

**ANNUAL REPORT 2006**  
**THE DANISH COMMITTEES**  
**ON SCIENTIFIC DISHONESTY**

*Danish Agency for Science, Technology and Innovation*  
*November 2007*



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# CONTENTS

## PAGE 3:

### **PREFACE**

*By Poul Lodberg, Chairman of DCSD*

## PAGE 7: CHAPTER 1

### **CASES CONSIDERED IN 2006**

*By Annette Rasmussen and  
Cecilie Dickmeiss*

## PAGE 17: CHAPTER 2

### **SCIENTIFIC DISHONESTY AND RESEARCH ETHICS IN NORWAY**

*By Matthias Kaiser*

## PAGE 23: CHAPTER 2

### **TOWARDS INTERNATIONAL STANDARDS OF INTEGRITY IN RESEARCH**

*By Vagn Lundsgaard Hansen*

## PAGE 29:

### **APPENDICES**

*Executive Order on the Danish Committees on Scientific Dishonesty  
(No. 668 of 28 June 2005)*

*Extracts from the Danish Act on the Research Advisory System etc.  
(Act No. 405 of 28 May 2003 with such amendments as follow from  
Act No. 418 of 8 May 2006)*

*Rules of Procedure for the Danish Committees on Scientific Dishonesty*

*Members and alternates of the Danish Committees on Scientific  
Dishonesty*

# **PREFACE**

*By Poul Lodberg,  
High Court Judge  
Chairman of DCSD*

The Danish Committees on Scientific Dishonesty (DCSD) herewith submit their Annual Report for 2006

In 2006 DCSD completed ten cases, four of which were considered by the Committee on Scientific Dishonesty for Research in Cultural and Social Science (UKSF) . Three of the cases were considered by the Committee on Scientific Dishonesty for Research in Natural, Technological and Production Science (UNTPF) , with two cases being considered by the Committee on Scientific Dishonesty for Research in Health and Medical Science (USF). One of the cases (Case No. 9) was rejected for consideration by DCSD, since it concerned rejection of support for a project that does not count as a matter for inclusion within DCSD's jurisdiction.

Following preliminary consideration, some cases were dismissed. These cases were dismissed on the following basis:

- Lack of party status. (DCSD found no reason to continue its consideration of its own accord).
- The particulars being appealed were not covered by the concept of "research" in the sense of the Executive Order.
- An in-depth examination of the case would be too extensive and require too many resources in relation to the importance of the case.
- Some factors involved had no bearing on scientific work and had thus not been perpetrated "during research".
- Dismissal of resumption of cases previously ruled on.
- Some copyright issue not covered by DCSD's competence was involved.

- 1) *Formerly the Committee for Social Science and the Humanities.*
- 2) *Formerly the Committee on Scientific Dishonesty in Natural Science, Agricultural & Veterinary Science and Technical Science.*

In a single case (Case No. 2) DCSD declared misconduct. The case was about plagiarism.

2006 saw the arrival of a further six cases. The cases had not been finalized by the turn of the year 2006/2007.

Chapter 1 of the Annual Report includes a review of the cases DCSD considered in 2006.

In October 2006 DCSD was given new rules of procedure. These rules have been reprinted as an appendix.

Two articles have been printed in Chapter 2 of the Annual Report. One article, "Scientific dishonesty and research ethics in Norway", has been written by Matthias Kaiser, Secretariat Director of the *National Committee for Research Ethics in Science and Technology (NENT)* in Norway. The second article, "Towards international standards of integrity in research", has been written by Professor Vagn Lundsgaard Hansen of the Technical University of Denmark (DTU), who is a member of DCSD's Committee on Research in Natural, Technological and Production Science.

I thank DCSD's members, alternates and secretariat for their excellent collaboration in 2006.

A handwritten signature in black ink, appearing to read 'Poul Lodberg', with a large, sweeping flourish at the end.

**Poul Lodberg**  
High Court Judge  
Chairman of DCSD



# **CASES**

## **CONSIDERED IN 2006**

*By Annette Rasmussen, LL.M.,  
Head of Section  
and Cecilie Dickmeiss, LL.M.,  
Head of Section*

## CASES FINALIZED IN 2006

### *Completed cases from previous years*

*All completed cases have been considered in accordance with Danish Executive Order No. 668 of 28 June 2005 on the Danish Committees on Scientific Dishonesty*

#### **Case No. 1**

*Case No. 1 in the 2006 AR  
(Case No. 8 in the 2005 AR)*

**1** A person contacted DCSD in March 2005, since it was his view that a research institution had acted in a scientifically dishonest fashion. The research institution had published a report without, for one thing, being able to present the requisite documentation for the research data. Furthermore, it was the Complainant's view that the report contained an undue violation of an insufficiently depersonalized individual. The research institution in question informed DCSD that the report was a collection of experiences requested by a ministry, for which reason the report was not supposed to meet the academic requirements of documentation and theory-relating made of research reports proper. On this point the Complainant noted that there was nothing in the project description to indicate that this was not a proper scientific study, with original information collected by means of an accepted scientific method. To this the research institution replied that the contents of the project were continuously adjusted along the way, in part when the project's original researcher found work elsewhere. These adjustments had been continuously discussed with the ministry, as a result of which the project turned into a fact-finding assignment.

The case was considered by the Committee on Scientific Dishonesty for Research in Cultural and Social Science (UKSF). There was some dissension among the members of the Committee.

A majority of the members of the Committee found that the report was not research, as it was descriptive and took the nature of a fact-finding assignment with the aim of collecting and disseminating experience. In addition, the majority found that the institution's disclosure about the project having been adjusted along the way had to be taken as a basis. Finally, the majority found that the preface to the report lent credence to its characterization as a fact-finding assignment.

A minority of the members of the Committee found that there was sufficient basis for establishing that research was involved. They emphasized that the report was part of a series of publications from the institution, and that the contract between the institution and the ministry indicated that the report was intended as research – before the event, at any rate. Finally, the minority attached importance to the fact that the report contained a methodology section.

Decisions on the Committee are made by a simple majority vote, cf. Section 9, subs. 3 of the Executive Order. Since a majority of the members of the Committee did not consider that the report could be regarded as research, cf. Section 4, subs. 3, item 1, of the Executive Order, cf. Section 1, item 2, the case fell outside the Committee's competence and was therefore dismissed.

**2** An editor on a Danish journal contacted DCSD in May 2005, being of the opinion that a named person had acted in a scientifically dishonest fashion. The person had submitted an article to the journal. In the view of the journal's assessor the article was an abridged and directly translated version of an article previously published abroad and compiled by two foreign researchers.

The Defendant told DCSD that it was not her intention to have plagiarized the article. She stated that the article took the form of a review article. Furthermore, she stated that the two foreign authors realized she was writing the article for the Danish journal, but did not wish to be cited as co-authors as they did not understand Danish. The Danish journal editor stated that the Defendant had signed a declaration saying that the article was her own work. The editor went on to state that he had contacted one of the two foreign authors. The author explained that he was aware that the Defendant was in the process of writing a review article, but he had not been told that she had translated the article into Danish.

The case was considered by DCSD's Committee for Health and Medical Science (USF).

From the Defendant's article it appears that the work was funded by a public foundation abroad and conducted at a foreign university. Thus, since the article had been both publicly funded and conducted at a public institution, DCSD found that the case was covered by DCSD's competence.

DCSD found that the case was covered by Section 1, subs. 4, items 1 and 4 of the Executive Order by virtue of the Defendant having requested publication of the article in a Danish journal.

In the case the Committee stressed that, when submitting the manuscript to the journal, the Defendant had signed an authors' declaration, in which she declared that the work presented in the manuscript had not been published elsewhere, either in part or in full. It further emerged from the authors' declaration that the Defendant was supposed to cite the reference if the work was a secondary publication of a work already published. No reference was cited on the declaration.

The Committee did not find that the two foreign authors' awareness of the Defendant's work on the article had any bearing on their assessment of the case, since external parties such as the journal and its readers (assuming the article was featured) should be able to trust in the work being original unless otherwise specified in the authors' declaration.

## **Case No. 2**

*Case No. 2 in the 2006 AR  
(Case No. 9 in the 2005 AR)*

In August 2006 the Committee stated that, having sent the article in to the journal, the Defendant had acted in a scientifically dishonest fashion by deliberately plagiarizing the two foreign authors' article, which resulted in an unjustifiable misrepresentation of the Defendant's own scientific achievement, cf. Section 2, item 5 of the Executive Order.

**Case No. 3**

*Case No. 3 in the 2006 AR  
(Case No. 10 in the 2005 AR)*

**3** In April 2005 a foreign researcher approached DCSD. The researcher stated that during her appointment on a Danish-financed project abroad from 2000 to 2002 she had been witness to various instances of scientific dishonesty. She had complained about these instances to the project officers in charge, whereupon she had been dismissed.

The case was considered by DCSD's Committee on Research in Natural, Technological and Production Science (UNTPF). After a comprehensive and protracted hearing process, the Committee was able to ascertain a lack of consensus between the parties over the actual facts of the case and about the circumstances in general.

