President: Professor Andrew Holmes AC PresAA FRS FTSE

3 May 2018

Mr Ben Morton MP
Chair of Joint Standing Committee on the
National Capital and External Territories
PO Box 6022
House of Representatives
Parliament House
Canberra ACT 2600

Dear Mr Morton and members of the Committee,

INQUIRY INTO CANBERRA'S NATIONAL INSTITUTIONS

The Australian Academy of Science (the Academy) welcomes the opportunity to provide a submission to the Joint Standing Committee on the National Capital and External Territories Inquiry into Canberra's National Institutions.

The Committee has been asked to inquire into and report on the range of innovative strategies Canberra's national institutions are using to maintain viability and relevance to sustainably grow their profile, visitor numbers, and revenue, including:

- 1. creating a strong brand and online presence
- 2. experimenting with new forms of public engagement and audience participation
- 3. conducting outreach outside of Canberra
- 4. cultivating private sector support
- 5. developing other income streams
- 6. ensuring the appropriateness of governance structures.

The Terms of Reference also include any other relevant matter the Committee wishes to examine, including the process for establishing new institutions.

The Academy's submission will relate especially to the first three Terms of Reference, reflecting its role as a cultural resource and partner organisation for engagement and outreach activities with national institutions.

As an overarching statement, the Academy would like to see Australian science represented more completely among Canberra's national institutions. For example:

- There is no national natural history museum.
- There is no permanent national facility for collections of historical scientific instruments and artefacts.
- There is no national facility dedicated to commemorating and communicating Australia's history of scientific endeavour and achievement.

The establishment of such facilities would play a vital role in evoking a sense of national pride and helping the public engage with critical, science-based issues.

The Academy is a not-for-profit national organisation comprising around 520 Fellows elected for their outstanding contribution to science and research. Through our Fellowship, and our National Committees, the Academy exercise national leadership and influence in a number of areas of science, including gender equity in science and related disciplines, school education, industry-research collaborations, and especially the public awareness and understanding of science. The Academy sees strong strategic opportunities in collaboration with national institutions for public engagement and outreach activities in support of our shared goals.

The Academy has a close relationship with Questacon which, as an interactive science and technology centre, performs an extremely important role in science education, outreach and in engaging young Australians. This relationship takes a number of forms including representation of Fellows on the Questacon governing board, engagement between the Academy's education programs and Questacon's public lectures, and communication activities. Questacon was a pivotal distribution point for the Academy's "Questions and Answers" publications on Immunisation and Climate Science.

The Academy also partners with other national institutions. For example, the National Museum of Australia sponsors the Mike Smith Student Prize, a biennial award for the best essay on the history of Australian science or on Australian environment history. To celebrate the Academy's 50th anniversary in 2004, the National Museum of Australia hosted the exhibition *Eureka moments!* that commemorated Australian science by highlighting scientific innovations and endeavours that have impacted on society and culture.

In 2014 to celebrate the International Year of Crystallography, the Academy organised a photographic exhibition hosted at Questacon called *Crystallography in everyday life*. Early this year the Academy also partnered with Questacon to host the lecture by an Academy awardee from the Netherlands, Professor Albert Polman, on the science of solar generation. The talk attracted nearly 500 members of the public.

We are seeking further opportunities for collaboration with Questacon, the National Gallery of Australia, the National Library of Australia and the National Film and Sound Archive.

The Academy's value for collaboration, engagement and outreach stems primarily from its Fellowship, which represents a significant intellectual and cultural resource. The Fellowship of the Academy includes Nobel Laureates, Australians of the Year, recipients of prestigious scientific awards, and appointments within the General Division of the Order of Australia. Through partnerships with the Academy and similar organisations, national institutions can leverage this extensive knowledge base into broad-based public outreach programs.

As an illustration of this capacity, the Academy has recently undertaken a large expansion of its social media and branding activity to reach Australian and worldwide audiences. This enhancement is based around the creation of short, branded videos which highlight significant scientific information and discoveries in innovative, engaging ways. These videos can be accessed *via* our website, at https://www.science.org.au/curious/.

The Academy also possesses a major archive of scientific materials dating back to our founding in 1954, made up of contributions by its Fellows throughout its history. We are currently seeking partner organisations to digitise the archive, allowing it to be disseminated broadly throughout Australia and the world.

In addition, the Academy owns two heritage listed buildings in Acton, ACT: Ian Potter House and the iconic Shine Dome. The Shine Dome is available for hire, and is frequently used by the Academy and others for functions, conferences and public lectures.

As a body representing excellence in Australian science, the Academy would like to see Australian science represented more completely among Canberra's national institutions. For example, there is no national natural history museum. There is no permanent national facility for collections of historical scientific instruments and artefacts. There is no national facility dedicated to commemorating and communicating Australia's history of scientific endeavour and achievement. Such facilities would engage the public, evoking a sense of national pride and helping the public engage with critical, science-based issues.

There are several ways this representation might be expanded. Existing national institutions such as Questacon, the National Museum, the National Library or the National Gallery might have their remit expanded. A national science and technology touring exhibition could be created, modelled on Questacon's travelling exhibitions but focusing on narratives of Australian science.

There are also existing facilities and collections that might be leveraged to inform a set of science-based public institutions. For example, landmark facilities such as the Atlas of Living Australia, or CSIRO's extensive natural history collections, might inform a natural history institution.

Further, exposure of the historical and cultural collections of organisations such as the Academy and similar bodies, as well as universities, research institutions, publicly funded research agencies and landmark research facilities, to wider audiences, could be opened up to tell the stories of Australian scientific achievement.

Science-based engagement strategies generally rely on capturing citizens' natural curiosity about the world and their excitement about gaining new, interesting and relevant knowledge. The Academy believes strongly in promotion of science as a mechanism for cultural enrichment, and will engage with Australia's national institutions to do so. Further, the international role played by the Academy and other scientific organisations is significant, with international scientific cooperation having an important role in Australian diplomatic and strategic activities.

If you have any further questions about this submission or to arrange an appearance before the committee, please contact Dr Stuart Barrow (stuart.barrow@science.org.au, 02 6201 9464) at the Australian Academy of Science.

Yours sincerely

Professor Andrew Holmes AC PresAA FRS FTSE

Andrew B. Holmes

President