SRHMRA Submission 162 — Dr Andrew Rayfield

There are several important reasons why it is in Australia's interest to have a healthy and competitive health and medical research sector. Firstly, as is widely broadcast, Australia (and the most of the Western World) has an aging population. We must cater to this population and the health and medical implications that are intimately associated with it.

Australia possesses a unique biodiversity that does not exist anywhere else in the world. Our rainforests, reefs and deserts maybe a source for future medicines that benefit all of humanity, yet if we don't have a working system of researchers, we are not tapping the full potential that our country might provide.

Australia, as a 1st world, economically strong country has a social duty to the rest of the world to use our collective knowledge and the privileges that come with our privileged life to help combat disease and sickness in the rest of the world.

Furthermore, in times of economic uncertainty a strong research sector, not only in technology but in health and medical research can only have ongoing benefits to our country's prosperity and wealth yet it often feels that our country's culture ignores our best and brightest, resulting in most leaving for opportunities that present themselves overseas.

How best might we manage our research for the future? We need to address the current problem the confronts all researchers, particularly in health and medical research: money and jobs. While Australia is doing a wonderful job at inspiring children and students by science, and into studying science, the life of a research scientist is not currently viewed as a desirable career and for those who have chosen a career in research life is difficult, pay does not reflect work input, and a sound work/life balance is all but ignored because "that"s what scientists do". Why would students become research scientists and follow in that career, if this is the life and attitude that is ahead of them?

Those who have been inspired by science at a young age, who do want to pursue a career in research science in Australia, like myself, are now presented with a severe lack of jobs. There are VERY few or no jobs. In my experiences over the last year, I know a number of friends and colleagues who have had to leave research and get a job outside of science because there is no money, there are no jobs. This is scarily affecting both new graduates and experienced, long-term researchers alike. Some who have worked as a researcher for 30 years! What then does this mean for our future? I predict that the lack of funding will result in a stagnation in innovation with funding being retained by "safe bets". In 10-20 years we will also be faced with a shortage or gap in fully qualified upper-tier researches in this country. The effects could be devastating for not only the economy, but for the health of all.

Funding of basic science research is also very important. The trend appears to be that funding will tend to increasingly be awarded to those projects that have an immediate disease or pathological implication. I would argue that the understanding of the basic mechanisms of the biological processes of life, of the body and of the cell are vitally important to understanding the mechanisms behind a disease state. The current level of funding provided by the Federal government needs to be bottom-lined here and now, and protected from further cuts, lest our health and medical research community collapse. Funding needs to be returned to levels in the past with the percentage of grant success returning to levels previously seen. Furthermore, Australian researchers need to begin to look elsewhere for credible and reliable funding, for example through philanthropic sources of funding from individuals and industry. The more money, the more jobs; more jobs = innovation, which will benefit the entire population, not only of our country but of the entire planet.