

Research Integrity Annual Report 2022-23

LSTM is a subscriber to the Concordat on Research Integrity. We are required to compile an Annual Report following the headings set out below. This Report will be discussed at Research Integrity and Governance Committee and shared with LSTM Executive as well as UK Research Integrity Office (UKRIO), as per the terms of our membership.

This report covers the period 01 August 2022 – 31 July 2023.

A. Summary of actions and activities to support research integrity

1. The UKRIO Self-Assessment was conducted in September 2023. Using a ‘traffic light’ grading system, it was found that ‘green’ items had increased by 79%, ‘amber’ decreased by 50% and ‘red’ decreased by 43% since the previous self-assessment conducted in September 2022.
2. LSTM Research Conduct & Integrity Policy was updated, demonstrating LSTM’s expectations across all roles and departments.
3. Communication across LSTM has improved with strengthened links between research integrity-related Committees, working groups and initiatives.
 - a. Research Integrity Champions initiative was launched in summer 2023. There are 16 RI Champions based across LSTM, representing each department. There are also representatives from our key African partner organisations MLW (Malawi Liverpool Welcome) in Malawi and CRID (Centre for Research in Infectious Diseases), Cameroon. Induction and training is underway for RI Champions. The role entails sharing good practice with their research teams and being available to offer advice or support regarding matters under the research integrity umbrella. It is intended as another avenue of communication to raise the profile of research integrity and enable colleague feedback.
 - b. In line with LSTM’s increased focus on promoting good practice in animal research, AWERB (Animal Welfare & Ethics Review Board) now reports directly to LSTM Research Integrity & Governance Committee.
 - c. Work is underway with MLW to create a parallel Research Integrity Champions initiative in the first instance, for adaptation to suit their staff membership. It is hoped that all LSTM Hubs will eventually adopt/adapt this initiative.
4. Research Integrity Induction & Training
 - a. All new starters attending ‘LSTM Welcome Event’ access an introductory presentation on research integrity at LSTM.
 - b. Two core modules made mandatory for Principal Investigators of LSTM-sponsored studies. Role-specific compliance with mandatory training is being monitored by Learning & Development with non-compliance to be escalated to Research Integrity & Governance Committee and Academic Faculty Managers where necessary.
 - c. In 2022-23, a new programme of research integrity workshops was rolled out. Twelve workshops were attended by 141 colleagues, comprising 77 individuals (where numerous attendees attended multiple workshops). This equates to approximately a quarter of research active staff. Six topics were covered, with each taking place twice – on Teams and in person. A high proportion of attendees were PhD students and Early Career Researchers.

The workshops programme will be annual, covering key terms, good practice and discussion of case studies.

- d. Our 2023-24 RI Workshops programme has been expanded to cover 10 topics, with delivery from a range of LSTM experts, and will similarly take place both on Teams and in person.
- e. PhD and Masters course programmes now as standard include an introductory session on research integrity.
- f. Work is underway to share the package of research integrity training with MLW in the first instance, for adaptation to suit their staff membership. It is hoped it will be further rolled out across all LSTM Hubs in due course.
- g. A Research Integrity Seminar Series has, to date, hosted three external speakers which covered the following topics: publication, equitable partnership, PhD supervision. A further Seminar is scheduled for December 2024 focussing on image integrity. RI Seminars are hosted via MS Teams and made available to students and colleagues in LSTM Hubs.

5. Research Culture

- a. Concordat for Research Career Development: Participation in the Vitae CEDARS (Culture, Employment and Development of Academic Researchers *Survey* survey in 2023 highlighted several areas of concern; these have informed the new action plan for the Concordat which will have a focus on onboarding (particularly for staff working internationally), reporting mechanisms (navigating to an anonymous external reporting mechanism), and increasing clarity and equity in our 'career track' programme for early career researchers transitioning to core funded academic roles.
- b. PROSPER: Recognising the importance of providing broader career guidance and support for our ECRs (Early Career Researchers), we have launched an LSTM cohort of the PROSPER programme for individuals to work alone, in groups, and with a career coach to 'Explore, Reflect and Act'. We are also spotlighting case studies of alumni who have transferred to careers outside of academia.
- c. An additional package of training aimed specifically at Research Group Leaders has been developed, intending to promote consistent approaches within research teams and improve accountability.

