

## SUMMARIES OF RCR FILES INVOLVING A CONFIRMED BREACH

(CLOSED BETWEEN APRIL 2016 AND MARCH 2019)

### FILE 64

*Allegations:* Invalid authorship; inadequate acknowledgement; questionable financial management of funds

*Findings:* R, a supervisor of a doctoral student (C), breached the Institution's integrity policy by failing to obtain consent from all co-authors, including C, before listing them as co-authors on a published article. R was also found to have not adequately acknowledged all contributors to the article. According to the Institution, the breaches were not of a sufficient magnitude to take any administrative or disciplinary action against R, but the Institution issued a reminder to R regarding the applicable research integrity responsibilities.

*Breaches:* Invalid authorship (3.1.1.f); Inadequate acknowledgement (3.1.1.g)

*Institutional Disposition:*

- reminded R to follow appropriate authorship policies.

*Agency Recourse:*

- issued a letter of reprimand to R, emphasizing the importance of obtaining the consent of all authors prior to submitting an article for publication and ensuring that all contributors are appropriately acknowledged.

### FILE 65

*Allegations:* Invalid authorship; plagiarism; dissemination of invalid research results

*Findings:* R, a former post-doctoral research trainee in a faculty member's lab, failed to follow best practices regarding the dissemination of research results by: a) submitting two abstracts without the permission of the project lead and co-author; b) plagiarizing text and research results already obtained and presented by the faculty member; c) not obtaining the faculty member's approval to publish the results obtained in the lab; d) presenting non-reproducible or invalid research data stemming from work done at the Institution; e) listing themselves as being affiliated with the Institution, when, at the time of the submission of the article, R was no longer affiliated with the Institution; f) plagiarizing a figure from a paper published by the faculty member; g) plagiarizing from the faculty member's published article; h) failing to acknowledge the source of funding in a published paper; and i) appropriating a trial that was part of a confidential collaboration with industry.

*Breaches:* Lack of rigour (3.1.1); Invalid authorship (3.1.1.f)

*Institutional Disposition:*

- informed the journals of the authorship issues so that the research record could be corrected; and

- advised R to refrain from taking ownership of the faculty member’s work, from publishing invalid results, and from acknowledging affiliation with the Institution.

*Agency Recourse:*

- declared R ineligible to hold, participate in, or apply for Agency funding as an applicant, co-applicant or participate in any Agency grant application as a collaborator, partner or in any other capacity for a period of five years;
- declared R ineligible to participate in Agency peer review processes for the same five-year period; and
- acknowledged the Institution’s and Complainant’s diligence in this matter.

**FILE 66**

*Allegation:* Data fabrication in two papers

*Findings:* R, a doctoral candidate at the Institution, admitted to deliberately fabricating research results in one published paper (Paper A) and in one paper that was under review by the journal (Paper B). This admission arose after R’s supervisor asked a junior Master’s student to replicate R’s results.

R was unable to replicate results and, feeling the pressure to publish and the fear of failure, decided to fabricate the results in Paper A. R continued this practice with Paper B, as the results in Paper B were based on Paper A. Once R realized that his/her research results were being verified, R voluntarily admitted to the data fabrication and wrote a letter of apology to their supervisor, offering to correct the results.

Following the admission, R’s supervisor immediately implemented a plan to address the situation, which included a risk analysis; a correction of the error; notification to the journal that published Paper A; a report of the breach in accordance with the Institution’s integrity policy; and the installation of special software to ensure version control of codes.

R informed the journal editors of the data fabrication, was allowed to correct the errors in Paper A and submitted an erratum to the journal for consideration. R withdrew Paper B before the review process was completed.

*Breach:* Data fabrication (3.1.1.a)

*Institutional Disposition:*

- expelled R from Institution.

*Agency Recourse:*

- declared R ineligible to hold, participate in, or apply for Agency funding as an applicant, co-applicant or participate in any Agency grant application as a collaborator, partner or in any other capacity for a period of five years; and
- declared R ineligible to participate in Agency peer review processes for the same five-year period; and

- commended R's supervisor for his/her swift and reasonable course of action.

## **FILE 67**

*Allegation:* Misrepresentation in a grant application

*Findings:* R, an experienced faculty member, admitted to deliberately misrepresenting their contribution to the training of highly qualified personnel (HQP) in an Agency grant application.

While R found the online entry of information into the Agency's forms confusing, R's submission of inaccurate information was not deemed to be the result of honest error. This is because R appeared to have admitted to intentionally misrepresenting the information on HQP supervision, the supervisory status of many of the HQP listed could not be verified, and R appeared to have attempted to inflate the quality and variety of supervision.

*Breach:* Misrepresentation in an Agency application or related document (3.1.2.a)

*Institutional Disposition:*

- requested that R withdraw their Agency grant application; and
- terminated R's employment.

*Agency Recourse:*

- declared R ineligible to hold, participate in, or apply for Agency funding as an applicant, co-applicant or participate in any Agency grant application as a collaborator, partner or in any other capacity for a period of two years; and
- declared R ineligible to participate in Agency peer review processes for the same two-year period.

## **FILE 68**

*Allegation:* Mismanagement of Agency funds

*Findings:* An internal audit into the research accounts of two faculty members, R1 and R2, concluded that although it could not find any evidence of intent to perpetrate financial impropriety, R2 was negligent in fulfilling his/her financial responsibilities as a Principal Investigator and did not appropriately manage his/her conflicts of interest. R2 did not properly represent/document an arrangement made with a consultant to subcontract R2's company for work to be done by the consultant. R2 also failed to properly disclose to his/her supervisors any payment to his/her company and did not disclose those payments on any of his/her conflict-of-interest filings.

R2 admitted to not reviewing the financial activity in his/her research accounts but instead relied fully on administrators to manage his/her research accounts. After further inquiry into the examination of the appropriateness of certain payments made by R2, the Institution confirmed that the payments made using Agency funds were entirely appropriate and within the scope of the Agency grant. R2 was therefore not required to repay those amounts.

No unusual activity was identified in R1's research accounts.

*Breaches:* Mismanagement of Agency Grant or Award Funds (3.1.3); Mismanagement of Conflict of Interest (3.1.1.h)

*Institutional Disposition:*

- updated R2's conflict of interest declaration; and
- imposed relevant disciplinary action against R2 to address the issue of financial mismanagement.

*Agency Recourse:*

- withdrew both of R2's Agency applications;
- required R2 to follow financial management and COI training before he/she could re-apply to the Agency;
- required the Institution to demonstrate that R2 had completed the above training before he/she could apply to the Agency in the future; and
- declared R2 ineligible to participate in Agency peer review processes for a period of one year.

## **FILE 69**

*Allegations:* Data manipulation; falsely accused a research assistant of having carried out the manipulation; failure to correct errors once problem was discovered; failure to retain research data to a standard appropriate to the discipline; and impeding an investigation process.

*Findings:* R, an experienced researcher and faculty member affiliated with two institutions, was found to have engaged in serious breaches, including manipulating study data with the intention of supporting the underlying hypothesis of research studies; intentionally manipulating electronic datasets and presenting them as raw data to investigators; falsely accusing a research assistant of having carried out the manipulations; failing to correct the errors once the problems were discovered; sharing manipulated rather than primary data with colleagues; deleting records that were to form part of the Institution's forensic investigation; failing to retain research data to a standard appropriate to the discipline; impeding an institutional investigation; and using falsified results from one study to apply for, obtain and use funding for other studies. R resigned from his/her positions at both Institutions before the investigation was complete.

The research in question involved human participants; however, the Institution in charge of investigating the matter found no evidence that the health of participants was negatively affected. The Institution notified participants by registered letter that they may have received inaccurate information about the research.

*Breaches:* Data falsification (3.1.1.b); Destruction of research records (3.1.1.c); Lack of rigour (3.1.1)

*Institutional Disposition:*

- notified the journal editor of the investigation findings and the need for the article that was published using the manipulated data to be retracted; and
- although the Institution in charge of investigating the matter found no evidence that the health of participants was negatively affected, notified participants by registered letter that they may have received inaccurate information about the research.

*Agency Recourse:*

- declared R permanently ineligible to hold, participate in, or apply for Agency funding or funding from three federal research agencies or any Tri-Agency programs;
- declared R permanently ineligible to participate in Agency peer review processes;
- required R to reimburse all Agency funds spent on the study; and
- publicly disclosed the serious breach.

The Agencies took the above action due to the deliberate and significant nature of the breaches.

**FILE 70**

*Allegation:* Plagiarism in a grant application

*Findings:* R, a former faculty member at the Institution, plagiarized portions of a grant application submitted by another researcher to a non-Canadian funding agency more than 10 years prior. The plagiarized sections included the literature review, the methodology, and the proposal approach sections of the application.

*Breach:* Plagiarism (3.1.1.d)

*Institutional Disposition:*

- none, since R was no longer at the Institution.

*Agency Recourse:*

- declared R ineligible to hold, participate in, or apply for Agency funding as an applicant, co-applicant or participate in any Agency grant application as a collaborator, partner or in any other capacity for a period of three years; and
- declared R ineligible to participate in Agency peer review processes for the same three-year period.

**FILE 71**

*Allegation:* Submission of ineligible travel expense claims to an Agency

*Findings:* R, a senior faculty member at a Canadian Institution, also undertaking research at a non-Canadian Institution, claimed travel costs in both countries under the assumption that the expenses were allowable, given that R was performing research and research administration in two places at the same time.

Following consultation with the relevant Agency, it was determined that some of R's travel expenses were clearly not a direct cost of research, in contravention of the Tri-Agency Financial

Administration Guide. A thorough audit by the Institution found that R had spent nearly \$10,000 inappropriately by submitting non-compliant travel claim expenses (e.g., duplicate per diem/accommodation costs; false expense claims; expense claim submitted for airfare and translations which had already been paid for by the non-Canadian Institution).

When asked by the Institution for documentary evidence during the investigation process, R agreed to pay back the questionable expenses rather than provide the documents requested. The Institution concluded that R made contractual agreements that were contrary to the Institution's policies and practices. The Institution also found inconsistencies in verbal and written responses provided by R during the investigation.

