# **University of St Andrews**

# Research Integrity statement for academic year 2022-23

The University of St Andrews fully supports the principles laid out in the UK Concordat to Support Research Integrity (Universities UK, updated 2019): this report summarises our approach to embedding research integrity in our activities, including ensuring compliance with the provisions of the Concordat, and relevant activities undertaken.

> This arrow symbol is used to emphasise developments that took place in this academic year, 2022-23.

The last few years, during and following the global COVID-19 pandemic, saw significant upheaval that led to a focus on core and business-critical activities, and consequently, whilst many existing provisions continued to be delivered in full, most anticipated new actions were paused.

The end of academic year 2022-23 saw a welcome resumption of some return to paused research integrity actions.

# The University's approach to research integrity

As a term and condition of funding from almost all research funders, the University has to operate in line with the provisions laid out in the Concordat to Support Research Integrity.

Oversight of research integrity activity at the University of St Andrews is conducted at an institutional and operational level. At the institutional level this is led by the Vice-Principal (Research, Collections & Innovation), who chairs the University's Ethics and Research Integrity Assurance Group (EARIAG). At an operational level, oversight of research integrity activity is led by the head of research policy, integrity and governance, who convenes the Research Integrity Committee (RIC).

Work in coming year will include reconstituting RIC in line with a new framework for research-related decision-making entities being discussed at the October 2023 meeting of the University Research, Impact and Innovation Committee. Under the arising framework, RIC will have its remit and membership reviewed and refreshed. It is expected that following this, the group will liaise with each of the University's Directors of Research, to understand their perspectives and needs around integrity, and their sense of relative priority of actions by the central team.

Due to the efforts of the RIC, and as articulated in this and previous annual statements, the University is already compliant with the core requirements of the Concordat. However, the University's approach, implemented via the RIC, is to focus on continuous improvement activities aimed at culture-building, taking an academic-led approach to ensure that we strategically focus on activities with a high likelihood of impact.

The RIC has continued to input into the <u>University's work on research culture</u>: it is acknowledged that progress on building a culture of integrity will depend significantly upon developments in wider research culture.

# Supporting and strengthening research integrity

# Policy and guidance

# Research integrity

St Andrews has had in place policies and procedures relating to good research conduct and research misconduct since 2013. Overhauled policies and guidance were launched in January 2019, reviewed and updated in June 2021, and are publicised via staff, postgraduate, postgraduate supervisor and Head of School induction events, a training module that covers the policies and procedures, and all talks/workshops on research integrity. Following feedback from research misconduct investigations, pan-University work has taken place to update the vexatious complainants policy and integrate it with all University investigative processes.

- Following it reaching its biennial review point, and the publication of a <u>new template investigation procedure</u> <u>by UKRIO</u> (the UK Research Integrity Office) in March 2023, work started to review the Research Misconduct Policy (and Policy Annexe, and Allegation Proforma). This will also take into account actively-solicited feedback from those (other than Complainant and Respondent) involved in previous investigations.
- A proposal was approved by the Research, Impact and Innovation Committee in May 2023 to form a paninstitutional working group, containing a diverse set of representatives from across disciplines, career stages (including PGRs) and job families (including technicians and professional services staff), to deliberate and develop guidance on 'recognising contributions to research', regarding how all such individuals' varied and various contributions to research activities are recognised in outputs, from articles, chapters and books, to

talks and webpages etc. This work results from both: a recommendation of a previous investigation; and analysis of topics of questions, concerns and allegations from the last seven years' worth of St Andrews' public annual statements on research integrity showing that over 50% of all questions, concerns and allegations relate to issues regarding recognition of contribution to a piece of research. It is also part of the University's work on the Technician Commitment and research culture.

The team started to scope out existing guidance on making, and responding to, allegations of research misconduct, in preparation for developing such guidance internally.

Work in the coming year will include: reviewing the webpages; taking forward the working group on recognising contributions to research; taking forward developing guidance for those making, and responding to, allegations of research misconduct; and having direct conversations with all Directors of Research to explore what further policies/guidance could add value.

