Question on notice no. 75

Portfolio question number: BI-75

2021-22 Budget estimates

Economics Committee, Industry, Science, Energy and Resources Portfolio

Senator the Hon. Matthew Canavan: asked the Commonwealth Scientific and Industrial Research Organisation on 3 June 2021—

Senator CANAVAN: Sorry. Can you just answer that specific question: do you have a written prohibition within the CSIRO against gain of function research? Ms Zielke: I'll come back and confirm that. Senator CANAVAN: You can take that on notice. If you do have such a written prohibition, please take on notice when that was made-if it does exist. Ms Zielke: Okay.

Answer —

Please see attachment.

Economics Legislation Committee

ANSWERS TO QUESTIONS ON NOTICE

Department of Industry, Science, Energy and Resources 2021 - 2022 Budget Estimates

AGENCY/DEPARTMENT: Commonwealth Scientific and Industrial Research Organisation

OUTCOME: Agencies

TOPIC: Query - written prohibition

REFERENCE: Spoken Question (Hansard Page 120)

QUESTION DATE: 03 June 2021

QUESTION No.: BI-75

Senator CANAVAN: Sorry. Can you just answer that specific question: do you have a written prohibition within the CSIRO against gain of function research?

Ms Zielke: I'll come back and confirm that.

Senator CANAVAN: You can take that on notice. If you do have such a written prohibition, please

take on notice when that was made—if it does exist.

Ms Zielke: Okay.

ANSWER

CSIRO's Code of Conduct and Science and Delivery Policy require staff to comply with all relevant laws, regulations, Ministerial directions and Australian Government policy and to conduct research in compliance with the Australian Code for the Responsible Conduct of Research, 2018.

Recent media commentary in relation to 'Gain of Function' research has been based on a common interpretation of the term in the context of the (alleged) manipulation of coronaviruses with the intent of making them more transmissible or pathogenic. CSIRO does not conduct research of this nature.

In the broadest sense, research that might fall under the technical use of the term 'Gain of Function' could include any research designed to learn how organisms gain new properties through scientific interventions or through natural selection. Examples of this could include research that is conducted in order to manage the risk of pandemics, research to understand new strains of flu each season in order to inform vaccine manufacture and research that alters plants in order to make them more drought resistant.

As such, CSIRO does not have a specific written prohibition against this type of research, nor is research of this nature specifically prohibited by legislation.

There are strong regulatory controls in Australia for Gain of Function Research. For instance, genetic modification of organisms is regulated by the Office of the Gene Technology Regulator. Gain of Function research must also be undertaken by trained personnel in appropriate biosafety containment conditions according to the level of human and environmental risk. As there are ethical and biosafety issues associated with such research, all CSIRO activities in this area are also comprehensively managed through the CSIRO Code of Conduct and CSIRO's Science and Delivery Policy, which require that the potential impacts of our research and its outcomes are fully considered. This includes ethical issues associated with the impacts of dual-use technologies,

ensuring that the potential benefits of any research far outweigh any risks, and that any risks can be effectively mitigated.

In addition, given the potential broad range of research applications that involve genetically modified organisms, such research is strictly regulated and CSIRO's Institutional Biosafety Committees have the necessary technical and scientific expertise to review and advise on the scientific justification and identification and management of risks associated with this research. Through this technical advice and compliance with its policies, CSIRO ensures that any proposed research is compliant with Australian legislation (including the *Gene Technology Act 2000*).

CSIRO notes that the Minister for Health has requested the National Health and Medical Research Council to undertake a review of gain of function research in Australia. This review will include a review of any gain of function research that could increase the harmfulness of an infectious agent to humans that has been funded or conducted by the Australian Government or its agencies over the last 10 years; the regulatory framework that controls gain of function research in Australia, and how it compares with frameworks in other relevant countries.