The investigation concluded that R's behavior was irresponsible and demonstrated a pattern of willful disregard for rules, guidelines, and requirements for the appropriate financial management of a large research project.

*Breach:* Mismanagement of Agency Grant or Award Funds (3.1.3)

*Institutional Disposition:*

- required R to reimburse his/her grant account for the amount of non-compliant travel expense claims; and
- implemented an audit process on all of R's research accounts for a period of three years.

*Agency Recourse:*

- declared R ineligible to hold, participate in, or apply for Agency funding as an applicant, co-applicant or participate in any Agency grant application as a collaborator, partner or in any other capacity for a period of five years;
- declared R ineligible to participate in Agency peer review processes for the same five-year period;
- issued a strongly-worded letter of reprimand to R emphasizing their responsibilities as a grantee;
- required R to follow grant management training at the Institution;
- required the Institution to implement a second-level review for all expenses submitted by R before processing any claims associated with any future Agency grants for a period of one year; and
- issued a letter to the Institution reminding it of the importance of vigilance when processing expense claims.

## **FILE 72**

*Allegation:* Plagiarism in a Postdoctoral Fellowship application

*Findings:* R, a Postdoctoral Fellow, submitted an application that was found to be substantially similar to that of a successful application submitted by R's supervisor.

R explained that the supervisor had provided a copy of their application to R. Since the copy did not include a title, the name of the funding agency to which it was submitted or other related

information, R assumed that the supervisor's application had not been published or reviewed and that R could use it. The Institution concluded that R's application was the product of plagiarism and that R's justification for the plagiarism, i.e., that it was not a published document, was not relevant to the assessment of plagiarism.

*Breach:* Plagiarism (3.1.1.d)

*Institutional Disposition:*

- placed a letter of reprimand in R's official file at the Institution.

*Agency Recourse:*

- issued a letter of reprimand to R, emphasizing the importance of accurate referencing, regardless of whether a text or document is published or unpublished; and
- in the letter to the Institution, included a general statement regarding supervisor/institutional responsibility for reviewing applications they support or endorse.

### **FILE 73**

*Allegation:* Plagiarism in a Master's thesis

*Findings:* The Institution concluded that R plagiarized substantial portions of a chapter in R's Master's thesis from a former student's PhD thesis. R admitted to plagiarism and accepted responsibility for the breach.

The Institution decided not to revoke R's Master's degree because of the following mitigating factors: it was a first offense; the source material was included in the list of R's references; the plagiarized material represented a small portion of the literature review chapter; the plagiarized material did not detract from the contributions made in the research; R freely admitted to the breach and indicated that this was not an intentional act.

*Breach:* Plagiarism (3.1.1.d)

*Institutional Disposition:*

- required R to correct his/her thesis, have it approved by his/her supervisor and include a preface in the thesis that it had been revised and the reason for the revision, which was to address an issue related to uncited and inappropriately cited source material;
- required R to apologize to the faculty supervisor and the former PhD student whose thesis was insufficiently referenced;
- placed a disciplinary letter of reprimand in R's student file;
- placed R on disciplinary probation; and
- would issue a more severe penalty for any subsequent offense, up to and including expulsion.

*Agency Recourse:*

- issued a letter of reprimand to R emphasizing the importance of proper referencing.

## **FILE 74**

*Allegation:* Failure to appropriately manage conflicts of interest

*Findings:* R, a faculty member, hired and supervised two family members while they were students at R's Institution, without declaring it. An Institutional investigation committee found that R misunderstood the Institution's policies on conflict of interest, and openly admitted to the error when he/she was informed of it.

*Breach:* Mismanagement of conflict of interest (3.1.1.h)

*Institutional disposition:*

- instituted more face-to-face training in RCR for its employees;
- revised its conflict-of-interest declaration form;
- promoted online training courses that enhance further awareness of the need to declare and manage conflicts of interest; and
- made completion of RCR training a milestone requirement within faculties.

*Agency Recourse*

- sent a letter of reprimand to R; and
- required R to take training recommended by the Institution; and
- acknowledged the Institution's efforts to broaden awareness of COI issues in its community.

## **FILE 75**

*Allegations:* Re-use of previously published data without proper attribution; image manipulation; redundant publication; failure to recognize and acknowledge unethical publication behavior

*Findings:* R, a senior faculty member, was the senior author and corresponding author on a manuscript; a PhD student was the first author. The Institution reviewed the matter and, after a thorough review of the original data by R, the latter acknowledged that the authors of the manuscript should have been more forthright in the presentation of their data and in the use of controls. R also added that they also should have been more explicit in referring to their previous work. R recognized that the way in which some of the images were presented in the manuscript was an error, and that more oversight might have identified the issue prior to submission. R also acknowledged that a more appropriately framed set of figures should have been provided.

The graduate student's advisory committee also weighed in on this matter and noted that the student had not intended to deceive when committing a series of errors in rendering the images. The student had not understood the standard of practice with respect to duplicate publication; in particular, that the way in which he/she had presented the images was not an acceptable mode of presentation.



The Institution concluded that there were breaches of the norms and standards of scientific practice, but that the breaches did not undermine the scientific validity of the research in question.

*Breach:* Lack of rigour (3.1.1); Redundant publication (3.1.1.e)

*Institutional Disposition:*

- imposed no academic sanctions against the student (first author); but required him/her to complete appropriate training.

*Agency Recourse:*

This breach was not the first committed by R. Although the nature and impact of this breach is not considered serious, there is a pattern of a general disregard for/lack of understanding of RCR by R.

- declared R ineligible to apply for Agency funding as an applicant, co-applicant for a period of one year; and
- declared R ineligible to participate in Agency peer review processes for the same one-year period;
- issued a letter of reprimand to R emphasizing that any further breach would result in a harsher recourse;
- required R to take RCR training offered by the Institution;
- required the Institution to provide evidence that R completed the required RCR training; and
- issued a letter of awareness to the graduate student explaining the importance of RCR and that anyone conducting research on a project that is funded by the Agency, including students, must comply with Agency policies, including the RCR Framework.

## **FILE 76**

*Allegation:* Duplication of figures in publications listed in an Agency grant application

*Findings:* R, a faculty member, selected the wrong figure for inclusion in a journal paper. The figure selected was a duplicate of a figure in a previously published paper. R recognized the error of not including the proper label and of failing to double check the source of every figure in the paper. The error was made unintentionally during the writing and editing phases. R apologized and took steps to rectify the error by communicating with all co-authors, and the editors of both journals. The figure in question was corrected by the journal.

*Breach:* Lack of Rigour (3.1.1)

*Institutional Disposition:*

- None

*Agency Recourse:*

- issued a letter of awareness to R emphasizing the importance of proper labeling and of careful review of the source of every figure in R's papers.

**FILE 77**

*Allegation:* Plagiarism in a published work

*Findings:* R, a graduate student, published a work online that was composed of phrases plagiarized from the work that a fellow graduate student had generated as part of a graduate course.

R admitted to the breach, which they stated was inadvertent. R was apologetic, remorseful, and promptly rectified the breach by removing the work from its online location within weeks of being notified of the issue.

*Breach:* Plagiarism (3.1.1.d)

*Institutional Disposition:*

- R was placed on disciplinary probation and required to complete specific actions including:
  - writing an essay on research integrity in creative writing that discusses the consequences of plagiarism;
  - meeting with key stakeholders in R's department to discuss the plagiarism and their essay; and
  - deleting, destroying or attributing all material written by R's student peers that R may have collected through coursework to minimize the potential of future such incidents.
- R was informed that future breaches could lead to expulsion from the Institution.

*Agency Recourse:*

- issued a letter of awareness to R reminding them of their responsibilities to appropriately reference and, where applicable, obtain permission when using someone else's published and unpublished work.

**FILE 78**

*Allegation:* Mismanagement of conflict of interest

*Findings:* R, a faculty member, co-supervised a student, who was his/her child, without declaring a conflict of interest to the Institution. R had also transferred funds from his/her Agency grant to his/her child in the form of a stipend, which is not consistent with the Tri-Agency Financial Administration Guide.

When asked about the student's role in the matter, the Institution acknowledged that all its students take courses on how to address conflict of interest, but that sometimes it is easier to recognize a conflict when seen from afar, as opposed to when one is so close to the issue, as in this instance. The Institution took no action against the student.

*Breaches:* Mismanagement of conflict of interest (3.1.1.h); Mismanagement of Agency Grant or Award Funds (3.1.3)

*Institutional Disposition:*

- required R to correct the situation by repaying the amount transferred to his/her child and instead use his/her personal funds for the student's stipend;
- implemented a validation process in which the Institution's finance department would oversee R's grants for a period of 24 months;
- re-assigned supervision of R's child to another faculty member;
- increased the awareness of all its professors regarding research integrity and RCR; and
- required that all faculty complete Module 7 of the TCPS 2 Tutorial Course on Research Ethics (CORE), which addresses conflict of interest.

*Agency Recourse:*

- declared R ineligible to apply for Agency funding as an applicant, co-applicant for a period of two years; and
- declared R ineligible to participate in Agency peer review processes for the same two-year period;
- issued a letter of awareness to the student informing him/her of his/her responsibilities regarding RCR and the importance of identifying and addressing conflict of interest; and
- suggested to the Institution that it require its faculty to undergo specific conflict of interest training, not only Module 7 of CORE but also on its own institutional conflict of interest policy.

## **FILE 79**

*Allegation:* Mismanagement of conflict of interest

*Findings:* R1 and R2, faculty members at the Institution, and an industry partner, failed to manage their conflicts of interest in an Agency-funded research project. R1 had hired R3, the senior official of the industry partner, as a research professional to work on a separate non-Agency funded project while the adjudication process of the Agency application was underway. R3 continued to be under R1's employ even after the Agency grant was awarded to R1, R2 and R3.

