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Version Number	Purpose/Change	Date
1	Creation of Research Data Management Policy	September 2021

RESEARCH DATA MANAGEMENT

- 1. Purpose and Context
- 1.1 RGU recognises that good research is underpinned and validated by good data. Research data provides the evidence of academic endeavours and in conjunction with publications, forms an important part of the scholarly record. Research data is a valuable asset and good management of research data brings benefits to the researcher, the University and the wider community. All researchers at RGU create or use some type of data as part the research process.
- 1.2 Responsible handling of research data provides a clear indication that the institution and individual researchers are operating with integrity.
- **1.3** Sharing research data appropriately enhances the value and impact of research; therefore, RGU supports:
 - 1.3.1 the UKRI position that publicly funded research data is a public good and that it should be made openly available with as few restrictions as possible in a timely and responsible manner
 - 1.3.1.1 "Publicly funded" includes any research undertaken whilst employed or studying at RGU, including where studies are self-funded. Specific contractual arrangements relating to research funded by a commercial interest may be put in place on a case by case basis
 - 1.3.2 the principles set out in the <u>Concordat on Open Research Data</u>
 - 1.3.3 the UKRI common principles on data policy
 - 1.3.4 the FAIR data principles
- 1.4 RGU advocates an open access approach to research data wherever possible. However, open access needs to be balanced with the constraints of security, confidentiality and commercial interest.

1.5 This policy provides detailed information to supplement the RGU Research Governance and Integrity policy. Safe and ethical handling of data is a fundamental part of good practice for research, demonstrating; honesty, rigour, transparency and open communication, care and respect. The RGU Information Governance Policy also provides context, with explicit explanation of the legislative environment governing the handling of any personal data.

2. Legislation and Standards

- 2.1 Researchers are responsible for making themselves familiar with and adhering to legislation, ethical standards, (in particular NHS Ethics Committee requirements & Caldicott), regulatory requirements and contractual obligations including funder policies that pertain to their research.
- 2.2 Key legislation includes; the Data Protection Act (2018) and General Data Protection Regulations (GDPR) (2018), the Freedom of Information (Scotland) Act (2002), Intellectual Property Rights (2014), and Copyright (1988).
- 2.3 The <u>UK government</u> promotes open research data as part of all the research it funds including research commissioned with industry and HEI partners.
- 3. Concordat on Open Research Data
- 3.1 In keeping with the principles outlined in the Concordat on Open Research Data RGU aims to demonstrate that the research community;
 - 3.1.1 are acting in an appropriate manner concerning research data
 - 3.1.2 conform to all ethical legal and professional obligations relevant to their work
 - 3.1.3 nurture a research environment that makes data open wherever practical and affordable
 - 3.1.4 use transparent, robust and fair processes to make decisions concerning data openness

- 3.1.5 have appropriate mechanisms in place to provide assurances as to the integrity of their research data and
- 3.1.6 recognise the importance of data citation and credit acknowledgement

4. Scope

- **4.1** This policy covers all types of research that is expected to result in published findings of lasting scholarly value including:
 - 4.1.1 collection and creation of new data for the purposes of research
 - 4.1.2 use or re-use of data already created or collated elsewhere for the purposes of research
 - 4.1.3 data used as part of externally funded research in accordance with funder's requirements
 - 4.1.4 data used for internally funded research whether carried out as part of normal salaried scholarly activity or for specific internal funding streams.
 - 4.1.5 data used or created by research students studying at RGU. This is classed as "publicly funded" regardless of personal student financial arrangements.
- 4.2 It applies to any individual affiliated with the University including Emeritus, Visiting and Associate staff, and those with no formal affiliation, who conduct research on University premises or using University facilities. This policy applies across all research disciplines.
- **5.** Roles and Responsibilities
- 5.1 It is the collective responsibility of the Institution, Schools and Academics to ensure that research data is appropriately managed throughout the entire research lifecycle.