## Research involving humans, their samples or data

- University Teaching and Research Ethics Committee (UTREC) continued to regularly review guidance and documents shared on the webpages, including updates to template participant documents and consent guidance to place greater emphasis on accessibility and to ensure researchers future-proof any statements around data sharing.
- > The committee continues to balance regular standing items with process development and in-depth discussion on ethics topics.
- The committee continues to reflect on items and recommendations raised by a self-audit using the UKRIO/ARMA (Association of Research Managers and Administrators) tool, and participated in a research project spanning several Scottish Institutions, including developing a proposal to move from 'approval' wording to 'opinion'.
- ➤ The project to put in place a digital system for managing research ethics has made significant progress in this period, including submission of a Full Business Case, completion of the tendering process and engagement with a supplier. Contract negotiations are ongoing with configuration and implementation activities anticipated to begin in Semester 1 of 2023-2024.

Work in the coming year will include delivery of the project to source and implement an electronic ethics management system, including introducing the 'opinion' terminology and evaluation of processes and structures against the <u>UK</u> Research Integrity Office – Association of Research Managers and Administrators (UKRIO-ARMA) guidance on research ethics support and review and with a view to: supporting and ensuring resource for ethics committees to focus on ethics over basic administrative and quality checks (for example, through use of logic in application forms, workflows and in-system validation); review and evaluation of interrelated processes around research involving humans such as between ethics and governance processes for clinical research; and maintaining positive, collegiate and supportive peer relationships between the University's ethics reviewers, convenors and administrators.

# Research involving animals, their samples or data

The University's guidance, processes and access to online training relating to research involving animals are provided through the Research involving animals' webpage. This webpage includes links to: public facing webpages (which contain a video and information on what the animals experience and the numbers involved), and a webpage on what types of animals are involved in research. There is also guidance on how to apply for research involving animals. Our animal welfare and ethics committee (AWEC) (our institutional AWERB, animal welfare ethics review body) continuously reviews and develops processes relating to the oversight of research involving animals to ensure maximal clarity and thus compliance amongst researchers. Versions of process documents are available for researchers or members of the public upon request. The existing ethics application database now stores applications for non-licensed research involving animals.

This year, the new activities of the AWERB have included:

- Reviewing and approving the secondary data application process, following its first year of operation. At the June 2023 meeting of AWEC, the School Ethics Committees (SECs) reported to AWEC that the first full year of the secondary data process/form were working well, suggesting some further clarifications be made to the documents to further refine the process. AWEC approved continuation of the process, on the condition of enhancement of the monitoring and reporting of the process, ensuring visibility of and access to the process for all researchers at the University, and consideration of how reputational risk issues are being handled in the process.
- Overseeing a successful December 2022 Home Office facilities audit.

Work in the coming year will include: full systems review, of all documentation and guidance at an AWERB, central and facility level, identifying and taking opportunities for enhancing fullness, clarity, consistency (where appropriate) and interoperability; introduction of an enhanced method of communication and document storage/sharing, involving MS Teams; enhancing the review of research projects that are taking place outwith the UK, but would be deemed 'regulated' by UK standards.

#### Research governance

The extensive suite of <u>guidance pages</u> developed in 2021-22 continue to be available on the University's research governance and ethics webpages. These cover the types of approvals researchers may require, the circumstances when these may be required, what is involved in making an application, and the actions required post-approval. This also includes description of the Sponsor's review and links to external guidance, training, and contacts. These webpages have been well received by both internal and external stakeholders. The webpages are periodically reviewed and updated, usually in response to issues highlighted by researchers or local NHS collaborators, or news updates from the Health Research Authority (HRA). Our <u>research governance page</u> outlines our processes for compliance with Export Controls and the Nagoya Protocol.

- A link to the HRA's student research toolkit was included on our webpages.
- Substantive work has been undertaken to finalise our 'working draft' policy and process on 'due diligence on overseas research partners' following: the 2020 policy review; the 2022 KPMG audit; the late 2022 UKRI/ARMA updates to due diligence guidance and template questionnaires, UKRI updates to their standard terms and conditions of grant; and early 2023 clarification from UKRI on those changes

Work in the coming year will include: incorporating the HRA's new Participant Information Design and Review Principles and Quality Standards into our NHS/social care guidance and processes, attempting to clarify and condense what is currently 11 overlapping HRA webpages into one simple checklist; reviewing institutional provision for export controls against the Higher Education Export Controls Association (HEECA) self-assessment tool; finalising the due diligence work to launch a formal policy and webpage; and developing enhanced policies/guidance on areas of research governance including export controls, due diligence, the Nagoya Protocol, and the Sponsorship of NHS research.