The Institution's investigation concluded that R1's hiring of R3 while the adjudication process of the Agency application was underway and keeping R3 under R1's employ after the Agency grant was awarded, constituted a breach of scientific integrity. Although no research activities associated with the Agency grant occurred while R3 was employed by R1, the Institution

concluded that the conflict of interest was not appropriately managed, even if the conflict existed for a very limited period.

*Breach:* Mismanagement of conflict of interest (3.1.1.h)

*Institutional Disposition:*

- established an internal institutional validation process regarding future hirings by R1 and R2 for a period of 24 months, without adding unjustified delays to the research activities of R1 and R2;
- decided that R3 would no longer be employed by the Institution as a research professional while owning an enterprise that could receive research grants with the Institution;
- enhanced its training of all professors regarding research integrity and RCR; and
- made the completion of Module 7 of the TCPS 2 Tutorial Course on Research Ethics (CORE) mandatory for all its faculty.

*Agency Recourse:*

- declared R1 and R2 ineligible to participate in Agency review processes for a period of two years and reminded them to appropriately identify and address their conflicts of interest when working with industry partners; and
- issued a letter of reprimand to R3 reminding him/her, as the president of an industry partner, to appropriately identify and address conflicts of interest prior to engaging in work with institutions or researchers, whether as a research professional or as an industry partner.

## **FILE 80**

*Allegation:* Breach of *Conflict of Interest and Confidentiality Policy of the Federal Research Funding Organizations*

*Findings:* In an effort to submit a strong review, R, a senior faculty member, admitted to sharing an applicant's proposal with several individuals in their department (a student and two faculty colleagues) to seek their opinion. R had also used the application for a purpose other than peer review, to help train the student on how to write proposals.

R did not keep the application in confidence but relied on others to do so. R recognized his/her error and apologized. It was determined that R's intentions were not malicious, but rather, showed it was a disregard of the obligations and responsibilities agreed to as a reviewer. There was no evidence that the applicant's intellectual property was compromised by the sharing of the application.

*Breach:* Breach of Agency review processes (3.1.5.a)

*Institutional Disposition:*

- not applicable, as R's Institution had no role to play in the review of this matter (R was doing peer review on behalf of the Agencies)

*Agency Recourse:*

- declared R ineligible to participate in Agency peer review processes for a period of two years.

Agencies were encouraged to make the research community more aware of the obligations associated with being a peer reviewer on an Agency review committee.

**FILE 81**

*Allegation:* Plagiarism in an Agency application

*Findings:* R, a Postdoctoral Fellow, plagiarized in several of his/her Agency Fellowship applications by using text from the lay abstract and training expectations section of a former colleague's Agency application without appropriate referencing or permission. R admitted that the Agency applications that he/she had submitted included text from his/her colleague, but that his/her actions were not intentional and were a result of negligence on his/her part during the editing process.

R explained that he/she had previously worked with this colleague and that the latter had provided a copy of his/her successful Agency Fellowship application to R to use as a guideline when writing his/her own Fellowship application. The plagiarized text was first used by R in his/her first Agency Fellowship application, which was unsuccessful, but R never changed that text in subsequent Agency applications. The copied text therefore continued to appear in several of R's Agency applications, with the last application being successful. The text copied did not relate to scientific data or methodology but rather to a few sentences a lay abstract and training expectations.

As soon as R was notified of the concern by his/her colleague, R accepted responsibility and contacted the Agency to rectify the situation, which included providing the Agency with an updated lay abstract.

*Breach:* Plagiarism (3.1.1.d)

*Institutional Disposition:*

- not applicable as R was not affiliated with an eligible institution.

*Agency Recourse:*

- issued a letter of reprimand to R;
- declared R ineligible to participate in Agency peer review processes for one year; and
- uploaded R's revised abstract to the Agency's online funding database.

**FILE 82**

*Allegation:* Mismanagement of conflict of interest

*Findings:* R was a faculty member at the Institution. R was also the President and a shareholder of three companies. R had submitted invoices for payment to his/her Institution in relation to a research project led by a research group at the Institution for which all three of R's companies had provided services. Reimbursement for those services was sought from R's Agency grant funds. R had not disclosed his/her conflict of interest with these companies to his/her Institution. R was of the view that his/her connections with the companies were known by the Institution, given that the three companies were started as a result of R's work at the Institution.

R did not deny the existence of a conflict of interest and admitted that he/she did not complete the required declaration forms as required by the Institution's research integrity policy. According to the Institution's investigation report, by not declaring the conflict, R placed the Institution in a vulnerable position where it was "blindly" approving expenses invoiced by R's companies and paid out of R's Agency grant.

*Breach:* Mismanagement of conflict of interest (3.1.1.h)

*Institutional Disposition:*

- issued a disciplinary notice to R requiring him/her to complete all necessary forms for declaring his/her conflicts of interest with his/her companies.

*Agency Recourse:*

- declared R ineligible to participate in Agency peer review processes for a period of two years;
- required the Institution to carefully vet all grant applications prepared by R before they are submitted to the Agency, for a period of three years, with particular attention placed on R declaring his/her conflicts of interest; and
- required R to take COI training at his/her Institution.

## **FILE 83**

*Allegation:* Breach of the *Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans* (TCPS 2)

*Findings:* R, a faculty member and co-investigator on a multi-institutional project failed to obtain research ethics approval from their own institution's (Institution A) research ethics board (REB) prior to undertaking research involving humans. The project had received REB approval from another institution (Institution B) for the parts of the project that related to research involving humans.

As soon as R discovered their error, R contacted Institution A's research office and voluntarily reported the unintentional breach.

Institution A concluded that R breached the RCR Framework regarding the ethical conduct of research involving humans, by failing to obtain clearance from Institution A's REB prior to undertaking their research. The breach was not deemed serious by Institution A because at no time

did R's research pose significant risks or harm to their research participants. Moreover, the research involving human participants was reviewed and approved by Institution B's REB and approved protocols were followed throughout the research. R was therefore allowed to continue to use and access the data that was collected under Institution B's REB clearance. R expressed their remorse and took steps to ensure that a similar situation would not recur.

*Breach:* Breach of Agency policy or requirement for certain types of research (3.1.4)

*Institutional Disposition:*

- Institution developed procedures and communications for multi-institutional research projects.

*Agency Recourse:*

- issued a letter of reprimand to R reminding them of Article 6.1 of the Tri-Council Policy Statement 2 (TCPS2), which states that "Each institution is accountable for the research carried out in its own jurisdiction or under its auspices"; and
- issued a letter to Institution A reminding it that all its researchers need to understand that any research involving humans conducted under its auspices must go through local REB review.

## **FILE 84**

*Allegation:* Misrepresentation in an application submitted to an Agency

*Findings:* R, a faculty member, modified the titles and roles of previous positions on his/her CCV from those that appeared in the CCV in a previous year's competition. Agency staff were concerned that the changes might have been made to gain an advantage in the adjudication process. An Institutional investigation found that R's former employer did not use consistent terminology in its position titles in its official company documentation. This contributed to the errors and inconsistencies in R's CCV. The Institution concluded that the information in R's CCV was inaccurate, but that this was not done in bad faith.

*Breach:* Misrepresentation in an Agency application or related document (3.1.2.a)

*Institutional Disposition:*

- Institution's research office to assist R in completing applications for 12 months; and
- inform the Secretariat on Responsible Conduct of Research of the correct position titles to be used in application submitted by R.

*Agency Recourse*

- issued a letter of reprimand to R emphasizing the importance of providing true, complete, and accurate information in applications and related documents.

## **FILE 85**

*Allegation:* Failure to obtain approval from the Institution's research ethics board (REB) for research involving human biological materials

*Findings:* When advising R, a relatively junior faculty member, about ethics review requirements for a planned research project, the REB at R's Institution realized that R should have obtained REB approval from the Institution for research conducted in the past but did not. R acknowledged the error immediately. The research conducted in the past had been reviewed, but only by the REB at his/her co-applicant's Institution. R mistakenly believed that this was sufficient. The Institution agreed that this was an error and that there was no impact on human participants' welfare.

*Breach:* Breach of Agency Policies or Requirements for Certain Types of Research (3.1.4)

*Institutional Disposition:*

- instituted several measures to prevent similar errors by its faculty in the future, including modifying its training sessions, clarifying the information on its website, and instituting procedures that permitted it to directly inform researchers involved in multi-site projects of the requirements.

*Agency Recourse:*

- sent a letter of awareness to R, emphasizing the importance of understanding the review requirements for multi-site research and encouraging him/her to take advantage of the Institution's updated training opportunities.

## **FILE 86**

*Allegation:* Failure to mention, in an application for a post-doctoral fellowship (PDF), that the applicant had a second PhD.

*Findings:* R, an applicant for a PDF, had obtained their first PhD while attending a foreign university. About 10 years later, R obtained a second PhD from a Canadian Institution. A little less than two years after obtaining the second PhD, R applied for the PDF. In the PDF application materials, the second PhD was listed in R's CV, but not the first. Since the program requires applicants to have obtained their *first* PhD less than two years prior to the application date, the omission allowed the application to appear eligible for the program and be adjudicated. The application was successful.

*Breach:* Misrepresentation in an Agency Application or Related Document (3.1.2.a)

*Institutional Disposition:*

Due to novel circumstances, the inquiry was carried out by the relevant Agency program staff rather than the Institution to which R was affiliated. Agency staff recommended that the fellowship be terminated, and the funds be returned, since the timing of R's first PhD should have rendered their application ineligible.



*Agency Recourse:*

- terminated R's award; and
- required R to repay any dispersed award funds.

**FILE 87**

*Allegation:* Image manipulation in a submitted manuscript

*Findings:* R1, R2, and R3, all faculty members, manipulated images in a submitted manuscript. The Institution found that there was inappropriate editing of representative blots and a lack of due diligence in recording the data for the representative blots and in preparing the figures. Specifically, R3 failed to record which blots and lanes were used to represent the images in two figures in the manuscript. R1 and R2 (senior authors on the manuscript) were deemed negligent by the Institution in failing to recognize the seriousness of the problem when it was first raised by the journal editor. This ultimately led to the journal's loss of confidence in the entire manuscript and its rejection on the basis of inappropriate image manipulation and acknowledgement. All three Respondents failed to provide a clear description of why the blot images were manipulated until after the manuscript was rejected by the journal and were found to be negligent in failing to understand the policies and guidelines of the Journal regarding figures of Western blots.

