Written evidence submitted by Mathias Willumsen (RES0043)

This written evidence is submitted in my personal capacity and express my personal views based on my experience working with research integrity for half a decade in the Danish Ministry of Higher Education and Science.

I was approached by the UK House of Commons Science and Technology Committee in November 2017 and asked to contribute with oral evidence to the Committee’s inquiry on research integrity sharing the Danish experience with setting up a regulatory framework to deal with misconduct within the field of research integrity. I have previously given an interview to a parliament representative on the same topic.

Unfortunately I was unable to participate in the session with oral evidence and was therefore asked to submit written evidence instead focusing on the following questions:

- What was the driver behind Denmark legislating in this area? Why was it felt to be necessary?
- Does the Act make research misconduct a crime? How is sentencing/sanctioning handled?
- Was this something that the research community wanted? Has the community objected to the state taking a role in this area?
- Has the DCRM pursued any cases under the new Act yet?
- Are the details and outcomes of cases made public?
- Is there a public ‘blacklist’ of researchers who are guilty of misconduct?
- Is the work of the DCRM costed? How much does it add to the cost of doing research?
- What process did Denmark go through to decide on how to legislate in this area? Were alternative approaches considered?
- How will you know whether the decision to legislate was the right decision? Are there any measures of ‘success’ that you are hoping to achieve? (e.g. increasing number of investigations – or decreasing number of investigations?)
- What advice would you give to the UK if it were to decide to legislate in this area?
- The UK Research Integrity Office have told us that “It would be extremely challenging to establish a body which could regulate all aspects of the research enterprise”. Does Denmark’s approach manage to deal with the full diversity of research disciplines and research institutions?

Below I will give a short introduction to the Danish approach to research integrity and the regulatory framework (section 1) followed by an attempt to address each question listed above (section 2). Finally I have included a short biography with my working experience in the field (section 3).

1 The Danish approach to research integrity

We have had a national central committee handling cases of research misconduct in Denmark since 1992. It was initially established on a three year trial basis covering only research misconduct (from 1992 until 2017 termed ‘scientific dishonesty’ in the Danish context) within health and medical science. The trial period was prolonged for two years and in 1998 the committee was expanded to cover all research areas in Denmark divided upon three subcommittees. Simultaneously an executive order with a legal basis in the Act on the Research Advisory System etc. was issued regulating the activity of the committee.

In 2003 some central provisions from the executive order (primarily on the establishment of the committee) was inserted directly into the Act. In 2008 a decision was made to also include a definition of research misconduct directly in the Act.

While there has been a rather focused approach to dealing with research misconduct in Denmark since 1992 with a central committee, regulatory framework and political support, the approach to the broader field of research integrity – including common principles and standards for good practice and teaching
and training – was more sporadic and characterised by ad hoc initiatives up until recent times. This changed when the Ministry of Higher Education and Science brought together representatives from the universities, the sector research institutions and the research councils to try and develop a common guideline for research integrity. This resulted in the Danish Code of Conduct for Research Integrity published in November 2014. The code represents a truly national approach to research integrity across disciplines, sectors and institutions and received widespread support from the Danish research community. Today more than 40 research actors in Denmark have signed on to the code’s recommendations including all Danish universities, several public and semi-public research institutions, research councils and private and public foundations.

Based on the new national approach to research integrity in the broad sense it was decided to conduct a thorough review of the Danish research misconduct system in 2015. An initial step in the review was to do a study on research misconduct systems in several other countries. On the basis of this report an expert committee was established by the Ministry tasked with looking into possible improvements of the current system. The expert committee delivered 12 recommendations for changes to the system which laid the foundation for a new Danish law on research misconduct which came into effect on 1 July 2017. The main changes in the Danish research misconduct system introduced by the new law are:

- A clearer definition of research misconduct limiting the area to fabrication, falsification and plagiarism.
- A definition of questionable research practice is included in the law.
- A clear division of responsibility between the central national misconduct body (the Danish Committee on Research Misconduct – DCRM) and the Danish research institutions determining that the DCRM will handle all cases of research misconduct whereas the remaining instances of questionable research practice will be handled by the research institution in question.
- A new process for handling notifications on research misconduct with more involvement by the research institutions.
- Guiding time limits for dealing with cases have been introduced, so that a case should be finalised within one year.
- An obligation for research institutions to deal with questionable research practice and publish guidelines for the process.
- The three existing subcommittees are consolidated into one central committee handling cases across all disciplines coupled with an increased possibility of including external expert assistance in individual cases.
- The central committee will publish an annual report on questionable research practice based on annual reporting from the research institutions.

2 Questions from the Science and Technology Committee (Commons)

2.1 What was the driver behind Denmark legislating in this area? Why was it felt to be necessary?

The purpose of the Research Misconduct etc., Act of 1 July 2017 is to strengthen the credibility and integrity in Danish research through an up-to-date regulatory framework for handling research misconduct and questionable research practice. It is important to note in this context that the law is not intended to regulate responsible conduct of research, the way research is carried out and the practices followed by researchers. This is a task for the research community – for instance via common guidelines such as the Danish Code of Conduct for Research Integrity – following the development in practices taking into consideration the dynamic nature of research itself.
The consideration for safeguarding the rights of researchers and ensuring an accessible and transparent approach speaks in favour of regulating the treatment of suspicions concerning research misconduct and questionable research practice in the law. These arguments are all the more important when considering research misconduct cases as these (usually) severe cases can have great impact on the future career for those involved as well as for the research institution in question.