6. Animal Research

- a. LSTM Animal Research Policy was finalised in 2023. The Policy applies to all research taking place at LSTM sites in the UK and to sites in partner institutions where the research is funded by a funder based in the UK.
- b. LSTM is committed to being a signatory to the [Concordat on Openness in Animal Research](#) in the UK, pending fulfilment of criteria which is in progress.
- c. A process ensuring ethical approval of animal projects led or funded by LSTM researchers at international sites has been reviewed and implemented, accompanied by a specific guidance document. This is in line with our policy and funder expectations.
- d. A training workshop run by NC3Rs (National Centre for the Replacement, Refinement & Reduction of Animals in Research) was hosted by LSTM. This covered experimental design including integrity issues regarding bias and subjectivity in animal research and best practice of statistical design to deliver meaningful data and avoid unnecessary animal use. This was attended by 40 staff and students across Liverpool campus and wider region.

- e. A research integrity workshop on animal research will be held in 2024. Partners will be invited to attend, noting that partners conducting animal research are also required to comply with UK regulations in this area therefore it is important that training is provided to these groups.

7. Equity

- a. In 2022, LSTM adopted a Consensus Statement led by LSTM-based authors on equitable partnership within international collaborations involving low and middle income countries (LMICs) ([PMC34647323](#)). Compliance with the Consensus Statement at LSTM is not currently monitored but, as part of LSTM's project to update our research information systems, we are actively discussing ways to incorporate this at the conception and publication stage of research projects partnering with LMICs.
 - b. Action was taken to promote compliance with LSTM Taking and Storing of Videos and Photographs Policy, where images on LSTM's walls displayed identifiable research participants/wider participant communities without their consent. This was a research integrity issue relating to Care & Respect as well as a contravention of GDPR. A gap was highlighted, whereby policy compliance mechanisms should be strengthened.
8. Data Integrity: LSTM Research Integrity Working Group requested improved central research data management, noting that a lack of infrastructure is detrimental to data integrity. This request is being taken forward by the Research Data Manager and the Information & Data Committee.

B. Statement on process for dealing with research misconduct

As there have been no new cases of misconduct, the process has not been tested in practice.

An SOP to be used towards training potential misconduct panel members was developed. The Policy for Handling Misconduct Allegations will be reviewed as scheduled in 2024.

C. Statement on formal research misconduct investigations

There were no formal research misconduct investigations in 2022-23.

There was one potential misconduct case which, upon scrutiny, did not meet the threshold for investigation.

D. Statement on what the institution has learned from any formal investigations of research misconduct

(that have been undertaken, including what lessons have been learned to prevent the same type of incident re-occurring)

1. The formal investigation highlighted gaps in process around visitors to LSTM and the data security measures, and sharing agreements, that should be in place in advance of such visits.
2. The investigation also led to updates to the Investigating Allegations of Research Misconduct Policy which were actioned earlier this year.
3. We have gained insights to the complexities that can arise between LSTM and partners in terms of interorganisational dynamics which can lead to poor practice. We will be working on further guidance documentation to support researchers leading collaborations.

E. Statement on how the institution creates and embeds a research environment in which all staff, researchers and students feel comfortable to report instances of misconduct

Conducting research to the highest ethical standards, embedding equity in all our partnerships, and seeking to influence others to do the same, are key behaviours underpinning LSTM's refreshed values ([Vision, mission and values | LSTM \(lstmed.ac.uk\)](#)). The use of Reading Panels to assess the quality of papers (thereby reducing the reliance on unfair metrics), the introduction of workshops to informally discuss concerns over questionable research practices, the commitment from LSTM Executive to make research integrity training mandatory for all staff, regardless of seniority, work of the Research Integrity & Governance Committee and the Research Integrity Working Group, all speak to LSTM's commitment to value research quality over quantity and create an environment in which all are empowered to question poor practice.

Results from the CEDAR survey indicated a concerning level of mistrust in Our Freedom to Speak Up portal and we have made the commitment to introduce an anonymous external reporting tool by the end of 2023; we hope that this, plus the introduction of Research Integrity Champions will increase the level of reporting of questionable research practices enabling us to identify areas that need action. The Champions will also serve to increase awareness of misconduct, provide advice, flag questionable practices and increase visibility of support and resources promoting adherence to the principles of research integrity.

F. Gaps identified and being addressed

1. Policies are not currently accessible via the website, to be remedied.
2. A programme of internal monitoring of LSTM-sponsored studies conducted by Research Governance, Ethics & Integrity Office is to be continued and expanded.
3. Expand training programme to be inclusive of LSTM hubs in Cameroon, Kenya, Malawi, Nepal and Zimbabwe.
4. Establish links with LSTM KEF (Knowledge Exchange Framework) group to build research integrity into public engagement and dissemination work.
5. Research data management is being considered as gaps in this area are detrimental to data integrity.
6. Improve package of online resources providing guidance on research integrity.

Compiled by Lindsay Hunt, Research Compliance Officer with input from Professor Hilary Ranson, Dean of Research Culture & Integrity

Authorised by Denise Watson, Research Governance & Integrity Manager

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Shared with LSTM Executive Committee: 24 January 2024