R1, R2 and R3 accepted responsibility for the incorrect blots in the original figures and expressed regret for the breach but maintained throughout the process that they were not purposely misleading the journal editors or the reviewers of the manuscript and that all the results and conclusions from the manuscript, in particular those from the graphs in the two figures, were valid. The Institution analyzed the research results. The research results were found to be sound. As such, the Institution concluded that the breach was a less serious breach of research integrity.

*Breach:* Falsification (3.1.1.b)

*Institutional Disposition:*

- none

*Agency Recourse:*

- issue letters of reprimand to R1, R2 and R3;
- declared R3 ineligible to hold, participate in, or apply for Agency funding as an applicant, co-applicant or participate in any Agency grant application as a collaborator, partner or in any other capacity for a period of one year; and
- declared R1, R2 and R3 ineligible to participate in Agency peer review processes for a period of three years.

**FILE 88**

*Allegations:* Fabrication and falsification in a dissertation

*Findings:* R, a doctoral student, included several problematic images in his/her draft thesis. Issues with the images included: inappropriate placement of white boxes over certain data points, using low-quality images without describing their limitations, presenting images that did not correspond to the compound they were intended to represent, including other students' data and findings with insufficient acknowledgement/attribution. An investigation committee found that these issues were due to sloppy research practice and poor supervision. R was also found to have falsified tabulated data to make it better correspond to images that had already been generated.

R had previously been found to have breached the Institution's policies on responsible conduct of research.

*Breaches:* Fabrication (3.1.1.a); Falsification (3.1.1.b)

*Institutional Disposition*

- required R to submit the dissertation to an advisory committee that included one investigation committee member;
- placed a finding of misconduct on R's transcript; and
- required R to make formal apologies to his/her former supervisor and colleagues in the lab.

*Agency Recourse*

- declared R ineligible to hold, participate in, or apply for Agency funding as an applicant, co-applicant or participate in any Agency grant application as a collaborator, partner or in any other capacity for a period of four years;
- ineligible to participate in Agency peer review processes for the same four-year period.

**FILE 89**

*Allegations:* Improper and misleading notebooks and recording data; fabrication of research data; falsification of research data; destruction of research records; irreproducible research findings

*Findings:* R, a PhD student at the Institution, failed to maintain appropriate research notes and lab books or properly record his/her raw and primary data; fabricated and falsified research data; destroyed/removed research records; and reported non-existent work (R's thesis research could not be verified or duplicated). The Institution was concerned with R's credibility and reliability through the inquiry/investigation process.

Although R was found to be solely responsible for his/her actions, the Institution noted that R lacked supervision, in that issues that arose were not properly or adequately addressed. Had there been better supervision, it is possible that many of the issues could have been discovered earlier and some perhaps avoided altogether.

*Breaches:* Fabrication (3.1.1.a); Falsification (3.1.1.b); Destruction of research records (3.1.1.c)

*Institutional Disposition:*

- expelled R from the Institution; and
- addressed the gap in the Institution's procedures and supervisory systems.

*Agency Recourse:*

- declared R ineligible to hold, participate in, or apply for Agency funding as an applicant, co-applicant or participate in any Agency grant application as a collaborator, partner or in any other capacity for a period of five years; and
- declared R ineligible to participate in Agency peer review processes for the same five-year period.

Although the breaches were serious and committed intentionally, the Agency decided that there was minimal benefit in public disclosure of this file. This decision was based on the fact that the safety of the public was not at issue; there was no impact on the research record; R had already been expelled from the Institution with a note on his/her transcript; and the likelihood of R doing research elsewhere was slim.

The Agency commended the Institution on its thoroughness in addressing the gaps in both the academic procedural and supervisory systems.

**FILE 90**

*Allegations:* Falsification, fabrication, destruction of research data

*Findings:* R, a doctoral student, was alleged to have fabricated or falsified data in a number of experiments, and destroyed data related to others. The Institution made a finding that R had failed to maintain source data in some research activities. R withdrew from the doctoral program at the Institution.

*Breach:* Lack of rigour (3.1.1)

*Institutional Disposition:*

- Institution informed four publishers of any content to which R contributed that could not be substantiated with available raw data.

*Agency Recourse:*

- declared R ineligible to hold, participate in, or apply for Agency funding as an applicant, co-applicant or participate in any Agency grant application as a collaborator, partner or in any other capacity for a period of one year; and
- ineligible to participate in Agency peer review processes for the same one-year period.

**FILE 91**

*Allegation:* Misrepresentation in an Agency application

*Findings:* R was alleged to have re-used a Figure published by R several years earlier without appropriate citation and had modified procedural information (postproduction) regarding the same Figure. The Institution concluded that R did not attempt to disguise the origin of the Figure,

as R's older paper was referenced a total of five times in the grant application, was listed as R's most important contribution and was reproduced in the grant application in its entirety. The Institution confirmed that R had erred in labelling the Figure in the legend in his/her application but that the error was a result of a typing mistake. R had also made some non-substantive format modifications (line properties and line colors) to the original Figure because the Agency does not permit the use of colour in its grant applications. The Institution concluded that the errors in the grant application were unintentional and were not designed to mislead in any way.

*Breach:* Lack of rigour (3.1.1)

*Institutional Disposition:*

- none

*Agency Recourse:*

- issued a letter of awareness to R, stressing the importance of appropriately referencing any materials taken from sources that he/she has previously published.

## **FILE 92**

*Allegations:* Redundant publication; plagiarism; fabrication; falsification; inappropriate attribution; mismanagement of conflict of interest

*Findings:* Given the number of allegations made against a retired faculty member (R), with respect to multiple publications, the Institution examined R's body of work and concluded that R had engaged in plagiarism in four conference proceeding papers which contained large sections that were copied from unnamed sources. The Institution concluded that R should have known that citations were needed but that it was more of a lapse in judgment than a deliberate attempt to deceive. Based on the considerable number of publications authored by R, there was no evidence that plagiarism was a consistent pattern of behavior in R's works. In the context of both the time when the articles were written and R's considerable body of research, the Institution concluded that the plagiarism was minor.

Despite the overlap between R's conference presentations and the publications, the Institution noted that this practice was acceptable at the time within R's discipline and sometimes even promoted by R's discipline. The Institution therefore concluded that there was nothing to suggest that R sought to gain advantage through this pattern of presenting papers and submitting them in whole or in part to journals.

All the other allegations were unfounded.

*Breach:* Plagiarism (3.1.1.d)

*Institutional Disposition:*

- retraction of the four conference papers in which plagiarism was found;
- required R to write a letter of apology to the people whose work R had plagiarized;

- required R to rectify his/her practice of listing his/her publications on his/her website in conformity with the practices of R's discipline, by sorting his/her publication by category (e.g., journal articles, conference proceedings, book chapters, patents, etc.);

*Agency Recourse:*

- no recourse.

Given the impact of R's breaches on the research record were minor, particularly in light of the fact that, in R's discipline, standard practices for referencing conference papers in journal articles that arise from them have changed over time, and that R promptly corrected the research record when requested, the Agency decided that recourse against R was not warranted.

**FILE 93**

*Allegation:* Plagiarism in a grant application

*Findings:* R, a faculty member at the Institution, acknowledged using an image from a reference book in his/her grant application without appropriate referencing, R also acknowledged that his/her actions could lead a reader to believe that R was the owner of that image. R had made numerous revisions to his/her application, that over time had the effect of altering the application without realizing the effect of the changes. The Institution concluded that R acted inappropriately in using an image from a reference book without proper citation, but that R's action was not done in bad faith. R acknowledged his/her mistake and regretted his/her actions.

*Breach:* Plagiarism (3.1.1.d)

*Institutional Disposition:*

- none

*Agency Recourse:*

- issued a letter of awareness to R.

Given that the breach had no impact on the research record and R's application was not successful, the breach did not contribute to any benefit to R.

**FILE 94**

*Allegation:* Plagiarism in a grant application

*Findings:* R, a Postdoctoral Fellow, copied information from a professor's works and used it in their application for Agency funding without appropriate citation. Approximately 40 lines of text were allegedly plagiarized.

The Institution's findings noted minor plagiarism. While the plagiarism did not involve text that would have provided an advantage to R, nor did it impact the research record, R's actions were nonetheless inappropriate. R was remorseful for their actions. The application for funding was not successful.

*Breach:* Plagiarism (3.1.1.d)

*Institutional Disposition:*

- advised R to be more vigilant in the future by adequately citing all sources from which text is borrowed.

*Agency Recourse:*

- issued a letter of awareness to R reminding them of the importance of accurately referencing and, where applicable, obtaining permission for the use of all published and unpublished work, including theories, concepts, data, source material, methodologies, findings, graphs, and images.

## **FILE 95**

*Allegation:* Holding an active Agency grant while on unpaid leave from the Institution

*Findings:* R, an established faculty member, contravened the Tri-Agency Financial Administration Guide (“the Guide”) by holding an active award while on unpaid leave from the Institution. The Institution found that the breach was the result of poor understanding of the Guide and poor communication between R and the Institution. The Institution noted that the only expenditures from the grant during R’s leave were related to students.

*Breach:* Mismanagement of grant or award funds (3.1.3)

*Institutional disposition:*

- none

*Agency Recourse:*

- declared R ineligible to hold, participate in, or apply for Agency funding as an applicant, co-applicant or participate in any Agency grant application as a collaborator, partner or in any other capacity for a period of one year;
- declared R ineligible to participate in Agency peer review processes for the same one-year period; and
- required the Institution to a) inform the Secretariat on Responsible Conduct of Research of any measures it plans to take to prevent a recurrence of similar errors; and b) reimburse the Agency for funds spent from the grant during the ineligibility period. In this instance, the Institution was asked to re-imburse the funds rather than R, since the Institution contributed to the breach.

