organisational units. This type of approach is instrumental to being able to gain access to expensive infrastructure. State-of-the art facilities certainly play their role in enabling big discoveries. In my view, a return to the "block funding" era of the 1980"s and 1990"s could be a good funding model if it were modified to become "partial block funding". This would

support core facilities of large organisational units and, importantly, could cover short-term funding gaps for individual researchers and their teams. A partial block funding could be topped up with a generous project-grant based funding system that has a higher success rate, is fully funded for salaries and is longer term (e.g. a 5 year rather than a 3-year cycle). Even these relatively small modifications could make a huge difference to the longevity and productivity of a career in medical research.

What are the health and medical research strategic directions and priorities and how might we meet them?

Neurodevelopmental disorders (due to the prevalence of ageing parents) and neurodegeneration, mental health, maintaining physical & cognitive health into old age, Aboriginal health. Redistribution of research funds to inject more funds into crucial research areas and special programs (e.g. NHMRC distributions to Neuroscience are lower than to cancer)