# Training and awareness-raising

The University provides a range of training opportunities for staff and students. A number of PGR training opportunities refer to research integrity.

### Online training

Seven online training modules are available to all of those with University account access. The first of these focuses on St Andrews guidance, policies and contact points, and the other six modules cover the following topics: introduction to research integrity and the responsible conduct of research, ethical approval and practice, collaborative research and data management, authorship, peer review and publication ethics, plagiarism and recycling of text and research outputs. Starting with the intake of September 2019, PGRs have been required to complete these modules. Since 2021 these have been refreshed, repositioned and repackaged into 'Training in Research Integrity and Ethics (TRIE)' and all modules must be completed ahead of matriculation.

- Following approval from the Mandatory Training Group, work has been ongoing to finalise the first (the St Andrews specific) module of the 7 online modules for new research staff (those on research only, or teaching and research, contracts) as a condition of probation. This has involved: reformulating the question sets to embody a 'case study based competency' approach; and reviewing the modules with a wider range of relevant Professional Service leads, to ensure comprehensive signposting and alignment with St Andrews' policies, processes and contact points regarding the various dimensions of research integrity.
- > The team started to review research integrity training provision at a sample of HEIs across the UK, to allow for benchmarking of St Andrews' provision in the coming year.

Work in the coming year will include: finalising the new version of the first module and its question set, including merging those changes with those undertaken in producing TRIE; and rolling out the updated package for mandating (as well as self-enrolment, which is widely encouraged among staff groups outwith the current training mandate).

#### **Events**

Inductions for new staff, postgraduate research students, supervisors of postgraduate research students and Heads of School consistently contain dedicated content on research integrity, ethics and governance, both in the form of explicit talks on the issue, and distribution of fliers providing the key research integrity information and contact points. There is brief content on research integrity, ethics and governance in the University-wide staff handbook. Workshops are provided on an ad hoc basis, e.g. for undergraduate students on the <a href="Laidlaw scholarship programme in research and leadership">Laidlaw scholarship programme in research and leadership</a> and different cohorts of Physics postgraduates. After moving online during the pandemic, these events have started to occur in person.

Work in the coming year will include: starting and maintaining the lunchtime University-wide academic-led peer-to-peer discussion and learning event series titled 'Spotlight on research integrity'; developing a workshop tailored to technician colleagues; developing a workshop template that can be tailored to any given discipline and delivered at School level; advocating for the introduction of the 'new Principal Investigator' training package; considering restarting the in-person case-study workshop for one-year PGRs; and considering liaising with Human Resources to explore providing a 'bolt on' session on research misconduct investigations to the existing Investigator training (which is fairly general, but focused on Human Resources investigations).

### Research involving humans, their samples or data

- > The online Moodle training course continues to be well received.
- > Training is provided one to one to School ethics administrators and convenors.
- ➤ The Senior Research Governance Officer facilitates and attends handover sessions when School ethics committee convenors change.
- Ad-hoc sessions continue to be delivered to student cohorts and staff at School level, often in partnership with internal (Data Protection, Research Data Management) and external speakers.

Work in the coming year will include: considerable updates to training in line with progress in the project to put in place a digital system for managing research ethics, and subsequent process and guidance change, plus stakeholder engagement and awareness-raising activities; and an online ethics training workshop will be delivered by David Carpenter of UKRIO in October 2023.

# Research involving animals, their samples or data

For any research involving animals the researchers must be trained, supervised, and assessed to the required level of competence. For those active with research involving animals there are a variety of training and induction provisions, including: specific induction material is provided to ethics committee members, which is based on <a href="LASA">LASA</a> (Laboratory Animal Science Association) Developing induction materials for AWERB members but customised to our University; ethics committee members are offered tours of the facilities; researchers must complete inductions of any secure unit before starting any research in that location, including reading and understanding the Code of Practice for that unit; training for handling animals, and subsequent assessment of competency, are provided as required; and researchers requiring a personal licence attend external accredited training courses, which covers law and ethics relating to animal research as well as species-specific information.

A successful workshop was organised, led by the University's Named Veterinary Surgeon, involving researchers from both the University of St Andrews and the University of Dundee. This workshop received excellent reviews and will likely be organised annually.

Work in the coming year will include: moving forwards with plans to organise a workshop on preparation of diagnostic samples; a review and refresh of training policy (for all cohorts of persons involved in research involving animals), and refresher training for Named People where needed; a review and relaunch of the 'local' module; and delivering more visible and co-ordinated activity around the 3Rs and 'culture of care.