## **FILE 96**

*Allegation:* Mismanagement of conflict of interest

*Findings:* R, a faculty member, was principal investigator (PI) on a number of research projects involving partnerships with Company A. R concurrently had a contract with a consulting firm (Company B) to act as a project manager for Company A. R did not disclose this relationship to his/her Institution. Moreover, R refused to cooperate with the Investigation Committee that was tasked with investigating this matter. This was not the first time that R failed to appropriately declare his/her conflicts of interest to the Institution.

*Breach:* Mismanagement of conflict of interest (3.1.1.h)

*Institutional disposition:*

- the Institution worked with R to improve his/her management of situations of conflict of interest.

*Institutional disposition:*

- declared R ineligible to hold, participate in, or apply for Agency funding as an applicant, co-applicant or participate in any Agency grant application as a collaborator, partner or in any other capacity for a period of two years; and
- declared R ineligible to participate in Agency peer review processes for the same two-year period.

## **FILE 97**

*Allegation:* Breach of the *Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans* (TCPS 2)

*Findings:* R, a graduate student, breached the TCPS 2 by conducting interviews with human participants without obtaining final approval from the research ethics board (REB). R had submitted their ethics application for REB approval for a study that would involve interviewing individuals from a specific population. R obtained conditional approval from the REB with the understanding that certain modifications needed to be made to the ethics application participant consent forms. R and their supervisor acknowledged and explained that they conducted the interviews without REB approval because of an urgency in being able to study the population at a particular time, otherwise would have the research project would have been significantly delayed and could have impacted the success of the project.

The research was minimal risk, and the breach had no impact on the research participants.

*Breach:* Breach of Agency policy or requirement for certain types of research (3.1.4)

*Institutional Disposition:*

- reprimanded R and R's supervisor reprimanded verbally and in written correspondence.

*Agency Recourse:*

- issued a letter of reprimand to R and R's supervisor.

## **FILE 98**

*Allegation:* Plagiarism in a grant application

*Findings:* R, a faculty member at the Institution, was found to have used sentences, and in some instances, series of sentences in his/her grant application that were directly or very closely taken from a review paper without appropriate citation. R accepted responsibility for the breach by acknowledging that some of the phrases used in his/her application came from the review paper but stated that he/she had not intended to appropriate someone else's work.

Although the review paper and a number of other papers from the same author of the review paper were referenced throughout R's grant application, R's referencing was inadequate. There were several instances where direct sentences were borrowed, and quotes were not properly employed. The Institution noted that R's error was an isolated incident and was not intended to thwart the spirit of responsible conduct of research.

*Breach:* Plagiarism (3.1.1.d)

*Institutional Disposition:*

- issued a letter of reprimand to R.

*Agency Recourse:*

- issued a letter of awareness to R and encouraged him/her to consult citation best practices, such as those offered by the Committee on Publication Ethics (COPE).

## **FILE 99**

*Allegation:* Plagiarism in a published article

*Findings:* Following a review of a faculty member's published article, R, was found to have plagiarized from various sources, without appropriate referencing. In its review, the Institution also concluded that R self-plagiarized and failed to acknowledge the grant that supported the research in the article.

The Institution suspended R, with pay, pending the results of the investigation. R resigned from the Institution before the investigation was complete. R indicated that they would be pursuing future employment outside of academia.

*Breaches:* Plagiarism (3.1.1.d); Redundant publication / Self-plagiarism (3.1.1.e); Inadequate acknowledgement (3.1.1.g)

*Institutional Disposition:*

- none against R as R resigned from the Institution;
- Institution informed the relevant journals of its findings in order to correct the research record; and



- Institution contacted collaborators and co-authors about the issues with the articles so that they could take proactive measures for any in-progress work.

*Agency Recourse:*

- declared R ineligible to hold, participate in, or apply for Agency funding as an applicant, co-applicant or participate in any Agency grant application as a collaborator, partner or in any other capacity for a period of two years; and
- declared R ineligible to participate in Agency peer review processes for the same two-year period; and
- reminded the Institution that an inquiry or investigation, in accordance with the RCR Framework, is required for all allegations received, regardless of funding source.

**FILE 100**

*Allegation: Breach of the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (TCPS 2)*

*Findings:* R, a faculty member, conducted research on a healthy control group and a healthy participant group. R received ethics approval for the study. R's original ethics protocol and subsequent renewals, however, did not explicitly mention that healthy control participants would be part of the study. R assumed that the inclusion of a healthy control group was implied and was covered under the original ethics approval. R had obtained informed consent from both groups.

As Principal Investigator of the study, R bears responsibility for not being more proactive in ensuring that the appropriate clearances were in place. This said, the REBs that originally approved the protocol and the REB that continued to renew and approve the protocol over the years, are also responsible for this administrative lapse based on their lack of oversight and auditing of the research proposal, including failure to adequately review protocols, particular over a long period of time.

*Breach:* Breach of Agency policy or requirement for certain types of research (3.1.4)

*Institutional Disposition:*

- None

*Agency Recourse:*

- issued a letter of awareness to R requesting that they be more explicit in their future ethics applications as to what groups they will be recruiting into their studies; and
- issued letters to those responsible for overseeing all health research involving human participants for the Institution, including the REBs, encouraging them to consider

improving their ethics renewal mechanisms, especially regarding studies conducted over many years, so that such an issue gets caught earlier on in the process.

## **FILE 101**

*Allegation:* Mismanagement of conflict of interest

*Findings:* Personal circumstances made R, a faculty member and Principal Investigator (PI) on an Agency-funded grant, unable to continue his/her research. In working to transfer R's Agency grant to a collaborating PI, the Institution became aware that R had hired his/her spouse as the program manager on the grant but failed to formally disclose the relationship. R and his/her spouse had different family names; therefore the relationship was not apparent when the grant was established. R had made payments to his/her spouse as the program manager for the grant. The Institution reviewed R's Agency grant accounts and determined that all the expenditures were in order. The Institution assigned another program manager to the grant. The spouse was no longer affiliated with the grant.

*Breach:* Mismanagement of conflict of interest (3.1.1.h)

*Institutional Disposition:*

- worked with the Agency and grant team members to ensure continuation of the project.

*Agency Recourse:*

- issued a letter to the Institution encouraging it to remind its faculty of their responsibility to appropriately identify and manage any real, potential, or perceived conflict of interest.

## **FILE 102**

*Allegation:* Breach of the *Tri-Council Policy Statement: Ethical conduct for research involving humans* (TCPS 2)

*Findings:* R, a Principal Investigator on an Agency-funded research study, breached the TCPS 2 by changing the study design for their research without submitting an amendment to the Institution's Research Ethics Board (REB). R collected data on children participating in various tests set up by the research team using a different venue/setting from what had been approved by the REB. This resulted in at least one participant feeling forced to participate in the tests without their consent. R believed that the tests that had already been approved by the REB were simply being conducted in a different venue/setting and therefore did not consider the participant risks to be different.

The Institution was of the view that the breaches were unintentional. R had minimal experience with conducting research with this particular participant group, in this specific setting, and therefore appeared not to have realized the impact of testing this group in different environments. This said, the change in settings resulted in emotional distress to at least one participant.

While R accepted full responsibility for the breach, the Institution concluded that the graduate student researchers named on the REB application were also bound by the ethical requirements

to submit an amendment to the REB. As such, the Institution was of the view that R did not have sole responsibility for the breach.

*Breach:* Breach of Agency policies or requirements for certain types of research (3.1.4)

*Institutional Disposition:*

- REB suspended ethics approval of the study and notified R to cease all research activity and data collection related to the study;
- required R to destroy all the research data that had been collected at the new venue/setting; and
- reminded R of his/her obligations to ensure compliance with Tri-Agency policies and requested that he/she review all his/her active research projects to ensure compliance with Tri-Agency policies and research ethics protocols.

*Agency Recourse:*

- declared R ineligible to hold, participate in, or apply for Agency funding as an applicant, co-applicant or participate in any Agency grant application as a collaborator, partner or in any other capacity for a period of one year;
- declared R ineligible to participate in Agency peer review processes for the same one-year period;
- required the Institution to confirm that each graduate student involved in the study had completed the TCPS 2 CORE tutorial; and
- issued letters of awareness to the graduate students involved in the study reminding them of their responsibility to comply with TCPS 2 when conducting research involving human participants.

## **FILE 103**

*Allegation:* Misrepresentation in an Agency application or related document

*Findings:* R, a doctoral student at Institution A submitted an application to a different doctoral program at another Institution. R fabricated the reference letters that accompanied this application.

*Breach:* Misrepresentation in an Agency application or related document (3.1.2.a)

*Institutional Disposition:*

- expelled R from the Institution.

*Agency Recourse:*

- declared R ineligible to hold, participate in, or apply for Agency funding as an applicant, co-applicant or participate in any Agency grant application as a collaborator, partner or in any other capacity for a period of three years; and
- declared R ineligible to participate in Agency peer review processes for the same three-year period.

## **FILE 104**

*Allegation:* Manipulation of images in a journal article and a thesis

*Findings:* R, a graduate student, inappropriately duplicated control data associated with an image in an article submitted to a journal. The same faulty image previously appeared in R's thesis. An investigation found that the duplicated data was the result of an error. The error had no effect on the interpretation of the research results.

*Breach:* Lack of rigour (3.1.1)

*Institutional Disposition:*

- none

*Agency Recourse:*

- issued a letter of awareness to R advising him/her to review manuscripts more carefully before submitting them.

## **FILE 105**

*Allegation:* Failure to respect the application guidelines when submitting an application for funding

*Findings:* R, a new faculty member, was enrolled in a PhD program while applying for, and subsequently holding, an Agency-funded research grant. In addition, there was some overlap between the content of one chapter in the PhD dissertation and the outputs of the research grant. Both of these are contrary to Agency guidelines on applying for and using Agency funds. Staff at the Institution contributed to the breach by encouraging R to apply for the research grant, even though they were aware that R was enrolled in the PhD program. Moreover, Institutional staff advised R that Agency guidelines permitted the PhD to be "put on hold" while the research grant was underway. This turned out to be incorrect.

