



15 March 2022

To the Senate Education and Employment Legislation Committee,

Thank you again for inviting the Australian Academy of Technology and Engineering (ATSE) to provide evidence to the inquiry into the *Australian Research Council Amendment (Ensuring Research Independence) Bill 2018*.

As requested, we would like to provide answers to the questions on notice taken during the hearing.

ATSE is very happy to provide any further information the committee may require.

Yours sincerely,

Professor Hugh Bradlow
ATSE President

Kylie Walker
ATSE Chief Executive Officer

Ratio of published to retracted papers**Extract**

Senator KIM CARR: Okay. What do you think the situation is now?

Ms Walker: I haven't done that calculation and so I couldn't say right at this moment, but I could take that on notice.

Senator KIM CARR: If you would, please. Is anyone able to assist me? Would you roughly agree with that general framework of that ratio, the 1.4 million papers issued and the 247 retracted?

Answer

According to Scopus, a tracking system run by academic publishers Elsevier, in 2020, 106,614 pieces of citable research were produced where there was at least 1 Australian author¹.

According to Retraction Watch, only 32 pieces of research (for which there was at least one Australian author) were retracted during the same period². This represents just 0.03% of research papers published.

These statistics encompass the entirety of citable research, including but not limited to the sciences. Research is cross-disciplinary and the boundaries between the sciences and humanities can be porous. We consider the rate of retractions to be low, and indicative that science, and research, is self-correcting. This is to say that a more concerning scenario would be if there were no retractions at all.

Proposal for an independent ARC review**Extract**

Senator KIM CARR: I'm also interested to know what you think of the Group of Eight's suggestion of an inquiry into the way in which the ARC fits within the broader system of research. Any advice you could lend on that would be appreciated if you choose to provide that information on notice. Thank you.

Answer

ATSE supports the Go8 proposal for an independent review of the ARC.

The Terms of Reference of an ARC review should address the following issues:

- Protecting the ARC's decision making as independent from the Minister for Education, including the removal of the ministerial veto and strengthening the ARC's accountability to Parliament.
- Creating transparency and accountability to Parliament for any funding and governance decisions imposed on the ARC by the Minister (if the veto or other powers are retained).
- Standardising the approach, application, and assessment process across the major research funding bodies.
- Examining and addressing potential biases in the granting system.
- Delineating timelines for ARC grant funding rounds, including dates for when funding decisions must be announced. These should be developed in consultation with the sector to ensure announcement dates do not inflict hardship upon researchers.
- Aligning application and announcement dates across major funding bodies.

¹ Scimago 2021, 'Scimago Journal and Country Rank', accessed from <https://www.scimagojr.com/countryrank.php?year=2020&order=itp&ord=desc>

² Retraction Watch Database, accessed from <http://retractiondatabase.org/RetractionSearch.aspx>



- Enshrining sustainable research funding allocations, comparable to other OECD countries as a fixed percentage of GDP (at a minimum, at the OECD average of 2.5%).
- Refreshing the national Science and Research Priorities³ on at least a five-yearly basis and providing clarity on how these will be used to assess funding applications.
- Requiring information on the inclusion of specific national benefit criteria to be provided to applicants ahead of time, to address any ministerial concerns about the benefits of particular research projects.
- Establishing how any national security issues arising from research proposals should be addressed, noting recent concerns such as ARC maintenance of sensitivity files.

³ Department of Industry, Science, Energy and Resources 2015, 'Science and Research Priorities', accessed from < <https://www.industry.gov.au/data-and-publications/science-and-research-priorities>>