The Committee stated in May 2006 that the complexity of the case, compared with the fact that the case concerned events that had taken place abroad several years previously, meant that an in-depth investigation of the case would be too far-reaching and resource-consuming in relation to the importance of the case. The case was therefore dismissed in pursuance of Section 4, subs. 3, item 3 of the Executive Order.

**Case No. 4**

*Case No. 4 in the 2006 AR  
(Case No. 11 in the 2005 AR)*

**4** In September 2005 a person contacted DCSD with information that two named individuals had acted in a scientifically dishonest fashion in two publications in their description of the disease fibromyalgia.

The case was considered by the Committee on Scientific Dishonesty for Research in Health and Medical Science (USF).

The Committee did not find reason to take up the case of its own accord pursuant to Section 1, subs. 2 of the Executive Order, as the two objects of the complaint could not be regarded as research.

The contents of the first defendant's publication took the nature of a debate book. It had not been subjected to any peer or similar review that might indicate research was involved. Moreover, the first defendant had admitted to the Committee that her statements were not based on scientific studies but took the nature purely of a contribution to the debate.

The second defendant has been brought before the Committee, as the Complainant felt that the Defendant displayed scientific dishonesty by diagnosing and treating patients in accordance with a specific model, and by instructing other doctors in accordance with that model. Consequently, the Committee found that the reported case did not, in isolation, hinge on the

specific model as a publication. In order to have any basis for taking a position on the case, the Committee considered it necessary for the specific model to be able to be regarded as a publication. In their concerted assessment, the Committee did not consider that the specific model could be regarded as research. There was consensus on the Committee that the model was a direction as to how to treat a stated patient group. The model was a further training programme for doctors and dealt not only with the disease specified but also with other disorders.

The Committee found this to be a case of professional conflict between the Complainant and the two defendants. The Committee declined to consider the case in pursuance of Section 4, subs. 3, item 1, cf. Section 1, subs. 1 of the Executive Order, as no research was involved on the part of either defendant.

**5** In September 2005 DCSD received a complaint about different research activities connected with a Danish county authority. It was the Complainant's view that the purpose of the research was to have a natural area designated an EU habitat area. The research showed that a particular species of animal lived in the relevant county, which, in the Complainant's view, was scientifically dishonest. The case was considered by the Committee on Scientific Dishonesty for Research in Natural, Technological and Production Science (UNTPF).

The Committee did not consider the nature of the case such as to provide any basis for taking it up of its own accord under Section 4, subs. 2 of the Executive Order. The case was not deemed to be of social interest or importance to the health of humans or animals.

The Committee did not find that the Complainant or the Defendant could be considered parties in the sense of the Danish Public Administration Act, as there was no evidence of the requisite essential and individual interest in the outcome of the case. The Complainant's and the institution's interest in the species and in the research into it did not provide sufficient basis for party status in relation to the people and publications targeted by the complaint. The Committee therefore dismissed the case pursuant to Section 4, subs. 1 of the Executive Order.

**6** In October 2005 a researcher contacted DCSD with a request for DCSD to undertake an evaluation of whether it was scientifically dishonest of a research institution to have placed a publication on its homepage without the researcher's consent, making it look from the homepage as if the publication came from the research institution in question.

The research institution had not obtained the consent of the researcher beforehand to post the publication on the webpage. Among several other

#### **Case No. 5**

*Case No. 5 in the 2006 AR  
(Case No. 12 in the 2005 AR)*

#### **Case No. 6**

*Case No. 6 in the 2006 AR  
(Case No. 13 in the 2005 AR)*

contributors, the research institution had made a financial contribution to the preparation of the publication. In addition, the publication could be accessed via the webpage by clicking on "publications from (the relevant research institution)". The Complainant was still listed as the principal author of the publication on the institution's homepage.

The case was considered by the Committee on Scientific Dishonesty for Research in Cultural and Social Science (UKSF). The Committee found that there was a copyright issue at stake. DCSD dismissed the case, as DCSD did not have the competence to deal with copyright-related cases, cf. the Executive Order, Section 4, subs. 3, items 1 and 2. Furthermore, DCSD considered it obvious that there could be no question of scientific dishonesty on the part of the research institution. DCSD emphasized that it was not a matter of plagiarism or inappropriate crediting of the authorial role, cf. Section 2 of the Executive Order, since the Complainant was still cited as principal author on the research institution's homepage.

### **Case No. 7**

*Case No. 7 in the 2006 AR*

*(Case No. 2 in the 2005 AR)*

**7** At the end of December 2005 a researcher approached DCSD with a view to having his case reopened. The case had previously been heard on the Committee for Social Science and the Humanities (USHF).

In November 2004 DCSD had received an enquiry from the Complainant, on the grounds of a proposal for an article he had sent to the editor-in-chief of a Danish newspaper. The editorial section had notified him that the article would not be published in the newspaper until the case had been tried in front of a broader expert committee. The case concerned alleged scientific dishonesty in the content (translations, quotations) of a named person's master's thesis and the thesis supervisor's assessment of the same.

In February 2005 the Committee declined to consider the complaint, since it could only be deemed improbable a priori that there was any scientific dishonesty. As regards the complaint about the thesis supervisor, the Committee found that the circumstances were not covered by DCSD's competence.

In December 2005 the Complainant asked DCSD to resume its treatment of the case. To support his request, the Complainant now referred to an application which the Defendant had submitted in September 2005, complete with appendices, to one of the state-funded Danish research councils.

In April 2006 the Committee pronounced that the previous complaint from November 2004 was deemed to have been finalized in the form of the ruling given in February 2005. DCSD therefore regarded the Complainant's enquiry in December 2005 as a new complaint. The Committee did not find that the Complainant could be considered a party to the case against the two defendants, cf. Section 4, subs. 1 of the Executive Order. The Committee had thus attached importance to the Complainant having no link with the case

other than his interest in conditions in a particular country such that the interest could be said to be essential and individual. More particularly, the Complainant was not affected personally by the research targeted by the complaint.

DCSD did not consider it was able to take up the case of its own accord under Section 4, subs. 2 of the Executive Order. Stress was placed on the letter the Complainant submitted in December 2005. From that letter no information had emerged to provide a basis for justified assumption of scientific dishonesty, on the part of either the Defendant or the thesis supervisor.

**8** In April 2006 a person contacted DCSD, being of the opinion that a named researcher had acted in a scientifically dishonest fashion by using a particular scientific title. The case was considered by the Committee on Scientific Dishonesty for Research in Natural, Technological and Production Science (UNTPF). The Committee did not find that the case involved possible scientific dishonesty committed in a context of research. The Committee emphasized that the material available did not show that the allegedly incorrect title had been used in connection with the Defendant's preparation of scientific products. It was not, therefore, a question of a matter committed in research, for which reason the Committee was unable to consider the case, cf. Section 1 of the Executive Order. The complaint was therefore rejected.

**Case No. 8**

**9** In July 2006 a person approached DCSD to report a named agency and a named employee for scientific dishonesty, having received a rejection for support for a project. Section 2 of the Executive Order defines the concept of scientific dishonesty. Scientific dishonesty is understood to mean intentional or grossly negligent conduct in the form of falsification, plagiarism, concealment, non-disclosure or suchlike, bringing about undue misrepresentation of one's own scientific efforts and/or scientific results. The clause enumerates a number of examples of scientific dishonesty. The fact that a complainant does not receive support for a project is not a consideration that falls within DCSD's jurisdiction. The complaint was therefore rejected.

**Case No. 9**

**10** The case was originally brought before DCSD in August 2004 and finalized in August 2005. The Complainant filed against a public authority that had published two reports. Against his will and without any prior opportunity to state his case, the Complainant had been ranked as first author of the reports, which were publicized after the Complainant had vacated the post. Besides that, a wrong measuring method had been given in one report.

**Case No. 10**

The case had been considered on the Committee for Natural Science, Agricultural & Veterinary Science and Technical Science (UNJTTF). In August 2005 the Committee stated that the Complainant ought to have had the reports submitted prior to publication. The Committee, however, did not find that the matters complained of could be characterized as scientific dishonesty. Nor, incidentally, did the Committee feel that it could be substantiated that indicating a wrong measurement method had had any bearing on the scientific message underlying the report that had purportedly indicated incorrect measurement. In September 2005 the Complainant, in a letter to DCSD, expressed his dissatisfaction with the decision.

At the end of September 2006 DCSD received a letter from the Danish Parliamentary Ombudsman. The Ombudsman forwarded a letter from August 2006 from the Complainant, as well as a copy of the Ombudsman's letter to the Complainant from September 2006. It was apparent from the case that the Complainant, in his letter of September 2005 to DCSD, had expressed some dissatisfaction with the decision. It further emerged from the case that the Complainant had subsequently received no reply from DCSD.

After receiving the Complainant's letter of September 2005, DCSD had not judged it to be a reflection of a request to have the case resumed. This was supported by the fact that the Complainant did not press for a reply.

