IMPERIAL COLLEGE LONDON

RESEARCH MISCONDUCT REPORT - 2016

A Paper by the Provost

INTRODUCTION

- 1. The College is a signatory to, and complies with, the UK Concordat to Support Research Integrity, which includes a commitment to "using transparent, robust and fair processes to deal with allegations of research misconduct should they arise". The concordat also recommends that research institutions should make a short annual statement to its governing body.
- 2. This report is intended to fulfil this requirement, and provides information about the investigations of research misconduct that have been undertaken in the last academic year.
- 3. Allegations of research misconduct are considered under Ordinance D17, the Investigation of Allegations of Research Misconduct. Although the procedures set out in Ordinance D17 are broadly in line with the UK Concordat to Support Research Integrity and the UK Research Integrity Office's model procedures for the investigation of misconduct in research, a number of revisions to the procedures are proposed that will align the procedures more closely with the Concordat and with the UKRIO's model procedures, and also with best practice in research misconduct.
- 4. Under these procedures, allegations of research misconduct are made in confidence to the College Secretary and Registrar, as Chair of the Research Misconduct Response Group (RMRG). The other members of the RMRG are the Vice-Provost (Research), the Director of the Research Office and the Director of HR. If the RMRG agree that an allegation constitutes research misconduct, it will arrange for a screening investigation to be conducted. The purpose of the screening investigation is to determine if there is a *prima facie* case of research misconduct. There are normally three possible outcomes from a screening investigation:
 - a. That a *prima facie* case has not been established, in which case the case will normally be dismissed.
 - b. If the screening investigation determines that there is some substance to the allegations, but it is judged that they are minor or there is lack of intention to deceive then the allegation may be dealt with through informal resolution.
 - c. That there is a *prima facie* case for further investigation. In such cases, the Provost will convene an investigation panel to conduct a formal investigation and reach a conclusion on whether the allegations are founded, based on the balance of probabilities. Where an allegation is upheld, it will then be referred to a disciplinary panel, which will determine the appropriate penalty to apply.

RESEARCH MISCONDUCT

- 5. In the academic year 2015-16 the College received eight allegations of research misconduct. In 5 of the 8 cases considered the allegation of research misconduct was dismissed, and 1 resulted in an informal resolution. Following referral to a full investigation panel, one case of research misconduct has been upheld. One case is still under investigation.
- 6. The case of research misconduct that has been upheld concerned a professor in the Faculty of Medicine, Professor Philip Ashton-Rickardt, and involved the misuse of western blots. In this case it was alleged that some of the illustrations for a paper in Science "The protein LEM promotes CD8+ T cell immunity through effects on mitochondrial respiration" had been both manipulated and duplicated. The College investigation found that there was inadequate record keeping and the loss of original experimental data. There were also repeated errors in compiling Figures in the paper, some of which were duplicated and manipulated and presented as different experiments which supported other data. It was concluded that these errors could not be attributed to simple mistakes and the loss of experimental data and the presentation of duplicated and manipulated figures in the paper fell below acceptable scientific standards, and therefore constituted research misconduct. The investigation confirmed that the illustrations in question were the sole responsibility of Professor Philip Ashton-Rickardt, and none of the paper's other authors were involved in the misconduct. The College has informed the co-authors of its findings, and has recommended that the original paper be retracted in its entirety. The College is consulting with Science on the retraction notice to be published.

REVISIONS TO THE PROCEDURES

- 7. The College's research misconduct procedures have been reviewed in the light of the experience of their operation over the last four years, and to take account of the guidance published by the UKRIO and others, and a number of revisions are now proposed. A copy of the revised procedures is annexed to this Report.
- 8. The main proposed revisions are to: provide for more realistic timescales for the conduct of screening investigations; update the definitions of research misconduct: include a time limit on allegations to give the RMRG discretion not to investigate allegations which are made more than a year after the incident; include an external academic on the Investigation Panel; and require that draft investigation reports are provided to the RMRG before they are shared with the complainant and the respondent.
- 9. The Council is invited to note this report, and to consider, and if it sees fit, approve the proposed revisions to Ordinance D17.