### Research governance

Training for researchers continues to be ad-hoc, with applicants given one-to-one guidance by a member of the team, reflecting the complex case-specific permutations of governance processes. There are aspects of the 'research involving humans' training that relate to NHS-related research, and researchers are also signposted to other relevant internal and external resources. The team engage at School level, delivering talks and presentations, normally by invitation.

Work has begun to develop an initial beta version of an online 'Trusted Research tool' for planning certain research. The aim is to present a streamlined single 'front door' to research support at the University, and professional services staff on this complex issue – ensuring awareness of and full engagement with relevant processes in good time. If successful, the tool may be expanded to address all areas of planning for all types of research, and thus ensure that dimensions of research integrity are explicitly flagged in the planning stage of every research activity.

Work in the coming year will include: evolving the 'Trusted Research tool'; further developing our training provisions around Export Controls and Nagoya Protocol, for the former utilising the resources made available by HEECA; and working with NHS Fife and the School of Medicine to explore the introduction of a 'buddy' system between more and less experienced researchers, and the sharing of 'exemplar' documentation from previous projects, to raise project quality.

# **External engagement**

#### Research integrity

Regarding research integrity broadly, the University is a subscriber to UKRIO, which has resulted in access to expert information and advice from the UKRIO team and attendance at UKRIO events, which provide valuable learning and networking opportunities for members of the RIC. The University also actively participates in the Scottish Research Integrity Network (SRIN).

- ➤ Team members attended the SRIN meeting at the University of Dundee in March 2023. This focused on the topics of Trusted Research and research integrity, training on research integrity, and input into the ongoing activities of the UK Committee on Research Integrity.
- The team agreed that St Andrews would host an upcoming instance of the SRIN. Following discussions with its two co-founders, an October 2023 event at Walter Bower House is being organised, on the topics of research involving humans (governance, training and digital systems) and research misconduct investigations (the new national template procedure, and training of investigators). This will feature discussions and

workshops involving reps from all Scottish HEIs, following talks from James Parry (UKRIO) on UKRIO's <a href="ethical governance">ethical governance</a> and <a href="investigation">investigation</a> guidance, and Cristina Douglas (University of Aberdeen) on her ethical governance and systems <a href="project">project</a> and <a href="report">report</a>.

➤ Team members attended the online <u>UKRIO annual conference</u> in May 2023, which included talks on the Technician's commitment, and systems of publication retraction.

Work in the coming year will include: hosting the SRIN event mentioned above, in October 2023; speaking at a UK CORI event in November 2023, following St Andrews' approach to numbers reporting in these annual statements being presented as a positive case study in the UK Committee on Research Integrity's (CORI) 'Review of annual statements on research integrity' (page 15); and continued active engagement with UKRIO and SRIN events and discussions.

### Research involving humans, their samples or data

The University continues to engage with other Scottish HE organisations (via SRIN on Teams and the ARMA Ethics Special Interest Group mailing list), including sharing of resources and best practice.

- Communication with other UK HE organisations has been a key part of the project to put in place a digital system for managing research ethics, exploring use and implementation of an electronic ethics management system as well as structures and processes at other UK HE organisations.
- Interaction with other UK HE organisations has occurred on governance and ethics approvals around research with human participants involving the Ministry of Defence

Work in the coming year will include attending ARMA, UKRIO and other events.

#### Research involving animals, their samples or data

Significant external engagement has continued over the past year, in part due to the continuing developments arising from the Home Office Change Programme. The typical networks and engagements that have occurred are with the: Home Office and UK Establishment Licence Holders network regarding the Home Office changes; external network ScotPIL which develops and assesses the provision of training for animal research across Scotland; Scottish AWERB Hub, a network for those involved and coordinate the activities of their Scottish animal welfare and ethics committees; and the HOLTIF - the Home Office Liaison Training and Information Forum is a UK wide network for those with specific roles within the animal research regulations. The University is in regular contact with the Animal and Plant Health Agency (APHA). The University regularly organises, with the Universities of Dundee and Aberdeen, joint 3Rs/culture of care webinars - for all license holders, Named People and welfare technicians in those institutions. The University provides a return to the annual survey of the Concordat on Openness in Animal Research.