In October 2006 DCSD apologized to the Complainant that there had been no response to the Complainant's letter from September 2005, as this might then have clarified whether the Complainant wished DCSD to revisit the case. In October 2006 DCSD did not find that there was any basis for re-opening the case. DCSD referred to the fact that the Complainant's letters, from September 2005 and August 2006, respectively, did not in DCSD's view contain fresh information that might supposedly have led to a different case outcome. In its ruling of August 2005 DCSD had purely taken a stance on the matters covered by the complaint, i.e. the two reports. The case was considered in accordance with Danish Executive Order No. 993 of 15 December 1998 on the Danish Committees on Scientific Dishonesty. The Executive Order did not authorize DCSD to take up other complaints or grievances for consideration of its own accord. In the ruling of August 2005 DCSD had voiced criticism that the Complainant had originally presented no draft of the reports prior to publication. DCSD did not find that any scientific dishonesty was involved, however, and DCSD did not have the competence to order the authority to change the acknowledgment of authorship.

With reference to the ruling from August 2005, DCSD declined in October 2006 to resume the case.

## **Incomplete cases in 2006**

**11** In March 2006 DCSD received a complaint from a professor, complaining that a colleague had substituted fictitious data for data during his work at a laboratory. The Defendant had since applied for and obtained another appointment with a private company.

**Case No. 11**

*The case had not been finalized by the end of 2006.*

**12** In March 2006 a named person approached DCSD with a complaint on behalf of a pharmaceutical company. The Complainant informed us that a Danish trade-union's indemnity insurance provider had, in his opinion, acted in a scientifically dishonest fashion by concluding in an annual report that a medicinal product in common use was toxic and that use of the drug should be avoided for the purposes of a specific therapy. The Complainant further stated that a named researcher had, in the view of the Complainant, acted in a scientifically dishonest fashion by concluding in an article in a Danish journal that a particular type of damage which can occur in connection with a particular type of therapy was perceived as being caused by the drugs detailed.

**Case No. 12**

*The case had not been finalized by the end of 2006.*

**13** In June 2006 DCSD received an enquiry from a person wishing to be cleared of allegations of scientific dishonesty put forward by an adjudicative committee in connection with its assessment of his PhD dissertation.

**Case No. 13**

*The case had not been finalized by the end of 2006.*

**14** In August 2006 a person complained to DCSD, as a named person had written an article in a journal which, in the view of the Complainant, had been copied from her dissertation. The Complainant felt that the Defendant had not made reference to her dissertation and that he was representing the content of the article as his own. The Defendant stated that it was not a case of plagiarization, as the information he had used in the article was taken from practice in a particular field, and was otherwise generally available in other well-known works. The Defendant's opinion was such that the information he had used was not the result of the Complainant's independent research work.

**Case No. 14**

*The case had not been finalized by the end of 2006.*

**Case No. 15**

**15** A person contacted DCSD in September 2006, wishing to be cleared of allegations of scientific dishonesty which had been proffered in an official return report.

In DCSD's terms for considering the case, it was stressed that DCSD is not an appeal body for the university.

*The case had not been finalized by the end of 2006.*

**Case No. 16**

**16** In October 2006 DCSD received an enquiry from a citizen, stating that in a brochure published by a health-science association there was incorrect information about the therapeutic options available for an illness.

*The case had not been finalized by the end of 2006.*

# **SCIENTIFIC DISHONESTY AND RESEARCH ETHICS IN NORWAY**

*By Matthias Kaiser*

*Secretariat Director of the Norwegian National Committee  
for Research Ethics in Science and Technology,  
NENT, [www.ethicsom.no](http://www.ethicsom.no)*

By Matthias Kaiser,  
Secretariat Director of  
the Norwegian National  
Committee for Research  
Ethics in Science and  
Technology, NENT,  
[www.ethicsom.no](http://www.ethicsom.no)

## SCIENTIFIC DISHONESTY AND RESEARCH ETHICS IN NORWAY

The news about research fraud in Norway in January 2006 came like a bombshell. Jon Sudbø, a researcher at the Norwegian Radium Hospital-University Hospital in Oslo was suspected of having fabricated data that formed the basis for a publication in the acclaimed medical journal *The Lancet*. This emerged just a few weeks after the whole world had been following the scandal surrounding the Korean stem cell researcher Woo-Suk Hwang. Most of us are more readily able to accept that morals are fragile in "Farawayistan", but whenever we are confronted with violations and immorality amongst our own ranks, the threat becomes palpable and we suddenly find ourselves forced to act. And here research places 'fudging' on a par with, say, doping in elite sport. What stings most, perhaps, is the damage to the image in arenas of publicity. Questions like "Can we still rely on research?" crop up, and for many researchers it is extremely irritating that the legitimacy of even raising this question can no longer be swept aside just like that. Researchers must be held accountable for the way quality assurance and research ethics are actually vouchsafed in the research community.

The politicians were quick off the mark too. The press called for political action, and the Norwegian Minister of Education – a new coinage, linguistically, in the political landscape of Norway, incidentally – was pleased to be able to report that his department had a draft bill on research ethics almost ready and that the aim was to pass the bill before Parliament took its summer break. The law was enacted in June 2006, coming into effect from 1 July 2007. The new Act led, amongst other things, to the research ethics committee system being put on the statute books in Norway and a national investigative committee being set up to look into research fraud. What the minister did not mention was that the draft had a long and difficult previous history, accompanied by debate and disagreement all along the way.

We on the research ethics committees in Norway have repeatedly looked to Denmark when it came to raising questions of dishonesty in research. The 1992 report *Scientific Dishonesty & Good Scientific Practice* (D. Andersen, L. Attrup, N. Axelsen & P. Riis) was read with great interest and gave us a Nordic/European point of reference for our discussions. It was important to tease out the problem from the North American slant in which it was normally viewed following the publication of William Broad & Nicholas Wade's book *Betrayers of the Truth* (1982) and after the so-called "Baltimore Scandal", which lasted from 1986 to 1996.

In 1996 we conducted an empirical study into fraud in research, based on Norwegian data from researchers in the natural and social science disciplines. The study suffered from a low response rate (37%), but conversely it showed a surprisingly great deal of self-reporting by researchers who admitted to having

committed dishonest or research-ethical irregularities. When the study was publicized in 1997, it received widespread media coverage, but also a great deal of criticism and abuse from researchers or research administrators. We were accused of painting a distorted picture of research and of sending wrong signals to the public, particularly at a time when research was in need of more public support – and grants. But the Government's research report entitled "Research at the Crossroads" (1998-1999; St meld (White Paper) no. 39) said that investigations had also been conducted in Norway with regard to scientific dishonesty, and furthermore: "It has been demonstrated that irregular research practice takes place in all specialist fields, not just within medicine, the area previously most under the spotlight. Probability also suggests that the number of cases of dishonesty is no less substantial in Norway than in other countries. There is reason to take this seriously, therefore, and to have the readiness and apparatus in place to deal with cases" (p. 115).

In 2001 a recommendation was made available to the Ministry, penned by a broadly mixed working party and administered by the Research Council of Norway, to set up an investigative committee for scientific dishonesty covering all specialist fields. The Government followed up with a consultative paper to introduce a law on research ethics in 2004. One of the things that made matters difficult was the Danish Lomborg Case, which fuelled debate in Norwegian research circles in 2003. I myself had quickly gone public with positive press about DCSD's "judgment". But in Norway, as in other countries, there were quite a number of researchers and journalists critical of what they perceived as the illicit involvement of research ethics and attempts to limit freedom of speech. The conflict ran deep, even among those active in the field of research ethics. The question of what constitutes scientific dishonesty was fiercely debated, partly with the participation of Danish experts. Against that background a number of researchers were critical of additional research ethics bodies.

The debate was made none the easier when a public committee ("The Nylen Committee"; Norwegian Official Report (NOU) 2005:1 "Good Research – Better Health"), formed to evaluate health research in Norway, proposed creating a new law on health research, embodying the medical research ethics committee system as a central and key part, while simultaneously divorced from the rest of the research ethics system. This ran counter to the proposal regarding the bill on research ethics. This tangled web was solved by the Sudbø Case, of all things, thereby galvanizing political bodies, which now assigned priority to the work on research ethics.

In the wake of the Sudbø Case, attention was drawn to the practice and guidelines concerning co-authorship. This issue is topical not merely in medicine but in a number of natural and social sciences too. The national research ethics committees organized meetings on this topic, it was discussed in the daily press, and the Committees spoke their minds on a specific case at

the University of Tromsø. There is unequal practice governing co-authorship in the various specialist fields. In some fields it is customary for supervisors or project leaders and/or heads of department to be listed as co-authors automatically. The challenge, of course, is not to restrict scope for co-authorship, but to render all co-authors answerable for their hands-on contributions to the publication in hand and to exclude out-and-out honorary authorship. The Vancouver rules provide clear-cut criteria for authorship and it is to be hoped that they will gradually be implemented in more journals and disciplines.

With its new Act on Research Ethics, Norway will have a national investigative committee for cases of dishonesty that the institutions themselves are not capable of rectifying. The Act's definition of dishonest research is: "Scientific dishonesty shall mean falsification, fabrication, plagiarism and other serious violations of good scientific/academic practice, committed intentionally or with gross negligence in the planning, implementation or reporting of research." The investigative committee will be attached to the secretariat at the Research Ethics Committees. The Ministry of Education is the appellate authority as regards consideration of cases by the Investigative Committee and in such cases will set up ad hoc committees. At the same time, the existing research ethics committees will be given responsibility for preventive work. The Committees are planning an annual research ethics seminar that will appeal to supervisors and project leaders. The universities and other research institutions will offer teaching on research ethics.