*Breaches:* Misrepresentation in an Agency application or related document (3.1.2)

*Institutional Disposition:*

- placed a letter on R's personnel file;
- required R to take additional training in grants management and the responsible conduct of research;
- agreed to provide preliminary reviews and approvals of R's applications, before they are submitted, for the next three years; and
- established a new practice whereby new members of R's faculty meet at least once with a grants management officer or representative of the Institution's research office to review Agency guidelines.

*Agency Recourse:*

- issued a letter of awareness to R.

The Agency advised the Institution that a failure to provide adequate advice and support places students, post-doctoral fellows and faculty at risk of breaching Agency policies. The Agency acknowledged the Institution's efforts to ensure that researchers are provided with correct and timely information on Agency requirements.

#### **FILE 106**

*Allegation:* Inappropriate authorship in a journal article

*Findings:* R, a faculty member, published two journal articles using data from R's former graduate student's thesis without the student's knowledge or consent, but listed the student as first author. Additionally, R did not list the student's co-supervisor as a co-author. An arbitration of the Institution's findings concluded that R did not breach the Institution's policy on authorship as there was no specific requirement to consult collaborators on authorship in this circumstance.

*Breach:* Invalid Authorship (3.1.1.f)

*Institutional Disposition:*

- none

*Agency Recourse:*

- issued a letter of awareness to R;
- asked R to inform the journal of any necessary corrections to the authorship of the articles; and
- advised the Institution that, even though R's actions may not have constituted a breach of the Institution's policy at the time, R's actions nevertheless constituted a breach of the RCR Framework. As such, the Institution was requested to consider modifying its existing policies to align more closely with the RCR Framework.

#### **FILE 107**

*Allegation:* Breach of the *Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans* (TCPS 2)

*Findings:* R, a faculty member, failed to ensure that research ethics approval was obtained before commencing R's research. R was under the incorrect assumption that R had obtained research ethics approval to proceed with his/her research and directed his/her undergraduate student to begin the research with human participants.

*Breach:* Breach of Agency policy or requirement for certain types of research (3.1.4)

*Institutional Disposition:*

- issued a letter of reprimand to R.

*Agency Recourse:*

- declared R ineligible to hold, participate in, or apply for Agency funding as an applicant, co-applicant or participate in any Agency grant application as a collaborator, partner or in any other capacity for a period of two years; and
- declared R ineligible to participate in Agency peer review processes for the same two-year period.

**FILE 108**

*Allegation:* Breach of the *Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans* (TCPS 2)

*Findings:* This was a multi-jurisdictional project, with several co-investigators, at several research sites. After receiving approval from their site's Research Ethics Board (REB), R2, a co-investigator at one of the sites, proceeded to carry out their research without first ensuring that approval had also been provided by the REB at the Principal Investigator's (R1's) Institution. This was contrary to Agency policy at the time. R1 as PI accepted responsibility for the breach. R2 did not accept responsibility and soon afterwards ceased to be affiliated with the research team or an eligible Institution.

*Breach:* Breach of Agency policy or requirement for certain types of research (3.1.4)

*Institutional Disposition:*

- recommended that R1 be dealt with in accordance with their Institutional policies;
- recommended that R2's Institution be notified of the incident of non-compliance; and
- implemented additional monitoring and reporting obligations at the Institution.

*Agency Recourse:*

- issued a letter of reprimand to R1 highlighting a PI's responsibilities for ensuring all approvals are in place before the research begins;
- issued a letter of reprimand to R1's Institution to take more prompt action when a researcher is having difficulties meeting institutional requirements; and
- issued a letter to R2's former Institution that a researcher at their Institution had been unwilling to obtain REB approval from the PI's Institution for a multi-jurisdictional study and to encourage R2's Institution to provide education on this topic.

## **FILE 109**

*Allegation:* Breach of the *Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans* (TCPS 2)

*Findings:* R submitted a request to their Institution's REB to have their study renewed, at which time the REB realized the study had expired. R confirmed that data collection had taken place after approval expired as he/she thought ethics approval was still in place. The Institution concluded the breach was unintentional, and that R was aware of the seriousness of the breach, admitting to it and accepting responsibility.

*Breach:* Breach of Agency Policies or Requirements for Certain Types of Research (3.1.4)

*Institutional Disposition:*

- issued a letter of reprimand to R ordering them to destroy any data collected during the period of noncompliance and not to collect any further data until the REB renews its approval.

*Agency Recourse:*

- issued a letter of reprimand to R reminding them of the importance of submitting requests for ethics renewal to the REB before the previous approvals have lapsed and that data should never be collected without a valid ethics certification in place.

## **FILE 110**

*Allegation:* Misrepresentation of research findings in several published articles

*Findings:* R, a retired faculty member and former researcher, had published several articles in which questions arose regarding the reported process that R used to confirm specific study test results. R had not kept complete records related to the study tests. R decided to correct the literature by submitting a corrigendum to the editors of the journals associated with the papers. The published corrigendum stated that not all the samples were confirmed with the particular process reported in the papers, but that this did not impact the results presented in the papers. The conclusions remained the same and R apologized for any inconvenience caused.

Given that R indicated to the Institution that he/she did not have the records related to those studies, the Institution was unable to verify the accuracy of the corrigendum, specifically that there was no impact on the study results.

The Institution concluded that R breached his/her responsibility for keeping complete and accurate records following publication, as required by the Institution. R also failed to use a high level of rigour in his/her research, which resulted in misleading information in the scientific literature.

*Breaches:* Lack of rigour (3.1.1); Destruction of research records (3.1.1.c)

*Institutional Disposition:*

- issued a letter of reprimand to R advising him/her that it is not possible to rule out that R's assertion in the corrigendum is an overstatement because it is not possible to state with certainty that the study results were not impacted; and
- communicated the same information to the journals for their consideration.

*Agency Recourse:*

- declared R ineligible to hold, participate in, or apply for Agency funding as an applicant, co-applicant or participate in any Agency grant application as a collaborator, partner or in any other capacity for a period of two years; and
- declared R ineligible to participate in Agency peer review processes for the same two-year period.

## **FILE 111**

*Allegation:* Misrepresentation in an Agency application

*Findings:* In an application for Agency funding submitted over the course of three years, R, a faculty member, changed the enrollment and graduation data of at least ten students so that they could be listed as Highly Qualified Personnel under R's supervision within the specified time frame in applications.

*Breach:* Misrepresentation in an Agency application or related document (3.1.2.a)

*Institutional Disposition:*

- declared R ineligible for internal funding at the Institution for one year; and
- required R to take webinars on the responsible conduct of research.

*Agency Recourse:*

- declared R ineligible to hold, participate in, or apply for Agency funding as an applicant, co-applicant or participate in any Agency grant application as a collaborator, partner or in any other capacity for a period of one year;
- declared R ineligible to participate in Agency peer review processes for the same one-year period;
- terminated one of R's active awards; and
- required R to reimburse any previous installments of that award.

## **FILE 112**

*Allegation:* Mismanagement of conflict of interest



*Findings:* During a routine review of research accounts at the Institution, R, a senior faculty member, failed to disclose that one of his/her collaborators on an Agency-funded project was his/her spouse. The Institution believed that R's failure to declare this relationship did not have a substantive impact on the project or the public. R's spouse was a collaborator on the grant rather than a co-applicant, therefore the spouse was unpaid and did not financially benefit from the grant. Moreover, R's spouse had the requisite skills to carry out his/her role in the project.

The Institution was of the view that it had contributed to the problem by not having an adequate plan for identifying and monitoring conflicts of interest.

*Breach:* Mismanagement of conflict of interest (3.1.1.h)

*Institutional Disposition:*

- adjusted its system so that researchers are prompted to declare their conflicts in a timely fashion prior to submitting applications.

*Agency Recourse:*

- issued a letter to awareness to R with respect to the need to disclose conflicts of interest.

## **FILE 113**

*Allegation:* Plagiarism in a grant application

*Findings:* R, a principal investigator, was responsible for submitting a large research project grant application to an Agency. In preparation, a call for ideas to participate in the project was issued. Two researchers submitted a proposal in response to the call. The PI reviewed all the proposals received but did not retain the proposal submitted by the two researchers. The PI submitted the final grant application for the large project to the Agency, with some of the text from the two researchers' proposal without permission. The PI acknowledged using words from the researchers' proposal without appropriate permission and/or citation but noted that the inappropriate copied materials were not ideas, creations, research plans, theories, or analyses but instead descriptions of materials that can be found in the public domain. The PI added that a research assistant was responsible for preparing the large project Agency application but acknowledged responsibility for all aspects of the grant application, including the inadvertent omission.

*Breach:* Plagiarism (3.1.1.d)

*Institutional Disposition:*

- issued a letter of reprimand to R; and
- required R to issue a letter of apology to the two researchers, accepting responsibility for the breach, with a copy to R's co-investigators on the grant and to the funding Agency.

*Agency Recourse:*

- issued a letter of awareness to R.

## **FILE 114**

*Allegation:* Inadequate acknowledgement in a technical report

*Findings:* R, a faculty member, did not acknowledge the contributions of a doctoral student in a technical report that R had authored. This was found to be an error. Since the report was not made public, the impact of the breach was minimal.

*Breaches:* Invalid authorship (3.1.1.f); Inadequate acknowledgement (3.1.1.g)

*Institutional Disposition:*

- R was paired with a mentor to assist in improving R's skills in referencing, acknowledgement, and use of citations.

*Agency Recourse:*

- issued a letter of reprimand to R; and
- recommended that the Institution arrange to have the report amended as appropriate.

## **FILE 115**

*Allegation:* Misrepresentation in an Agency application

*Findings:* In an application for Agency funding, R, a faculty member, indicated in his/her CCV that a previous application had been "Declined", when it should have been marked as "Not Supported". The error was the result of a misunderstanding. R believed that "Declined" meant "declined by the Agency" after a peer review process, when in fact the term is typically used by doctoral students who decline an award after it is offered. R first made this error in an application for funding from an earlier year. The CCV's "auto-populate" feature replicated the same error in several subsequent years. R acknowledged that he/she is responsible for reading the CCV instructions and understanding the terminology, and for carefully reviewing his/her applications before submitting them. The Institution concluded that the incorrect marking could not be construed as an attempt to deceive and could not be interpreted by reviewers of the application as anything other than an error.