- A joint 3Rs/culture of care webinar, with the Universities of Dundee and Aberdeen, was held on 10 February 2023. This event comprised two talks, one from individuals at Medical Research Council Harwell on managing mouse colonies, and one from a researcher and senior technician at St Andrews on rodent environmental enrichment strategies.
- ➤ The return to the annual Concordat survey was more substantial than in previous years, capturing a wider range of activity at the University than before, due to a more substantial process being developed for collating the response.

Work in the coming year will include continuing our abovementioned engagements.

#### Research governance

We remain engaged with: NHS Fife - exploring opportunities and challenges in relation to current support, and governance for, research studies involving both organisations; other Universities - regarding Sponsorship of research involving the MoD; (HEECA; the DEFRA ABS Stakeholder's Forum - regarding the Nagoya Protocol.

# Addressing research misconduct

Guidance on the various contact points available for asking questions, raising concerns and making allegations relating to research misconduct are provided on our <a href="webpage">webpage</a> and form the emphatic central message of all awareness-raising activities. Because of the importance of research integrity, we have a separate email account for anyone with queries on matters of research integrity (<a href="researchintegrity@st-andrews.ac.uk">researchintegrity@st-andrews.ac.uk</a>). We have a point of contact to act as confidential liaison for those making a public interest disclosure ('whistleblowers'): details can be found <a href="here">here</a>.

The Research Misconduct Policy and its Annexe provide a transparent process for reporting and investigating of allegations of research misconduct, a process which articulates and manifests appropriate principles and mechanisms to ensure that investigations are thorough and fair, carried out in a transparent and timely manner, and involve appropriate confidentiality. The process also includes provisions for appropriate reporting to external bodies and issuing of public statements.

	Academic year 2018-19	Academic year 2019-20	Academic year 2020-21	Academic year 2021-22	Academic year 2022-23
Questions asked	3	5	6	6	4
Concerns raised	9	8	5	3	4
Allegations received (for which investigations have concluded)	1*	0*	3	2	1
Allegations received (for which investigations are ongoing)	-	-	1	1	0

<sup>\*</sup>as reported before the introduction of the questions and concerns terminology: both were together referred to as 'inquiries' in these years' statements.

Data has not been broken down by discipline, type of misconduct or funding body because that could potentially allow for the identification of individuals or research projects, given the size of our institution and numbers of events being reported above.

### Definitions:

- A 'question' is an enquiry relating to general guidance on good research conduct, or explicitly related to a specific piece of research conducted under the auspices of another organisation.
- A 'concern' is an enquiry explicitly related to a specific piece of research conducted under the auspices of the University.
- 'Allegations received' refers to the receipt of a formal allegation in writing, all of which are investigated in accordance with the Research Misconduct Policy.

The questions and concerns were on the topics of:

#### Questions

- Copyright ownership (including with collaborators) of an image that an individual researcher paid to have produced (Library staff)
- A potential conflict of interest, that could potentially be seen to cast doubt on the impartiality and integrity of the research (Sciences)
- Appropriate recognition of staff involved in setting up and running facilities in outputs involving the use of those facilities (Sciences)
- How to respond to plagiarism/insufficient citation of contributions that are identified when undertaking review of an already-published book (Arts and Humanities)

### Concerns

- Follow-up issues relating to a concluded investigation (Arts & Humanities)
- Potential offence or contravention of equalities legislation arising from the contents of a research output (Sciences)
- A student potentially engaging in activity that might have required a favourable ethical opinion, without having sought or obtained that opinion (Social Sciences)
- Assertion that language used by a researcher in a published research output was racist (Arts and Humanities). The assertion was appraised by the central Equality, Diversity and Inclusion team, which found that: the assertion had no substance, with the language used in the work in question being within the bounds of academic freedom.

# Concluded allegations

A research misconduct investigation that started in mid-2022 was concluded and passed to the University's disciplinary process in early 2023. The Respondent is no longer employed by the University. The University invoked the relevant provisions of the Research Misconduct Policy to make a publicly accessible <u>statement</u> about the case. (Arts and Humanities)

Experience of handling these allegations has presented the following for consideration as future updates to the research misconduct policy/process: further clarifying the policy's provisions on sharing of information, and the publishing of public statements, regarding investigations.

# Monitoring and evaluation

In spring 2021, a research project at St Andrews was undertaken in which over 600 members of the University community (very large given the size of the University) responded to a survey regarding research culture, with a

balanced representation from Arts, Humanities and Social Sciences. In contrast to other surveys on research culture, across the sector and at other Universities, <u>the results</u> demonstrated strong perceptions that the University is taking integrity seriously (67%), and that research at the University is undertaken with honesty (63%).