The debate on research ethics and dishonesty came to Norway in the nick of time. As early as the late summer of 2006 it became known that a professor with a secondary post at the Centre for Development and the Environment at the University of Oslo (UoO) and a principal position at the Norwegian University of Life Sciences (UMB) was under suspicion of research fraud. Getting to grips with the case, communicating with one another about it and making their suspicions public turned out to take a long time for the institutions involved. The case is still under consideration.

Dishonest research in the sense of data fabrication, falsification or plagiarism very seldom occurs. Nevertheless, when it does, or when there is justified suspicion of such things, it is important for such cases to be handled in an orderly, competent and confidence-inspiring manner. At the same time, it is a challenge to research ethics that a great deal of the research-ethical irregularities occur in the grey zone between dishonesty and poor research. In an age when the pressure to secure fast research results and high-impact factor international publishing is growing, it is important to disseminate standards of good research practice and research-ethical guidelines for researchers, particularly the junior ones in the discipline. Inter alia, NENT has just adopted a set of its own new research-ethical guidelines for natural science and technological research. NESH, NENT's sister committee in the social sciences

and humanities, has enjoyed a positive experience with its guidelines for a long time now.

The time is now at hand to commit to an international exchange of experience and assess the scope for harmonization. All research is international and research ethics must reflect that. With the experience gathered in recent years and with its new Act on Research Ethics, Norway is poised to take an active part in the international debate on research ethics and dishonest research.

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# **TOWARDS INTERNATIONAL STANDARDS OF INTEGRITY IN RESEARCH**

*By Professor Vagn Lundsgaard Hansen,  
Technical University of Denmark (DTU)*

By Professor Vagn  
Lundsgaard Hansen,  
Technical University of  
Denmark (DTU)

## **TOWARDS INTERNATIONAL STANDARDS OF INTEGRITY IN RESEARCH**

### **1. INTRODUCTION**

In the wake of a number of serious cases of scientific dishonesty in countries with highly disparate cultures, considerable international focus has alighted on honesty in science in recent years [1]. The German-born physicist Jan Hendrik Schön, who had been proclaimed a potential Nobel Prize winner in physics, was dismissed from his post in the USA in 2002, when falsifications were found in various of his scientific articles; the American physician Eric T. Poehlman engineered research data in applications to foundations and trusts to such an extent that he was sentenced to a term of actual imprisonment in 2005; the world-renowned South Korean stem cell researcher Woo-Suk Hwang was revealed in November 2005 to have falsified many of his cloning results and dismissed from his post; the Norwegian dentist Jon Sudbø was caught in January 2006 having fabricated a large body of invented patient material and vacated his post at the Radium Hospital in Oslo; and the Japanese professor of biochemistry Akio Sugino was quickly dismissed when research fraud was ascertained in 2006. These sensational cases, together with other embarrassing instances, have not merely aroused disquiet in research circles but have also eaten away at the credibility of research among the population at large and in the political system.

Are they rigging or researching? Quite a lot is now known about this, internationally. The vast majority of researchers are honest and credible, but the international picture also shows that there are bad eggs among researchers of all subjects and all nationalities. With the growing requirements being made of researchers' publications and the intensified competition surrounding research grants, American experts, among others, take the view that such problems are on the increase. Editors of scientific journals, on the other hand, emphasize that sophisticated new electronic search options increase the chances of uncovering plagiarization of texts [2].

Often only the crudest cases of research fraud come to light. Since the minor cases of faltering honesty are those that give rise to most harassment between researchers, and since there is evidence that the gross offences are very often perpetrated by researchers who started off with minor transgressions [3], there is good reason to clamp down on misdemeanours immediately and to contemplate, both nationally and internationally, how best to prevent violations of good scientific conduct.

Cases of dishonest scientific conduct should be treated with a no-nonsense approach by bodies made up of people who understand the researchers' mentality and have profound insight into the research process. Given that all sciences are international ventures these days, it is of mounting importance to reach consensus at international level concerning the overall organization of national and international bodies for dealing with serious cases of fraud in the research process.

## **2. FOCUS ON INTEGRITY IN RESEARCH**

As one of its many activities, the global organization OECD has created a body called *Global Science Forum* to discuss research issues. On a Japanese initiative, Global Science Forum formed a steering group in 2006 to work on a series of fundamental questions relating to honesty in research: What characterizes dishonesty in research and what consequences does it have? What drives researchers to be dishonest? How to safeguard honesty in research? How to treat violations of honesty in research? The steering group has representatives from various OECD countries, including Denmark.

The Japanese initiative undoubtedly needs to be viewed against the backdrop of several unsavoury cases concerning integrity in research in Japan, which had to be handled without access to a formal system for dealing with such matters. Although the tasks were executed swiftly and efficiently – albeit harshly – the Japanese now wish to establish clear international rules governing good conduct in the sciences and proposals for good models of how legal systems can be put in place to deal with cases of violation of good conduct in science.

In collaboration with the Japanese Ministry of Education, Culture, Sports, Science and Technology (MEXT), OECD Global Science Forum held a workshop in February 2007 on integrity in research, planned by the above steering group. The results of the investigations into integrity in research from this workshop will be presented at the international "World Conference on Research Integrity", which will take place in Lisbon in September 2007. Arranged by the *European Science Foundation* in partnership with the *American Office of Research Integrity*, the conference will attract great attention from Portugal, which holds the presidency of the EU at that time. Issues concerning integrity in research are expected to be assigned high priority under the Portuguese EU presidency, and in the relatively short term, therefore, recommendations concerning standards of integrity in research are highly likely to be forthcoming from both OECD and the EU.

The steering group set up by OECD Global Science Forum met for the first time in Paris in April 2006 to draft a programme proposal for a workshop on integrity in research. The proposal was approved and led on to the "Workshop on Best Practices for Ensuring Scientific Integrity and Preventing Misconduct" held in Tokyo on 22-23 February 2007.

The workshop had participants from 23 OECD member states. All 70 or so attendees were specially invited and included research administrators, experts in research ethics and active members of bodies mandated to consider issues of integrity in research. From Denmark, Vagn Lundsgaard Hansen took part as a member of DCSD, and Annette D.N. Rasmussen from DCSD's secretariat at the Danish Agency for Science, Technology and Innovation.

Two major results from the workshop worth mentioning are that there proved to be total agreement that the definition of scientific dishonesty in each country should include at least fabrication, falsification and plagiariza-

tion, as familiar from the US system, and that courses in research ethics should be a compulsory part of all researcher education programmes. The significance of broad-based international endorsement of such principles was repeatedly underscored.

### **3. INDISPUTABLE FORMS OF SCIENTIFIC DISHONESTY**

The relatively narrow definition of scientific dishonesty used in the USA constitutes a collective core of all known national definitions of scientific dishonesty (misconduct). The American definition goes like this:

”Research misconduct *is defined as* fabrication, falsification or plagiarism in proposing, performing or reviewing research, or in reporting research results.

Fabrication is making up data or results, recording them in publications or verbal reports about them.

Falsification is manipulating research materials, equipment or processes, or changing or omitting data or results such that the research is not accurately represented in the research record.

Plagiarism is the appropriation of another person’s ideas, processes, results or words without giving appropriate credit, including those obtained through confidential review of others’ research proposals and manuscripts.

Research misconduct does not include honest error or honest differences of opinion.”

For obvious reasons, the US definition of scientific dishonesty (research misconduct) is often referred to in short as the *FFP definition* (Fabrication, Falsification, Plagiarism).

It is on the cards that there will shortly be international calls at national level to draw up rules of good scientific conduct, which in terms of dishonesty will include the conditions laid down in the FFP definition as a minimum. The definition of scientific dishonesty used by DCSD already satisfies these requirements. It is not inconceivable that the slightly broader Danish definition will inspire other countries that do not yet have a legal system for dealing with violations of integrity in research.

### **4. QUESTIONABLE RESEARCH PRACTICE**

A new concept is making rapid inroads into the description of the shadier aspects of research. From a variety of countries come expressions of concern about an inappropriate and unfortunate kind of scientific behaviour, known in the USA as *questionable research practice*. The concept includes e.g. exaggerations in interpretation of data, overinflated project descriptions in connection with applications to foundations, and hyped-up prior promises and presentation of project results. Questionable research practice is not the same as scientific dishonesty, but it is an important concept to include when considering ways of enhancing integrity in research.

There are several types of questionable research practice in connection with the publication of scientific results. The objectionable habit of slicing joined-up scientific works into little units, so-called 'salami publication', is not dishonesty, but it does pose a threat to academic work and the appropriation of knowledge by making it difficult to trace the origin of ideas and obtain a cohesive picture of new theory formations.

Undisclosed double or even multiple publication of virtually the same article in different scientific journals and convention reports is questionable research practice bordering on scientific dishonesty, because it veils the actual scientific qualifications of researchers in connection with applications for grants and promotions.