*Breach:* Misrepresentation in an Agency application or related document (3.1.2.a)

*Institutional Disposition:*

- issued a letter of awareness to R.

*Agency Recourse:*

- issued a letter of awareness to R.

## **FILE 116**

*Allegation:* Mismanagement of conflict of interest

*Findings:* R, a faculty member, applied for a grant involving a partnership with two industrial partner companies A and B. R did not disclose, either to the Institution or to the funding Agency that:

- R's siblings were directors in the partner company A (at different times);
- one sibling's child was an administrator in partner company A; and
- the spouse of one of the siblings was an administrator in partner company B.

*Breach:* Mismanagement of conflict of interest (3.1.1.h)

*Institutional Disposition:*

- suspended R for 13 months without pay;
- adjusted its processes to ensure better post-award tracking of grants;
- improved its post-award information and training for research teams;
- offered more support and assistance to researchers when completing their conflict-of-interest forms; and
- undertook a review of the Institution's policies on contract management to clarify its requirements.

*Agency Recourse:*

- declared R ineligible to hold, participate in, or apply for Agency funding as an applicant, co-applicant or participate in any Agency grant application as a collaborator, partner or in any other capacity for a period of two years;
- declared R ineligible to participate in Agency peer review processes for the same two-year period;
- required the Institution to reimburse the full amount of the grant.

Had the Agency been aware of the family connections between R and the two partner companies at the time of application, R would have been ineligible for the grant.

## **FILE 117**

*Allegations:* Plagiarism; invalid authorship; inadequate acknowledgement

*Findings:* R, a faculty member, failed to adequately acknowledge a former graduate student's work. The other allegations were not substantiated.

*Breach:* Inadequate Acknowledgement (3.1.1.g)

*Institutional Disposition:*

- required R make the necessary correction to the published paper acknowledging the Complainant's contribution (a corrigendum was issued by the journal); and
- allowed the graduate student to claim on their resume or CV co-contributor status with R on the unpublished report.

*Agency Recourse:*

- issued a letter of reprimand to R.

## **FILE 118**

*Allegation: Inadequate acknowledgement in a published paper*

*Findings:* R, a faculty member, informed two co-authors that a submitted paper had been rejected when, in fact, it had been accepted with corrections. The purpose of this was to remove the co-authors from the paper so that R could submit it as sole author after making the corrections. R stated that the co-authors had initially been included as a “courtesy” but had not actually made a meaningful contribution to the paper. An Institutional investigation found that both co-authors had made a substantial contribution.

*Breach:* Inadequate acknowledgement (3.1.1.g)

*Institutional disposition:*

- issued a letter of reprimand to R; and
- required R to approach the journal to request a correction to the authorship of the paper; the journal has since made the correction.

*Agency Recourse:*

- declared R ineligible to hold, participate in, or apply for Agency funding as an applicant, co-applicant or participate in any Agency grant application as a collaborator, partner or in any other capacity for a period of two years;
- declared R ineligible to participate in Agency peer review processes for the same two-year period; and
- removed R’s application from a peer review process that was underway.

## **FILE 119**

*Allegation: Breach of the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (TCPS 2)*

*Findings:* R, a faculty member, did not inform research participants about key changes in their research team, notably the departure of a key co-applicant who had interviewed the participants and had been described in the consent process as someone with expertise and familiarity with the cultural group to which the participants belonged. For various reasons, R decided to discontinue the study. After this decision was made, the Institution appointed R’s spouse to take care of administrative matters related to the termination of the project. The Institution found no breach of Agency policy.

*Breach:* Breach of Agency policy or requirement for certain types of research (3.1.4)

*Institutional Disposition:*

- none, the Institution did not find a breach.

*Agency Recourse:*

Based on the facts provided in the Institution's report, the Agency was of the view that, in fact, R breached the *Tri-Council Policy Statement: Ethical Conduct of Research Involving Humans (TCPS 2)*, because in the view of Agency staff with expertise in TCPS 2, the decision not to notify participants of the co-applicant's departure constituted a failure to provide participants with information relevant to their ongoing consent to participate in the research, as required by Article 3.3.

Although not a confirmed breach, the Agency was also concerned that the Institution's appointment of R's spouse to oversee the termination of the research might appear to be a conflict of interest.

- issued a letter of reprimand to R in relation to the breach of TCPS 2;
- required R to seek additional training on TCPS2; and
- advised the Institution to consider the appearance of conflict of interest when appointing research personnel.

**FILE 120**

*Allegations:* Plagiarism; Misrepresentation in an Agency application or related document

*Findings:* R, a graduate student, used another author's work as inspiration in one of his/her published works without appropriate attribution. R also listed his/her published work in the list of Research Contributions in a successful Agency Doctoral Fellowship application. The journal that published R's work had also nominated R for a special award in his/her field for that particular piece of work.

R accepted full responsibility for his/her actions, which were unintentional. R explained that he/she appreciated the other author's writing style and used the style. However, R failed to compare their works for excessive similarity before submitting his/her work to the journal. R was of the view that since he/she did not have the other author's work open when writing his/her work, that any overlap between the two works did not constitute plagiarism. In addition, R did not acknowledge or recognize the other author.

R worked at rectifying the breach by immediately notifying the journal and the publisher administering the award. R's published work was disqualified from the award competition. R released a statement of apology in response to his/her disqualification from the award. R's work was removed from the journal's web site and the journal issue in which R's work originally appeared is no longer available.

*Breaches:* Plagiarism (3.1.1.d); Misrepresentation in an Agency application or related document (3.1.2.a)

*Institutional Disposition:*

- R was suspended from the faculty for a period of four months; and
- R's Agency scholarship was also suspended for the same four-month period.

*Agency Recourse:*

- issued a letter of reprimand to R; and
- allowed R to keep his/her Agency Fellowship award once R completed his/her suspension and if a request for readmission to the program was approved by the Institution.

**FILE 121**

*Allegations:* Improper acknowledgement in published work; invalid authorship

*Findings:* R, a faculty member, in need of a paper in which they were the sole author, offered attribution on one paper to a former PhD student for which the former student made no substantive contribution in exchange for removing the student's name from another paper on which R was also listed as author.

*Breaches:* Invalid Authorship (3.1.1.f); Mismanagement of Conflict of Interest (3.1.1.h)

*Institutional Disposition:*

- issued a letter of reprimand that was placed in R's file for one year; and
- implemented remedial measures to support R's supervision of graduate students, including guidance on authorship practices and the establishment of advisory committees for each of R's graduate students to help assist and support R in the appropriate supervision of students.

*Agency Recourse:*

- issued a letter of reprimand to R regarding appropriate authorship and COI management.

**FILE 122**

*Allegation:* Misuse of Agency funds

*Findings:* R, a faculty member and leader of a research project, asked students under his/her supervision to submit expense claim forms and, once the funds were received, give the money to an individual unrelated to the research project. Approximately \$10,000 in expenses were claimed from four different Agency-related project accounts.

*Breach:* Mismanagement of Grants or Award Funds (3.1.3)

*Institutional Disposition:*

- suspended R without pay for 6 months; and
- intensified and regularized its education with respect to the responsible conduct of research across all departments.

*Agency Recourse:*

- declared R ineligible to hold, participate in, or apply for Agency funding as an applicant, co-applicant or participate in any Agency grant application as a collaborator, partner or in any other capacity for a period of three years;
- declared R ineligible to participate in Agency peer review processes for the same three-year period;
- required R to reimburse the misused funds; and
- terminated all of R's active grants.

**FILE 123**

*Allegations:* Data manipulation; lack of rigour in conducting research.

*Findings:* An investigation committee found that R, an established faculty member, and other researchers in R's lab, made an excessive number of errors in duplication and reproduction in 12 images found in approximately 10 published articles. R was unable to provide the committee with the original data used to generate the images. R reported that the missing data was the result of a lost hard drive and missing files from a microscope computer. As such, the committee found R to be in breach of the Institution's data retention policies. The articles at issue had different first authors, however the Institution's investigation committee concluded that R bore primary responsibility. R retired from the Institution.

*Breach:* Lack of rigour (3.1.1)

*Institutional Disposition:*

- terminated R's active grants and returned residual funds to the Agency;
- terminated a tri-Agency grant held by R; and
- advised all relevant journals of the concerns with images in articles that had been published in their journals and invited the journals to take action as they saw fit.

*Agency Recourse:*

- declared R ineligible to hold, participate in, or apply for Agency funding as an applicant, co-applicant or participate in any Agency grant application as a collaborator, partner or in any other capacity for a period of three years;
- declared R ineligible to participate in Agency peer review processes for the same three-year period; and
- asked the Institution to inform the co-applicants of the issues in the publications, if it had not already done so.

**FILE 124**

*Allegations:* Redundant publication; plagiarism; lack of rigour

*Findings:* R, a faculty member and supervisor of a lab with several students, published an article that was substantially similar to a previous one, without adequate referencing. In addition, R asked a student, Student B, to adapt and translate an article authored by Student A, and submit it to a different journal, without consulting Student A. Finally, R took excerpts from two articles prepared and submitted by Student A, adapted them, and published them in other journals. This led to one of Student A's submissions being rejected for publication, since R had published the content first. R's actions were found to be largely a result of unclear authorship practices, poor organization, and poor communication in the lab.

It was also discovered that R had applied for Agency funding while ineligible for funding at a different funding body. This is a breach of the RCR Framework. However, the breach was partly the result of incorrect advice provided to R.

*Breaches:* Lack of rigour (3.1.1); Plagiarism (3.1.1d); Redundant publication (3.1.1.e); Misrepresentation in an Agency Application or Related Document (3.1.2.b)

*Institutional Disposition:*

- suspended R for one week without pay; and
- took measures to assist Student A to mitigate the harm caused by the breaches.