It is a common approach in Denmark that an administrative body is regulated via laws or executive orders setting the framework for the body’s tasks. Furthermore as mentioned above the potentially severe impact of research misconduct cases played a pivotal role in the regulatory development of the area in Denmark ultimately resulting in a specific research misconduct act in 2017.

2.2 Does the Act make research misconduct a crime? How is sentencing/sanctioning handled?
The Research Misconduct etc. Act – and the regulation that went before the Act – does not criminalise research misconduct or questionable research practice. However, a research misconduct case may contain elements that might constitute a crime under the Danish penal code, e.g. fraud, but this is handled in a separate system.

The task of the DCRM according to the Act is to deliver a decision in a concrete case on whether or not research misconduct has taken place in the situation in question. If so the committee may inform the accused’s employer, funders of the research project and journals and suggest that the scientific work is retracted. As such the committee cannot itself impose sanctions and these are left for the before mentioned to decide upon.

2.3 Was this something that the research community wanted? Has the community objected to the state taking a role in this area?
The initial establishment of the central committee was very much driven by the research community itself or at least representatives thereof.

The decision to strengthen the framework behind the system through legal provisions has in general been positively received by researchers and institutions in the Danish research environment. In this regard, the recent Act has been commended for the close involvement of stakeholders and for supporting the ongoing efforts in the research community to maintain high integrity in research.

There are of course also in Denmark those that believe research is self-regulating and that there is no need for a system to address integrity problems. These views do however in my opinion become rarer and rarer as the recognition that a systemic and legislatively supported setup strengthens transparency and safeguards for researchers becomes more widespread.

2.4 Has the DCRM pursued any cases under the new Act yet?
There are several pending cases but none of them have reached a final decision yet.

2.5 Are the details and outcomes of cases made public?
All decisions by the DCRM are published on the committee’s website in anonymised form. At the same time there is access to the decisions and the material in cases before the committee according to the Danish Public Information Act which means that anyone can ask for the documents in concrete cases and get these in non-anonymised form.

In addition the DCRM publishes annual reports with summary of the cases.
2.6 Is there a public ‘blacklist’ of researchers who are guilty of misconduct?
No.

2.7 Is the work of the DCRM costed? How much does it add to the cost of doing research?
There is no charge for bringing complaints before the DCRM and no fees connected to the processing of cases. The work of the DCRM is financed on the Danish Finance Act regulating public expenses for the entire Danish public sector. As such there is no additional cost for doing research.

2.8 What process did Denmark go through to decide on how to legislate in this area? Were alternative approaches considered?
See section 1 and previous answers.

2.9 How will you know whether the decision to legislate was the right decision? Are there any measures of ‘success’ that you are hoping to achieve? (e.g. increasing number of investigations – or decreasing number of investigations?)
A ‘success evaluation’ is not planned currently. In my opinion it would probably be quite difficult to define success criteria in this rather complicated area.

2.10 What advice would you give to the UK if it were to decide to legislate in this area?
It is very important to include the UK stakeholders closely in the process and take into considerations the research traditions and culture of the UK.

In my experience there are many ways that different countries have set up (or not set up) research misconduct systems and these do depend a lot on the before mentioned elements. I would however always recommend having some sort of central authority in these matters preferably with a regulation behind it to create a transparent process and give the body the tools to make an impact. As research misconduct cases are often very complicated and can be very detrimental for the persons and institutions involved it is in my opinion an advantage with some sort of independent centralised body able to deal with or at least have supervisory authority in these cases.

2.11 The UK Research Integrity Office have told us that “It would be extremely challenging to establish a body which could regulate all aspects of the research enterprise”. Does Denmark’s approach manage to deal with the full diversity of research disciplines and research institutions?
It is the general perception that fabrication, falsification and plagiarism have the same negative impact and is similar in nature across of fields of research. Therefore I am convinced that you can create a regulatory framework and a committee that can deal with research misconduct in all disciplines.

The differences in practice across fields that might be relevant in the assessment of whether or not certain behaviour can be classified as fabrication, falsification or plagiarism within a specific discipline can be handled through other means of support for the committee, e.g. external expert assistance.

3 Biography
Mathias Willumsen has a Master of Laws from the University of Copenhagen and has been working in the field of research integrity for several years. He is currently employed in the office of legal affairs at the Danish Agency for Science and Higher Education – an Agency under the Danish Ministry of Higher Education and Science. This office is tasked with the national policy making on research integrity and the secretariat for the Danish Committee on Research Misconduct is placed here as well.
Mathias took part in drafting the Danish Code of Conduct for Research Integrity (published 2014) and has participated in various international fora on the subject (SEWGRI, ENRIO, EU's work on RI, etc.). In 2016 he was involved in a review of the Danish legal setup for handling research misconduct and questionable research practice resulting in new legislation being put before the Danish Parliament in January 2017. Mathias was responsible for drafting the proposal for the new Danish law titled ‘Research Misconduct etc. Act’ which came into effect on 1 July 2017.

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References and relevant links


2) Information on the expert committee tasked with the review of the Danish system: [https://ufm.dk/forskning-og-innovation/rad-og-udvalg/andre-udvalg-og-fonde/ekspertudvalg-vedr-uvvu](https://ufm.dk/forskning-og-innovation/rad-og-udvalg/andre-udvalg-og-fonde/ekspertudvalg-vedr-uvvu) (ONLY IN DANISH)


5) The Danish Research Misconduct etc. Act: [https://www.retsinformation.dk/Forms/R0710.aspx?id=188780](https://www.retsinformation.dk/Forms/R0710.aspx?id=188780) (ONLY IN DANISH – a translation will be available shortly on the website of the DCRM)