Multi-authorial publications, where some of the authors of a publication have not made any essential contribution to the production of the work, or occasionally even none at all, are a serious form of questionable research practice, which can only be deemed dishonest in the case of power-based coercion for unjustified co-authorship. The so-called *Vancouver rules* of good publication ethics, including rules of authorship, formulated by the *International Committee of Medical Journal Editors* [4] are increasingly being viewed as a good model for articulating such rules.

Questionable research practice can be prevented by having junior researchers and junior scientific staff trained in ethical issues relating to their field of research. This has long since been realized at leading universities in the USA, where there are now external demands that courses be offered in research ethics and bodies set up to consider violations of ethical matters at all universities seeking government research grants. In Denmark such courses have already been created and bodies set up to deal with violations of ethical standards at a number of universities. There can scarcely be any doubt that, before long, international recommendations will be forthcoming that courses in research ethics should be offered and ethical committees set up at all universities wishing to have their researcher training programmes accredited.

At an international level, targeted work is ongoing in a number of fora to obtain a description of common standards of good scientific conduct, and taking the initiative from OECD Global Science Forum as a starting point, there are prospects of having international recommendations for a minimum set of rules to regulate matters soon. However, we nurture no illusions about devising a set of rules to cover all forms of scientific conduct common to all nations, although there is agreement that some internationally accepted basic rules will reduce the risk of misunderstandings when researchers from different nations and cultures collaborate in international research consortia. Denmark holds a good position on matters of integrity in research, and many see the Danish system for dealing with violations of scientific practice as a good

## **5. CONCLUSION**

model to emulate. In the international work towards international standards for integrity in research, therefore, Danish points of view get listened to.

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# **APPENDICES**

*Executive Order on the Danish Committees on Scientific Dishonesty  
(No. 668 of 28 June 2005)*

*Extracts from the Danish Act on the Research Advisory System etc.  
(Act No. 405 of 28 May 2003 with such amendments as follow from  
Act No. 418 of 8 May 2006)*

*Rules of Procedure for the Danish Committees on Scientific Dishonesty*

*Members and alternates of the Danish Committees on Scientific  
Dishonesty*

## **EXECUTIVE ORDER NO. 668 OF 28 JUNE 2005**

*Executive Order on the Danish Committees on Scientific Dishonesty. The following provisions are laid down pursuant to section 32(3) and section 33 of the Danish Act No. 405 of 28 May 2003 on Research Advice etc.:*

### **Part 1**

*Purpose, scope etc.*

**1.-(1)** To strengthen the integrity of Danish research the Minister for Science, Technology and Innovation establishes the Committees on Scientific Dishonesty. The Committees may only consider cases of scientific dishonesty important to Danish research.

(2) The Committees shall consist of three committees, which combined cover all areas of scientific research::

- i) the Committee on Scientific Dishonesty for Research in Health and Medical Science;
- ii) the Committee on Scientific Dishonesty for Research in Natural, Technological and Production Science;
- iii) the Committee on Scientific Dishonesty for Research in Cultural and Social Science.

(3) The Committees shall jointly determine the remit of each of the three committees set out in subsection (2) hereof. The demarcation lines shall be specified in the rules of procedure, cf. section 16(1).

(4) The Committees may consider cases where the defendant has received scientific training within the area of research that the scientific product complained about concerns and who

- i) has had the scientific product complained about published in Denmark;
- ii) has prepared the scientific product complained about during his or her employment or commercial activity in Denmark;
- iii) has obtained or applied for a grant from Danish public authorities for the preparation of the scientific product complained about; or
- iv) otherwise has his or her closest connection to Denmark.

5) As regards scientific products prepared under private auspices, any consideration of the case will require that the private business or the like wants to be covered by the Committees' remit or wants to assist in elucidating the case.

**2.-(1)** Scientific dishonesty shall mean intentional or grossly negligent conduct in the form of falsification, plagiarism, non-disclosure or any similar conduct involving undue misrepresentation of a person's own scientific work and/or scientific results. Included hereunder are:

- i) undisclosed fabrication and construction of data or substitution with fictitious data;
- ii) undisclosed selective or surreptitious discarding of a person's own undesired results;
- iii) undisclosed unusual and misleading use of statistical methods;
- iv) undisclosed biased or distorted interpretation of a person's own results and conclusions;
- v) plagiarisation of other persons' results or publications;
- vi) a false credit given to the author or authors, misrepresentation of title or workplace;
- vii) submission of incorrect information about scientific qualifications.

**3.** The Committees shall not be entitled to consider cases involving the validity or truth of scientific theories or cases involving the research quality of a scientific product.

**4.-(1)** The Committees on Scientific Dishonesty shall consider cases brought by a party alleging scientific dishonesty under the Danish Public Administration Act, cf., however, subsection (3). The Committees may also consider cases brought by a party wanting to be cleared of named, anonymous or source-protected allegations of scientific dishonesty provided that the party provides all the necessary information for use in the Committees' consideration of the case, cf. section 12(3).

(2) The Committees may, to a limited extent, consider cases not brought by a party if the cases are of interest to society or of importance to human or animal health and where there is a reasoned assumption of scientific dishonesty.

(3) The Committees may refuse to consider cases where it is found beforehand that:

- i) the case is outside the scope of the remit of the Committees;
- ii) the case must be considered manifestly unfounded;
- iii) the costs of considering the case are out of proportion to its importance.

## **Part 2**

### *Remit*

## **Part 3**

### *Acceptance of cases for consideration*

(4) Cases which are not accepted for consideration by the Committees shall be dismissed not later than three months after the Committees' receipt of the case. In cases accepted for consideration, the Committees shall not later than three months after receipt of the case notify the parties to the case of the expected phases of the case and when a statement is expected to be made, cf. section 13(1).

**5.-(1)** The Committees on Scientific Dishonesty may consider cases involving complaints about individuals or groups of individuals.

(2) In cases involving complaints about groups of individuals, however, the Committees may only use their authority to employ sanctions, cf. section 15(1), if the clarification of the case leads to clarification of who is responsible for the conduct under section 2.

**6.-(1)** The Committees on Scientific Dishonesty may consider cases involving complaints about a written scientific product after the defendant's voluntary handing over thereof, cf. section 1(4).

(2) The Committees may also consider cases involving complaints about an application filed with a view to applying for a grant from public research funds.

#### **Part 4** *Structure*

**7.-(1)** The Committees on Scientific Dishonesty shall have a common chairperson, who shall be a high court judge.

(2) In addition to the chairperson, each Committee shall, in accordance with subsection (1) hereof, consist of six members and the same number of alternates who may only deputise on any member's absence and only for the full consideration of a case. The members shall all be recognised researchers, who between them cover all areas of scientific research. The same shall apply to the alternates.

(3) The chairperson shall be appointed by the Minister for Science, Technology and Innovation. The members and the alternates shall be appointed by the Minister in their personal capacities following a hearing conducted by the Danish Councils for Independent Research. The chairperson, the members and the alternates shall be appointed for a period of four years and shall be eligible for reappointment for a period of no more than two years. If a member or an alternate resigns in an untimely manner, a new member or a new alternate may be appointed for a period of less than four years.

**8.-(1)** The chairperson shall distribute cases for consideration by the three committees, cf. section 1(2).

(2) The individual committees shall decide whether a case is to be accepted for consideration or be dismissed beforehand, cf. section 4(3) and (4).

(3) Where a case is found to concern the remit of more than one committee, the committee to which the scientific product complained about primarily relates may decide that the Committees shall make a joint decision on the case, including making a statement, cf. section 6.

(4) Where the defendant is a group of individuals, cf. section 5(1), the decision under subsection (2) may be made by the committee, to which the scientific product complained about primarily relates. Where such committee cannot be determined, the decision shall be taken by the chairperson.

**9.-(1)** A committee shall form a quorum when the chairperson and four members or an equivalent number of alternates are present, cf. section 7(2).

(2) In cases where several committees make a joint decision, cf. section 8(2), such committees shall only form a quorum if each committee independently meets the requirement set out in subsection (1) hereof.

(3) The Committees shall, to the greatest possible extent, make a unanimous decision. If agreement cannot be reached, any decision shall be passed by an ordinary majority of votes.

(4) The chairperson shall resolve all legal questions and the formulation of a conclusion.

**10.** The parties to a case being considered by the Danish Committees on Scientific Dishonesty shall be entitled to be assisted by assessors.

11.-(1) The Committees on Scientific Dishonesty may establish ad hoc committees without any decision-making authority to assist with the preparation of a case. An ad hoc committee may be composed of some of the Committees' members, their alternates and/or external experts appointed by the Committees after an independent hearing of the parties on the contemplated composition has taken place.

(2) In connection with the preparation of the case, cf. subsection (1) hereof, the ad hoc committees shall prepare a report on the facts of the case. Where external experts have been appointed to the ad hoc committees, an independent hearing of the parties to the case shall be undertaken with respect to the report.

(3) Secretariat services for ad hoc committees shall be provided by the Committees' secretariat in accordance with section 35(2) of the Act.

## **Part 5**

*Distribution of cases,  
presence of a quorum and  
voting*

## **Part 6**

*Consideration of cases*

12.-(1) In connection with the consideration of the case, the Committees on Scientific Dishonesty shall obtain all necessary information in order to be able to make a sufficiently well-informed decision.