*Agency Recourse:*

- declared R ineligible to hold, participate in, or apply for Agency funding as an applicant, co-applicant or participate in any Agency grant application as a collaborator, partner or in any other capacity for a period of two years;
- declared R ineligible to participate in Agency peer review processes for the same two-year period;
- permitted R's active grant to be transferred to a co-investigator, subject to Agency assessment and approval; and
- informed R and the Institution of the RCR Framework's guidance with respect to applying for Agency funding while under a period of ineligibility with another funder.

## **FILE 125**

*Allegations:* Fabrication; falsification; plagiarism in two papers and study materials

*Findings:* R, a faculty member and corresponding author, acknowledged errors (incorrect reporting) made in two published papers. R made the necessary corrections and informed the journal, which published an erratum. The overlap of a few lines in R's consent form with a colleague's consent form did not constitute plagiarism, as there are limited ways to express information to patients about a particular test. The Institution found no evidence of purposeful data falsification, data fabrication or plagiarism. R's errors were considered sloppy and a result of negligent collection, analysis and reporting of research data.



*Breach:* Lack of rigour (3.1.1)

*Institutional Disposition:*

- issued a letter of reprimand to R;
- mandated a third party to review the analysis and conclusions set out in both papers to determine if the corrections had the potential to modify the study conclusions. The review determined that no further corrections to the papers were warranted and therefore communication to the journals was not required; and
- established a process for monitoring data-related practices in R's lab for a period of two years.

*Agency Recourse:*

- issued a letter of reprimand to R.

## **FILE 126**

*Allegation:* Failure to respect TCPS 2's guidance on multi-jurisdictional research

*Findings:* R, a doctoral student, approached faculty and staff at several Institutions to obtain their assistance in distributing information about his/her minimal risk research to potential participants that met certain criteria. By using the resources of those institutions to recruit participants, R's research came under those Institutions' auspices and required review and approval by those Institutions' Research Ethics Boards (REBs). R was not aware of this requirement and therefore did not seek or obtain the requisite approvals. Upon being advised of the error, R acted immediately to rectify it.

*Breach:* Breach of Agency policies or requirements for certain types of research (3.1.4)

*Institutional disposition:*

- Required R to re-take the CORE and CITI tutorials on research ethics and review them with his/her supervisor.

*Agency recourse:*

- issued a letter of awareness to R.

The Agency also encouraged the Institution to improve its education and training related to requirements for multi-jurisdictional research.

## **FILE 127**

*Allegation:* Breach of Agency policies or requirements for certain types of research

*Findings:* R, a graduate student, performed surgery on animals in a manner inconsistent with the Institution's animal care committee. The Institution concluded that a breach of research integrity was not supported, however, it noted that R had an inadequate understanding of most effective and appropriate techniques for the research in question.

The Institution also noted that the mentorship that R had received and the lab environment, and the quality of supervision in the lab, were all poor. The Institution reported that it is in the process of looking into other issues raised regarding this lab.

*Breach:* Breach of Agency Policies or Requirements for Certain Types of Research (3.1.4)

*Institutional Disposition:*

- required R to repeat the Institution's animal use protocol online course before conducting any further research involving animals;
- required R to inform any new supervisor of the situation and discuss whether the research using inappropriate techniques could be included in his/her thesis;
- required R to determine whether the research conducted using inappropriate surgical techniques and without approval of modifications to the animal use protocol could be submitted for presentation or publication. If yes, R would be expected to appropriately disclose the deviations from the protocol; and
- required R to ensure that any students that he/she has trained or mentored were aware of the deficiencies in their training.

*Agency Recourse:*

- issued a letter of reprimand to R. A more serious recourse was not imposed, since the breach was partly the result of a poor lab environment and poor supervision; and
- requested that the Institution look into systemic issues in the lab and report back to the Agency, including detailed measures the Institution intends to take to ensure more appropriate lab environments in the future.

## **FILE 128**

*Allegations:* Misuse of Agency funds; invalid authorship; conflict of interest; breaches of Agency requirements

*Findings:* R, an established researcher and supervisor of a lab, was found to have forced a post-doc to deposit sums of money, representing a portion of his/her post-doc salary, to R's personal bank account. The amount in question was approximately \$25,000. The other allegations were not substantiated.

After an Institutional audit, R reimbursed the Institution for the full amount of the misdirected funds.

*Breach:* Mismanagement of Grants or Award Funds (3.1.3)

*Institutional Disposition:*

- terminated R's employment; and
- reimbursed the former post-doc for the amount of the misdirected funds.

*Agency Recourse:*

- declared R ineligible to hold, participate in, or apply for Agency funding as an applicant, co-applicant or participate in any Agency grant application as a collaborator, partner or in any other capacity for a period of three years;
- declared R ineligible to participate in Agency peer review processes for the same three-year period; and
- terminated R's active awards.

## **FILE 129**

*Allegation:* Breaching TCPS 2 by failing to obtain approval by a Research Ethics Board after making significant changes to a research project involving human participants.

*Findings:* R, a faculty member, originally intended to conduct in-person interviews with a small number of young-adult research participants located in Canada and obtained approval from his/her Research Ethics Board (REB) for this project. R later submitted an application for a significantly revised project. The changes included the number of participants (from about 15 to about 130), the type of interview (from face-to-face interviews to interactions via social media such as Twitter), and the location of participants (from Canada-only to various locations around the world, including unsafe regions of the world). The consent process for the revised research project was unclear. On this basis, the Institution's REB requested several changes and clarifications to R's research plan. R did not make the changes and carried on with his/her revised research plan without securing the REB's final approval.

R in due course chose not to proceed any further with the research.

*Breach:* Breach of Agency policies or requirements for certain types of research (3.1.4)

*Institutional Disposition:*

- issued a letter of reprimand to R.

Agency recourse:

- declared R ineligible to hold, participate in, or apply for Agency funding as an applicant, co-applicant or participate in any Agency grant application as a collaborator, partner or in any other capacity for a period of two years;
- declared R ineligible to participate in Agency peer review processes for the same two-year period; and
- required R to reimburse the Agency for the full amount of Agency funding used in the research.

The Agency also asked the Institution to work with R to withdraw a working paper from the research record that the Institution believed to be based on data collected from participants without appropriate REB approvals in place.

## **FILE 130**

*Allegations:* Fabrication and falsification of data and experimental design during graduate training in a research lab

*Findings:* R, a doctoral student, admitted to being solely responsible for intentionally fabricating and falsifying research data over a three-to-four-year period. R also admitted to failing to follow protocols for animal experiments during their training in a research lab. The Institution also assessed the overall environment in the lab, including its philosophy, protocols, processes, interaction, and culture and concluded that the lab in which R was working was being run in a highly appropriate manner in all regards. It also did not note any significant failures on the part of R's supervisor regarding the matter. In fact, it was of the view that the lab supervisor was highly engaged and accessible and actively reviewed scientific data with all lab trainees and acted swiftly when the matter came to light.

R voluntarily withdrew from PhD program.

*Breaches:* Fabrication (3.1.1.a); Falsification (3.1.1.b); Breach of Agency policy or requirement for certain types of research (3.1.4)

*Institutional Disposition:*

- R's supervisor asked the journal to withdraw the article from its editorial systems;
- R's supervisor reviewed and revised the archived pre-print so that all of R's data was removed; and
- R's supervisor withdrew an application to a federal funding Agency as the application was based partly on R's suspect data.

*Agency Recourse:*

- declared R ineligible to hold, participate in, or apply for Agency funding as an applicant, co-applicant or participate in any Agency grant application as a collaborator, partner or in any other capacity for a period of four years.

The Agency acknowledged the steps taken by the supervisor to mitigate the impact of the falsified and fabricated data.

## **FILE 131**

*Allegation:* Breach of Agency policies or requirements for certain types of research

*Findings:* R, a faculty member, worked with a business partner on an Agency-funded project. The business was responsible for identifying and recruiting research participants through its public website. R was of the view that Institutional ethics approval was not necessary as he/she was not responsible for recruitment or for approving the business' internal procedures. Furthermore, R considered the data relating to the research participants that had been collected through the partner's web site to be public information. The Institution concluded, however, that the research activities of the project met the *Tri-Council Policy Statement, Ethical Conduct for*

*Research Involving Humans (TCPS 2)* criteria for research involving humans and therefore required ethics review. The breach was the result of an honest error due to a misunderstanding of TCPS 2 requirements.

*Breach:* Breach of Agency Policies or Requirements for Certain Types of Research (3.1.4)

*Institutional Disposition:*

- required R to complete the Course on Research Ethics (CORE) tutorial and provide the relevant parties within the Institution with a copy of the CORE certificate of completion;
- placed senior official's decision letter on R's Institutional file for a period of one year; and
- determined that although there was little likelihood that any participants were harmed by the breach, R could not use the data that was collected without ethics approval for academic purposes, including publication in academic journals.

*Agency Recourse:*

- issued a letter of awareness to R; and
- allowed R to keep his/her grant and to propose a new project and partner to the Agency for review and approval, in accordance with rules for that funding program.

## **FILE 132**

*Allegation:* Invalid authorship

*Findings:* R, an established researcher and lab supervisor, was initially alleged to have omitted a student from the list of authors in a publication. An Institutional investigation revealed that R did not have adequate policies and procedures for record-keeping and data management in the lab. As a result, it was virtually impossible for R, or anyone else, to ascertain the contribution that lab members had made to any given publication. It was also found that the lab lacked a registry to keep track of who was carrying out which experiments, which made it challenging for lab members to follow up on their own experiments or those of their colleagues.

*Breach:* Lack of rigour (3.1.1)

*Institutional Disposition:*

- suspended R without pay for 6 months;
- made alternate arrangements for student supervision during this time; and
- considered strategies for ensuring that R did not resume his/her previous lab management practices after returning from suspension.

*Agency Recourse:*

- declared R ineligible to hold, participate in, or apply for Agency funding as an applicant, co-applicant or participate in any Agency grant application as a collaborator, partner or in any other capacity for a period of two years;
- declared R ineligible to participate in Agency peer review processes for the same two-year period; and
- terminated R's active awards.