

Research integrity watchdogs: Lessons from Denmark and Sweden

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Denmark and Sweden are home to two of the world's best research integrity watchdogs. This is because these nations have implemented legislation that provides their watchdogs with the power to effectively handle cases of 'research misconduct', which is when researchers intentionally manipulate or falsify data to gain a competitive edge over their peers.



Above: The Karolinska Institute in Sweden. The site of a notorious research misconduct case that occurred before the establishment of Sweden's research integrity watchdog, 'Npof'.¹

World-leaders in research integrity

In 1992, Denmark became the first country in the world to effectively regulate research misconduct when it established the body now known as The Danish Board on Research Misconduct.² Following in the footsteps of Denmark, Sweden founded the National Board for Assessment of Research Misconduct, known as 'Npof' in 2020 after a notorious research misconduct scandal at its prestigious Karolinska Institute.^{3,4} The scandal surrounded a clinical trial in which 17 of the 20 participants later died after receiving an experimental synthetic trachea transplant based on falsified data.⁵ The institute initially cleared the researcher of misconduct three separate times, but he was later found guilty by Npof.

Unlike research integrity watchdogs from other nations, these bodies have the authority to conduct their own investigations into allegations of research misconduct. This ensures that investigations are impartial, fair, and transparent.^{6,7} In contrast,

Australia does not even have an agreed-upon, enforceable definition of research misconduct. Australia does not have a research integrity watchdog at all, and instead relies solely on a model of self-regulation, in which there is no external oversight of investigations into research misconduct.⁸

Key components of an effective watchdog

There are several other nations that take a more effective approach to research misconduct than Australia, but these mostly act as hands-off oversight bodies. Between them, the Danish and Swedish watchdogs have many innovative and effective design features including:

- A clear and legally enforceable definition of research misconduct^{9,10}
- Broad remits that cover all publicly funded research and research conducted at all public research institutions^{3,11}
- Independent investigatory panels comprised of members without conflicts of interest^{3,10}
- Binding investigation findings¹²
- Individuals can make complaints of research misconduct directly to the watchdog¹³
- Public disclosure of investigation outcomes^{12,14}
- Inclusion of whistleblower protections¹⁵
- Authority to initiate investigations^{10,13}
- A mechanism for appealing investigation findings¹⁴

In contrast, Australia's self-regulatory approach to research misconduct does none of these things.

Benefits of upholding research integrity

These Scandinavian research integrity watchdogs effectively block dubious research from entering the public domain, and this has many important benefits. Risks to patient health are reduced as treatments based on falsified or fabricated medical research data are prevented from advancing to the clinical trial phase, shielding them from potential harmful side effects.

Moreover, research progress is no longer hindered by the confusion caused by fraudulent research. These watchdogs also prevent the allocation of public funds to researchers who engage in questionable research practices. This in turn channels research funding toward honest researchers, eliminating the need for them to compete with dishonest peers.

Research integrity watchdogs enforce research integrity standards, leading to fewer retractions of academic papers. Ultimately, this cultivates public trust and confidence in the research produced by countries with exemplary research integrity watchdogs like Sweden and Denmark.

¹ Halme (2020) *Svenska: Aula Medica med gården "Stenbrottet"*, 3 april 2020, https://commons.wikimedia.org/wiki/File:Aula_Medica_-_Karolinska_Institutet.jpg

² Danish National Research Foundation (2021) *Research Integrity*, Danish National Research Foundation, <https://dg.dk/en/research-integrity/>

³ Npof (2023) *About us*, <https://npof.se/en/about-us/>

⁴ Else (2019) *Scandal-weary Swedish government takes over research-fraud investigations*, <https://www.nature.com/articles/d41586-018-05493-3>

⁵ Rasko & Power (2017) 'Dr Con Man: the rise and fall of a celebrity scientist who fooled almost everyone', *The Guardian*, <https://www.theguardian.com/science/2017/sep/01/paolo-macchiarini-scientist-surgeon-rise-and-fall>

⁶ ENRIO (2019) *Country Report Denmark*, <http://www.enrio.eu/country-reports/denmark/>

⁷ ENRIO (2019) *Country Report Sweden*, <http://www.enrio.eu/country-reports/sweden/>

⁸ Vaux (2022) *Australia needs an Office for Research Integrity to catch up with the rest of the world*, <http://theconversation.com/australia-needs-an-office-for-research-integrity-to-catch-up-with-the-rest-of-the-world-176019>

⁹ Npof (2023) *What research misconduct means*, <https://npof.se/en/research-misconduct/>

¹⁰ Danish National Research Foundation (2021) *Worth knowing: Research integrity from a Danish perspective*, <https://dg.dk/en/research-integrity/>

¹¹ Graasbøll (2023) *Act on research misconduct etc.*, <https://ufm.dk/en/legislation/prevaling-laws-and-regulations/research-and-innovation/scientific-dishonesty>

¹² Kania (2023) *The Danish Board on Research Misconduct*, <https://ufm.dk/en/research-and-innovation/councils-and-commissions/The-Danish-Board-on-Research-Misconduct>

¹³ Npof (2023) *Reporting suspected research misconduct*, <https://npof.se/en/report/>

¹⁴ Npof (2023) *FAQ*, <https://npof.se/en/vanliga-fragor-eng/>

¹⁵ Ministry of Higher Education and Science (2014) *The Danish Code of Conduct for Research Integrity*, <https://ufm.dk/en/publications/2014/the-danish-code-of-conduct-for-research-integrity>