(2) For the purpose of elucidating the case, the Committees may obtain information from the defendant on the scientific method used in preparing the scientific product complained about, cf. section 6(1), if such information is not already available to the Committees.

(3) In cases brought by a party with a view to clearing such party, cf. section 4(1), the Committees shall obtain a report in writing from the party unless the Committees find the allegation of the party's scientific dishonesty to be manifestly unfounded.

(4) In cases in which complaints are made about groups of individuals, cf. section 5(2), the Committees may, for the purpose of clarifying the case, obtain information from the defendant about the individual members' contributions to the total scientific product, if such information is not already available to the Committees.

## **Part 7**

### *Conclusion and possible resumption of cases*

**13.-(1)** The Committees on Scientific Dishonesty shall conclude the consideration of a case by making a statement. The statement shall include:

- i) a statement of facts;
- ii) statements from the other parties to the case;
- iii) the Committees' deliberations;
- iv) the Committees' conclusion and, in the event of a dissent, cf. subsection (2), the number of members or their alternates who can accept the conclusion.

(2) In cases where the Committees make their decision by an ordinary majority of votes, cf. section 9(3), each dissenting member or his or her alternate may demand that his or her dissent be mentioned in the statement.

(3) In cases where the Committees expect to criticise the defendant's conduct, cf. section 15, the Committees shall submit a draft statement to such person for hearing.

**14.** The Committees on Scientific Dishonesty may, at the request of a party, resume a case that has been closed if new information is received which, if it had been available during the consideration of the case, might probably have led to a different outcome.

**15.-(1)** In cases where scientific dishonesty is ascertained by the Committees on Scientific Dishonesty, the Committees shall make a statement expressing criticism. At the same time, the Committees may:

- i) inform the defendant's employer if the party in question is employed as a researcher.
- ii) recommend that the scientific project concerned be withdrawn;
- iii) inform the relevant public authority supervising the area;
- iv) make out a police report where a punishable offence is involved;
- v) at the special request of an employing authority, state their views on the degree of scientific dishonesty.

2) In cases under subsection (1) hereof, the Committees shall state their views on the degree of scientific dishonesty ascertained and on its importance to the scientific message in the scientific product concerned.

(3) The Committees may shelve cases under subsection (1) hereof if the Committees find the scientific dishonesty ascertained only to be of little importance to the scientific message in the product.

**16.-(1)** The Committees on Scientific Dishonesty shall draw up rules of procedure to be approved by the Minister for Science, Technology and Innovation.

(2) The Committees shall publish an annual report on their activities. The report shall describe all considered cases of scientific dishonesty in non-personalised form.

**17.** This Executive Order shall come into force on 1 August 2005. At the same time, Executive Order No. 933 of 15 December 1998 on the Committees on Scientific Dishonesty shall be repealed.

Danish Ministry of Science, Technology and Innovation  
28 June 2005

Helge Sander /*Thorikild Meedom*

**Part 8**  
*Sanctions*

**Part 9**  
*Various provisions*

**Part 10**  
*Coming into force etc.*

# EXTRACTS FROM DANISH ACT NO. 405 OF 28 MAY ON THE RESEARCH ADVISORY SYSTEM ETC.

## Part 1

### *Scope of the Act*

**Section 1.** To strengthen the quality, coordination and internationalization of Danish research and the dissemination and application of research results, the Minister for Science, Technology and Innovation establishes the Danish Council for Research Policy, the Danish Councils for Independent Research, the Danish Council for Strategic Research and the Danish Research Coordination Committee.

Subs. 2. To ensure the scientific integrity of Danish research, the Minister for Science, Technology and Innovation establishes the Danish Committees on Scientific Dishonesty, cf. Section 31.

Subs. 3. The main purpose of the Danish Council for Research Policy shall be to provide independent, expert research policy advice to the Minister for Science, Technology and Innovation, the Danish Parliament and the Government. The Council shall have a purely advisory function, cf. Section 3.

Subs. 4. The Danish Councils for Independent Research shall have both a funding function and an advisory function. The main purpose of the Councils shall be to support specific research activities based on the initiatives of the researchers themselves, and to provide scientific research advice in this regard, cf. Sections 7 and 8.

Subs. 5. The Danish Council for Strategic Research shall have both a funding function and an advisory function. The main purpose of the Council shall be to support research within politically prioritized and thematically demarcated areas of research, and to provide scientific research advice in this regard, cf. Sections 17 and 18.

Subs. 6. The Danish Research Coordination Committee shall be responsible for coordinating the public funding function for research, and shall have an advisory function in relation to research training, cf. Sections 25 and 26.

Subs. 7. The Councils and the Committee mentioned in subs. 4-6 in combination shall ensure that all state research grants, with the exception of basic grants associated with particular institutions, are allocated in open competition following scientific assessment of their quality.

## Part 2

### *Definitions*

**Section 2.** For the purposes of this Act,

- 1) Recognized researchers shall mean: persons who have engaged in active scientific research for a number of years who are of at least associate professor or senior research fellow standard.
- 2) Research experts shall mean: persons at PhD level who possess either knowledge or experience of performing research tasks for a number of

years at national or international level, or who have undertaken in-depth research administration, research management, research dissemination or research policy work for an institution, organization or company at managerial level.

...

**Section 31.** The task of the Danish Committees on Scientific Dishonesty is to consider cases involving complaints of scientific dishonesty.

Subs. 2. In the event of their ascertaining evidence of scientific dishonesty in a case, the Committees may:

- 1) Inform the Defendant's employer, if the party in question is employed as a researcher.
- 2) Recommend withdrawal of the scientific project concerned.
- 3) Inform the relevant public authority responsible for the area.
- 4) Make out a police report when a punishable offence is involved.
- 5) At the special request of an appointing authority, state their views on the degree of scientific dishonesty.

Subs. 3. The chairperson shall rule on legal issues, cf. Section 32, subs. 2.

Subs. 4. The Committees shall publish an annual report on their activities.

**Section 32.** The Danish Committees on Scientific Dishonesty shall consist of one or more committees covering all areas of scientific research.

Subs. 2. The chairperson of the Committees must be a high court judge.

Subs. 3. The Minister for Science, Technology and Innovation shall stipulate the number of members. Each member must additionally have a corresponding deputy. The members and deputies must all be recognized researchers, together covering all areas of scientific research, cf. Section 36, subs. 2.

Subs. 4. The chairperson shall be appointed by the Minister for Science, Technology and Innovation. The members and the deputies shall be appointed by the Minister in their personal capacities following a hearing conducted by the Danish Councils for Independent Research. The chairperson, the other members and the deputies shall be appointed for a period of four years. Reappointment may take place for a term of two years. If a member or deputy resigns in an untimely manner, a new member or new deputy may be appointed for a period of less than four years.

Subs. 5. The Committees shall draw up rules of procedure, which shall be subject to the approval of the Minister for Science, Technology and Innovation.

## **Part 7**

### *The Danish Committees on Scientific Dishonesty*

**Section 33.** The Minister for Science, Technology and Innovation may lay down detailed rules governing the activities of the Danish Committees on Scientific Dishonesty.

**Section 34.** The decisions of the Danish Committees on Scientific Dishonesty may not be brought before any other administrative authority.

## **Part 8**

### *Miscellaneous provisions*

**Section 35.** Secretariat services for the Danish Council for Research Policy shall be provided by the Ministry of Science, Technology and Innovation

Subs. 2. Secretariat services for the Danish Councils for Independent Research, the Danish Council for Strategic Research, the Danish Research Coordination Committee and the Danish Committees on Scientific Dishonesty shall be provided by an independent secretariat.

Subs. 3. The Minister for Science, Technology and Innovation or such person as designated by the Minister for the purpose shall supervise the application and legality of grants in connection with the work of the Danish Councils for Independent Research, the Danish Council for Strategic Research and the Danish Research Coordination Committee.

...

**Section 40.** This Act shall be reviewed in the 2007-08 session of the Danish Parliament on the basis of an evaluation of the advice provided by the research advisory system concerning support for research training.

## **Part 9**

### *Coming into force etc*

**Section 41.** This Act shall come into force on 1 January 2004. At the same time, the Act on Research Policy Advice etc., cf. Consolidated Act No. 676 of 19 August 1997, shall be repealed.

Subs. 2. Rules determined in pursuance of the Act on Research Policy Advice etc., cf. Consolidated Act No. 676 of 19 August 1997, shall remain in force until repealed or replaced by rules issued in pursuance of this Act.

# RULES OF PROCEDURE FOR THE DANISH COMMITTEES ON SCIENTIFIC DISHONESTY

The following is stipulated pursuant to Section 16, subs. 1 of Danish Executive Order No. 668 of 28 June 2005 concerning the Danish Committees on Scientific Dishonesty:

**Section 1.** The Danish Committees on Scientific Dishonesty comprise three coordinated committees, jointly covering all fields of scientific research. The Committees have a joint chairperson.