In AY2023-24, the Integrity, Ethics and Governance team plan to have discussions as a team with each Director of Research, to understand their perspectives and needs around integrity and how we may be able to help, and their sense of relative prioritisation of actions. This would then feed into the work of the reformulated RIC.

# Research integrity

In the absence of established indicators of integrity culture across the sector, we keep track of the following to inform our understanding of how effective our above efforts have been.

## Trends in numbers of questions, concerns and allegations over the 5 years from 2015/6 to 2022/23

Analysis performed during this year, using previous annual statements, shows the following. Questions asked and concerns raised were 0, 1, 7, 12, 13, 11, 9, 8. Allegations received were 0, 1, 3, 1, 0, 3 and 2, 0. Therefore allegation numbers have fluctuated between 0 and 3 each year, whereas questions and concerns have increased over time, before appearing to fluctuate around 10 per year, and perhaps fall slightly. We take this as an indication of an increasing awareness of the service and a developing culture of research integrity, but the need to undertake fresh awareness raising activity.

### Training and awareness-raising: completion of online training modules

Starting with the intake of September 2019, PGRs are required to complete the first module as part of matriculation, and the other six during their first year. Students cannot matriculate without meeting these requirements, and therefore completion is 100% every year.

### Training and awareness-raising: feedback on training and induction activities

Feedback on the session at postgraduate induction, and the workshops for postgraduate students, undergraduate Laidlaw scholars and Physics PGR cohorts receive consistently positive feedback from attendees, resulting in requests for repeat sessions in subsequent years. Feedback comments include the following: "nicely presented, engaging, to the point, interactive: this was actually useful, beyond the intellectual engagement", "extremely useful for someone returning to academia. I found the practical problem-solving approach very thought-provoking", presentations on policy were "very informative and I have a better understanding of what is expected of me", "lots of practical and specific advice covered", "it worked surprisingly well (was detailed enough) in the multi-disciplinary sphere", "useful, friendly input", "useful, especially on research integrity and ethics", and in one case was considered to be the "most informative" of all the talks.

# Research involving humans, their samples or data

All research involving humans, their samples or data is subject to ethical review by a School ethics committee, and summaries of every application are reviewed on a regular basis (monthly) either at a meeting of the University-level committee, UTREC, or virtually via Teams. This monitoring results in in-depth discussion of the issues raised by projects, sometimes resulting in the invitation of researchers to present on their work, and occasionally also resulting in the development of or updates to guidance on a particular topic that is then shared across the University via the webpages and email. Numbers of applications processed per year are presented for discussion each year at UTREC and then EARIAG, with consideration of any trends in the data over the years and whether there are any concerns about engagement. The University's research ethics, integrity and governance team liaise regularly with academics, Schools, and professional services to identify and resolve issues relating to research involving humans, wherever these may be identified in the research lifecycle.

### Research involving animals, their samples or data

All research involving animals, their samples or data is subject to ethical review by a School ethics committee, and numbers of applications for licenced and non-licenced work are reviewed regularly by the University-level committee, AWEC. AWEC also discusses best practice relating to and arising from projects undertaken and ensures that it is shared as widely as possible across the University. Numbers of applications processed per year are presented for discussion each year at AWEC and then EARIAG, with consideration of any trends in the data over the years and whether there are any concerns with engagement.

### Research governance

As part of an ongoing project with the School of Medicine and NHS Fife, exploring opportunities and challenges in relation to current support, and governance for, research studies involving both the University and NHS Fife, RIS previously undertook a comprehensive and detailed calendar audit of NHS Sponsorship reviews and approvals involving the University and NHS Fife. This audit demonstrated that RIS normally respond within 1-5 working days, with longer response times from researchers or external NHS contacts. Factors which influence approval timelines are: complexity of study; experience and diligence of applicants; degree of engagement of applicants' supervisors;

and novelty of aspects of the study, including resolving inconsistencies in guidance provided by different parts of the NHS and building internal processes to manage risk. This resulted in RIS proposing a series of recommendations to further improve these timelines and the quality of applications, including: introducing case meetings; enhancing guidance and template documents; more active, visible and explicit expectation management; and enhancing the skillset of RIS colleagues.