## The Committees – missions and aims

The three committees are:

1. The Committee on Scientific Dishonesty for Research in Health and Medical Science (USF).
2. The Committee on Scientific Dishonesty for Research in Natural, Technological and Production Science (UNTPF).
3. The Committee on Scientific Dishonesty for Research in Cultural and Social Science (UKSF).

Subs. 2. The detailed demarcation between the three committees shall be determined thus:

USF shall consider cases concerning research within human health, including nutritional aspects. The Committee shall consider cases concerning all aspects of both basic scientific and clinical research, including the use of animal models, targeting people's health and human disease.

UNTPF shall consider cases concerning research aimed at basic scientific issues within natural science, computer science and mathematics. The Committee shall further consider cases concerning basic research within technology and production, where the point of departure is an application perspective aimed at solving problems or at new ways of meeting society's needs.

UKSF shall consider cases concerning research within the fields of the humanities and the social sciences. The Committee shall consider cases concerning research within all aspects of history and culture, cognitive disciplines, linguistics and philology, aesthetic disciplines as well as economics, political science, sociology and jurisprudence.

**Section 2.** The Danish Committees on Scientific Dishonesty are mandated to consider cases of scientific dishonesty of significance to Danish research, cf. Section 4, subs. 1 and 2 of the Executive Order.

Subs. 2. The Committees can consider general enquiries, provided that the issue involved is deemed to be of social interest, interest to a wider circle of researchers or to a research environment.

Subs. 3. The Committees shall play an instrumental part in promoting good scientific practice and preventing scientific dishonesty. It will be endeavoured to achieve this goal by disseminating a knowledge of the Committees' rulings and annual report, and by means of teaching and lecturing activities etc.

Subs. 4. At the joint annual meeting, cf. Section 18, the Committees shall discuss initiatives capable of furthering the Committees' cause.

### **Preparation of cases and settlement on individual committees**

**Section 3.** The chairperson shall decide which committee is to consider a particular case. In the event of any queries, the chairperson shall discuss the question with the Committees concerned.

Subs. 2. If a case concerns more than one committee's sphere of competence, the Committee to which the scientific product being complained of primarily belongs can decide that the Committees must make a ruling on the case collectively and issue a joint statement.

Subs. 3. If the Defendant is a group of individuals, in accordance with subs. 2, the ruling can be made by the Committee to which the scientific product being complained of primarily belongs. In the event of queries, the chairperson shall make the ruling.

**Section 4.** The Committees can decline to consider a case if it is deemed beforehand that:

1. The case falls outside the Committees' competence.
2. The complaint may be deemed manifestly baseless.
3. The costs of considering the case are not in reasonable proportion to its significance.

**Section 5.** Cases not taken up for consideration by the Committees shall be dismissed no later than three months after the Committees have received them. In cases accepted for consideration, the Committees shall inform the parties to the case of the anticipated progression and outcome of the case and the anticipated time for a ruling on the case no later than three months after receiving the case.

**Section 6.** If the case is accepted for consideration, it shall be incumbent on the pertinent committee to investigate the complaint and procure all necessary information in order to be able to make a decision on an adequately informed basis.

Subs. 2. Information provided by the parties shall form part of the Committees' investigation and consideration of the case. The parties shall be heard by presenting the opposing party's information and comments.

The hearing procedure shall consist, as a basis, of two written hearings

between the Complainant and the Defendant; however, the scope of the hearing procedure shall be laid down in detail by the Committee following a concrete evaluation.

During the Committee's first hearing of the Defendant, his or her attention shall be drawn to the rules in Section 1, subs. 4 and 5 of the Executive Order.

Subs. 3. In cases where groups of individuals are being complained about, the Committee shall attempt to clarify each individual's contribution to the overall scientific product.

Subs. 4. In cases where a person wishes to be cleared of allegations of having committed scientific dishonesty, the Committee shall obtain a written account from the person in question unless it deems the allegation of scientific dishonesty adduced to be manifestly baseless.

As a prerequisite to considering the case, the Committee may otherwise request the person concerned to surrender all necessary information for use in considering the case. Following a concrete evaluation, the Committee shall decide whether a statement is to be obtained from any person or persons who have adduced allegations of scientific dishonesty.

**Section 7.** The Committee can appoint an ad hoc committee without decision-making authority whose brief is to investigate and prepare the case. An ad hoc committee shall be composed of some of the members of the Committee, their alternates and/or external experts. The parties to the case shall be informed of the ad hoc committee's composition and may produce any comments within a term of two weeks.

Subs. 2. As part of its preparations for the case, the ad hoc committee shall draw up a report on the actual circumstances of the case, which shall be submitted to the Committee. The Committee shall send the report to the parties to the case in order to ensure that any information of a factual nature in the report is correct.

The Committee shall subsequently send any comments the parties have to the ad hoc committee. The ad hoc committee's report, the parties' comments and the ad hoc committee's comments on it shall subsequently be sent to the Committee with a view to producing a ruling on the case.

Subs. 3. The Committees' secretariat shall provide secretariat services for the ad hoc committee.

Subs. 4. It shall otherwise be incumbent on the Committee, as part of its consideration of a case, to procure all necessary information in order to be able to make a decision on an adequately informed basis.

**Section 8.** If the Committee expects to express criticism on the grounds of any scientific dishonesty ascertained, the Committee shall listen to the Defendant's views on a draft of its statement.

**Section 9.** The Committee shall complete its consideration of a case by submitting a statement. Among other things, the statement shall account for:

1. Particulars of the case.
2. Statements from the parties to the case.
3. The Committee's deliberations.
4. The Committee's conclusion and, in the event of dissent, the number of members or alternates who have endorsed the conclusion, as well as any dissenting opinions, cf. Section 17, subs. 3.

**Section 10.** The Committee shall recommend to the parties that a case be dealt with in confidence until such time as a ruling is in place.

Subs. 2. Cases ruled on shall be discussed in the Committees' annual report in depersonalized form.

**Section 11.** The parties to the case may be assisted by advocates.

**Section 12.** Cases shall be decided at a meeting of the Committee, cf. however Section 13, subs. 3.

### **The chairperson's tasks and powers**

**Section 13.** One of the chairperson's tasks is to ensure uniformity of the casework procedure across the Committees.

Subs. 2. If a case will unquestionably have to be dismissed because it falls outside the Committees' competence or because the complaint is manifestly baseless, the chairperson can reject the case on his or her own initiative. The relevant committee shall be informed to this effect.

Subs. 3. The chairperson can determine that a case be resolved by means of a written vote if, taking into consideration the nature of the case, there is deemed to be no need for consideration at a meeting. At any time whatsoever, any member of the Committee can demand that the case be heard at a meeting.

Subs. 4. The chairperson may decide that the parties can be granted an audience with the Committee.

Subs. 5. The chairperson may decide that persons other than the Committees' members, alternates and secretariat are to take part in the joint annual meeting, cf. Section 18.

Subs. 6. The chairperson shall decide whether a request for access to documents can be met. The chairperson can delegate authority to the secretariat.

**Section 14.** The chairperson shall make a ruling in legal questions and on the wording of a conclusion in cases ruled on.

**Section 15.** The Danish Research Agency provides secretariat services for the Committees. The secretariat takes part in committee and ad hoc committee meetings.

Subs. 2. On receiving a complaint, the secretariat acknowledges it by providing particulars of the anticipated case-handling procedure. Wherever possible, the Defendant shall be informed of the complaint within ten days of the complaint being received.

Subs. 3. As soon as possible after receiving a complaint, the secretariat shall present the complaint to the chairperson, who shall decide whether ordinary consideration of the case is to be initiated with a view to treating the complaint on its own merits, or whether there may be a basis for dismissing the complaint out of hand.

Subs. 4. If ordinary consideration of the case is initiated, the secretariat shall send consultation replies and other case-related material to the chairperson on a regular basis. The secretariat shall notify all members and alternates of the complaint received.

Subs. 5. The secretariat shall otherwise assist the chairperson and the Committees in their work, as determined by the chairperson.

## **Acting as secretariat for the Committees**

**Section 16.** It shall be attempted to schedule meetings of the Committees giving at least four weeks' notice. For meetings of the Committees, an agenda with business material shall be sent out with ten days' notice, wherever possible.

## **Meetings of the Committees**

**Section 17.** A committee is quorate when the chairperson and four members or an equivalent number of alternates is present.

Subs. 2. In cases where several committees make a ruling jointly, cf. Section 3, subs. 2, the Committees shall only be quorate if each committee meets the requirement in subs. 1 independently.

Subs. 3. To the greatest extent possible, the Committees shall agree on the ruling they make. If agreement cannot be reached, a ruling shall be made by a simple majority. Any dissenting member or alternate can demand that his or her dissent be indicated in the statement.

**Section 18.** An annual joint meeting shall be held with the attendance of members of the Committees and their alternates. The meeting shall not be public. At the meeting the chairperson shall inform those present of the rulings made on the individual committees during the year. At the meeting a decision can be made on topics of joint interest to the Committees, cf. also in this respect Section 2, subs. 4.

**Section 19.** The Committees' chairperson shall chair the meetings.

Subs. 2. The Committees' meetings shall not be public.

**Section 20.** The secretariat shall minute the resolutions at meetings. The minutes shall be sent out for written approval among those in attendance.

#### **Alternates**

**Section 21.** In the event of a member's absence or disqualification, the chairperson shall designate an alternate, who shall deputize for the duration of the consideration of the case.

Subs. 2. When appointing alternates, it shall be endeavoured to have the Committee provide specialist coverage of the area of scientific research in question, wherever possible.

#### **Ensuring the continuity of the Committees' work**

**Section 22.** Once a committee has completed its consideration of a case, the secretariat shall send a copy of the ruling to all members and alternates on all three committees.

#### **Commencement**

**Section 23.** These rules of procedure shall enter into effect on 15 October 2006.

The Danish Committees on Scientific Dishonesty,  
14 October 2006

Henrik Waaben / Annette D.N. Rasmussen

## MEMBERS AND ALTERNATES OF THE DANISH COMMITTEES ON SCIENTIFIC DISHONESTY

*Poul Lodberg*, High Court Judge  
High Court of Eastern Denmark  
Bredgade 59  
DK-1260 Copenhagen K

**CHAIRMAN**



*Charlotte Bloch*, associate professor  
Department of Sociology, University of Copenhagen  
Postboks 099, Øster Farimagsgade 5  
DK-1014 Copenhagen K

**COMMITTEE FOR  
RESEARCH IN CULTURAL  
AND SOCIAL SCIENCES  
(UKSF)**



*Professor Peter Harder*  
University of Copenhagen, Department of English  
Germanic and Romance Studies  
Njalsgade 128, DK-2300 Copenhagen S



*Professor Jens Mammen, Head of Department*  
University of Aarhus, Department of Psychology, Nobelparken  
Jens Chr. Skous Vej 4  
DK-8000 Aarhus C



*Niels Ploug, Director of Research*  
National Institute of Social Research  
Herluf Trolles Gade 11  
DK-1052 Copenhagen K



*Professor Bjørn Poulsen, DPhil*  
University of Aarhus, Institute of History and Area Studies  
Nordre Ringgade, Bldg. 410  
DK-8000 Aarhus C



*Professor Lise Togeby*  
University of Aarhus, Department of Political Science  
Bartholins Allé, Bldg. 1331  
DK-8000 Aarhus

*Alternates*

*Lise Hannestad*, DPhil, senior associate professor  
University of Aarhus  
Institute of Anthropology, Archaeology and Linguistics  
Nordre Ringgade, Bldg. 1414, DK-8000 Aarhus C

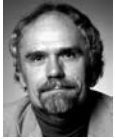
Professor *Hanne Foss Hansen*  
University of Copenhagen, Institute of Political Science  
Øster Farimagsgade 5  
DK-1353 Copenhagen K

Professor *Svend Erik Larsen*, DPhil  
University of Aarhus, Institute of Aesthetic Studies  
Langelandsgades Kaserne, Langelandsgade 139  
DK-8000 Aarhus C

Professor *Michael Møller*  
Copenhagen Business School, Department of Finance  
Solbjerg Plads 3  
DK-2000 Frederiksberg

Professor *Mogens N. Pedersen*  
University of Southern Denmark, Department of Political Science  
Campusvej 55  
DK-5230 Odense M

Professor *Kirsten Weber*  
Roskilde University  
Department of Psychology and Educational Studies  
Universitetsvej 1, Pavillon 10, Postboks 260, DK-4000 Roskilde



Professor *Lars Døvling Andersen*  
Aalborg University, Department of Mathematical Sciences  
Frederik Bajers Vej 7 G  
DK-9220 Aalborg Ø



*Mona Dahms*, associate professor  
Aalborg University  
Department of Development and Planning  
Fibigerstræde 13, DK-9220 Aalborg Ø



Professor *Torben Greve*, DVM, Deputy Rector  
Royal Veterinary and Agricultural University, Rector's Office  
Bülowsvej 17  
DK-1870 Frederiksberg C



Professor *Vagn Lundsgaard Hansen*  
Department of Mathematics  
Technical University of Denmark, Bldg. 303  
DK-2800 Lyngby



*Erik Lundtang Petersen*, Head of Division  
Risø National Laboratory, Wind Energy Department  
Bldg. 125, Postboks 49, Frederiksborgvej 399  
DK-4000 Roskilde



*Hanne N. Rasmussen*, DSc, senior researcher  
Danish Centre for Forest, Landscape and Planning  
Royal Veterinary and Agricultural University  
Hørsholm Kongevej 11, DK-2970 Hørsholm

**COMMITTEE FOR  
RESEARCH IN NATURAL,  
TECHNOLOGICAL AND  
PRODUCTION SCIENCE  
(UNTPF)**

Alternates

Professor *Susanne Bødker*  
University of Aarhus, Department of Computer Science  
Aabogade 34  
DK-8200 Aarhus C

*Jes Fenger*, senior researcher  
Danish National Environmental Research Institute,  
Dept. of Atmospheric Environment  
Frederiksborgvej 399, Box 358, DK-4000 Roskilde

*John Erik Hermansen*, Head of Research  
Danish Institute of Agricultural Sciences, Research Centre Foulum  
Agroecology Research Unit, Postboks 50  
DK-8830 Tjele

*Bodil Korsgaard*, associate professor  
Institute of Biology, University of Southern Denmark  
Campusvej 55  
DK-5230 Odense M

*Jørgen E. Olesen*, senior researcher, Director of Research  
Danish Institute of Agricultural Sciences, Research Centre Foulum  
Department of Crop Physiology and Soil Science  
Postboks 50, DK-8830 Tjele

Professor *Peter Sigmund*  
University of Southern Denmark, Physics Department  
Campusvej 55  
DK-5230 Odense M



Dr *Ulla Feldt-Rasmussen*, MD, consultant  
Rigshospitalet, the National University Hospital  
Department of Medical Endocrinology, section 2132  
Blegdamsvej 9, DK-2100 Copenhagen Ø

**COMMITTEE FOR  
RESEARCH IN HEALTH  
AND MEDICAL SCIENCE  
(USF)**



*Cai Frimodt-Møller*, MD, Chief Executive Consultant  
Erichsen's Private Hospital & Clinic  
Trunnevangen 4B  
DK-2920 Charlottenlund



Professor *Palle Holmstrup*, DDS, PhD  
School of Dentistry, University of Copenhagen  
Nørre Allé 20  
DK-2200 Copenhagen N



*Kirsten Ohm Kyvik*, associate professor  
University of Southern Denmark, Epidemiology  
Faculty of Health Sciences  
J.B. Winsløvs Vej 9 B, DK-5000 Odense C



*Ulf Madsen*, PhD, associate professor  
Department of Medicinal Chemistry  
Danish University of Pharmaceutical Sciences  
Universitetsparken 2, DK-2100 Copenhagen Ø



Dr *Lena Specht*, MD, consultant  
Rigshospitalet, the National University Hospital  
The Finsen Centre, Department of Oncology, section 5073  
Blegdamsvej 9, DK-2100 Copenhagen Ø

Alternates

*Bente Gammelgaard*, PhD, associate professor  
Department of Pharmacy and Analytical Chemistry  
Danish University of Pharmaceutical Sciences  
Universitetsparken 2, DK-2100 Copenhagen Ø

Professor *Albert Gjedde*, MD  
University of Aarhus Hospital  
PET Centre, Bldg. 10 C  
Nørrebrogade 44, DK-8000 Aarhus C

*Anders Johnsen*, DSc, Chief Biochemist  
Rigshospitalet, the National University Hospital  
Department of Clinical Biochemistry, section 3011  
Blegdamsvej 9, DK-2100 Copenhagen Ø

Dr *Elisabeth Mathiesen*, MD, consultant  
Rigshospitalet, the National University Hospital  
Department of Medical Endocrinology  
Blegdamsvej 9, DK-2100 Copenhagen Ø

Dr *Ole Haagen Nielsen*, MD, consultant  
Copenhagen County Hospital in Herlev  
Department of Medical Gastroenterology  
Herlev Ringvej 75, DK-2730 Herlev

Professor *Jens Overgaard*, consultant  
University of Aarhus Hospital  
Experimental Clinical Oncology, Bldg. 5  
Nørrebrogade 44, DK-8000 Aarhus C

## **SECRETARIAT OF THE DANISH COMMITTEES ON SCIENTIFIC DISHONESTY (DCSD)**

*Helle B. Strøm*, Principal Consultant, hbs@fi.dk

*Annette Rasmussen*, Head of Section, anr@fi.dk

till 30 June 2007

*Cecilie Dickmeiss*, Head of Section, cedk@fi.dk

from 1 July 2007

*Heidi Strand*, student assistant, hstr@fi.dk

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Danish Agency for Science, Technology and Innovation

Bredgade 40

DK-1260 Copenhagen K

Denmark

Tel. (+45) 3544 6200

Fax (+45) 3544 6201

fi@fi.dk

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**Danish Agency for Science  
Technology and Innovation**

Ministry of Science  
Technology and Innovation

*Danish Agency for Science, Technology and Innovation*

*Bredgade 40*

*DK-1260 Copenhagen K*

*Tel. (+45) 3544 6200*

*Fax (+45) 3544 6201*

*fi@fi.dk*

*www.fi.dk*