5.2 Institution

- 5.2.1 RGU is responsible for;
 - 5.2.1.1 development of research data strategy and policy
 - 5.2.1.2 developing support services including training, guidance and advice in research data management necessary to implement this policy
 - 5.2.1.3 access to infrastructure and facilities for the storage, backup, deposit and retention of research data and records that allow researchers to meet their requirements under this policy and funding body policies.
 - 5.2.1.4 monitoring compliance and practice

5.3 Schools

- 5.3.1 Schools are responsible for;
 - 5.3.1.1 ensuring that academics are aware of and follow RGU's policy and procedures
 - 5.3.1.2 putting in place an appropriate Standard Operating Procedure for ethical and safe handling of research data
 - 5.3.1.3 ensuring academics, and through their supervisory activities, students, complete relevant training and are appropriately skilled
 - 5.3.1.4 ensuring data is retained by the institution and not lost either through poor practice or when staff and students move on in their academic career
 - 5.3.1.5 ensuring all researchers and research students have registered for an ORCid
- **5.4** Academics Principal Investigator (PI) Responsibilities
 - 5.4.1 The RGU PI on a grant application or research project is responsible for managing research data which is generated or collected as part of the project, even when there are other partners on the project. This includes:
 - 5.4.1.1 completion of a Data Management Plan at the time of submission to any funder that requires it

- 5.4.1.2 completion of a Data Management Plan in other cases where data is being transferred between collaborators / partners or where data is about people.

 This can be at the time of award and contract agreement.
- 5.4.1.3 following best practice, keeping skills up to date
- 5.4.1.4 secure and ethical storage and use of data on RGU facilities. Data must not be stored on mobile devices, personal (i.e. non RGU) devices and should always be backed up
- 5.4.1.5 compliance with the University's Information Governance Policy for research projects involving the processing of personal data, including the completion of a Privacy Impact Assessment where required.

5.5 Academics - Supervisors

- 5.5.1 It is the supervisor's responsibility to guide research students in best practice when managing research data. This includes:
 - 5.5.1.1 completion of a Data Management Plan at an appropriate stage
 - 5.5.1.2 compliance with the University's Information Governance Policy for research projects involving the processing of personal data, including the completion of a Privacy Impact Assessment where required
 - 5.5.1.3 managing access to research data
 - 5.5.1.4 ensure students are appropriately skilled and undertake relevant training
 - 5.5.1.5 secure and ethical storage and use of data. Data should not be stored on personal (i.e. non RGU) devices and should always be backed up
- 5.6 Staff should be aware that failure to handle research data responsibly and with integrity, for example without adequate back-ups against potential loss, or on personal devices which could breach data protection legislation, may be subject to disciplinary action.

6. Research Data Management

6.1 Definition of Research Data

- 6.1.1 "Research data" is defined as any recorded information necessary to support or validate a research project's observations, analysis, findings or outputs, regardless of format or funding stream. It can include data specifically created or collated for the study, or use of data collected or created elsewhere which is being re-used. It includes, but is not limited to:
 - 6.1.1.1 results of experiments/simulations
 - 6.1.1.2 statistics and measurements
 - 6.1.1.3 algorithms, models and software
 - 6.1.1.4 observations, survey results, interview transcripts and recordings
 - 6.1.1.5 images, designs, physical artefacts and samples
 - 6.1.1.6 textual source materials, archival material and annotations

6.2 Data Management Planning

6.2.1 A data management plan is an essential part of research study design and methodology. RGU requires that a data management plan is completed as part of any research project submission where the funder requires it. In addition, RGU requires that a data management plan is completed in every other case where data will be transferred between partners / collaborators.

6.3 Information Governance

6.3.1 The Information Governance Policy discharges the University's legislative obligations for data protection, sharing of information and records management of which research data is a part.

- 6.3.2 Extra consideration should be given to research projects involving personal data including;
 - 6.3.2.1 if the processing of personal data will result in a high risk to the individuals concerned. A Data Privacy Impact Assessment should be completed before data is collected.
 - 6.3.2.2 compliance with the seven data protection principles and individual's rights set out in the UK General Data Protection Regulations.

6.4 Consent for Data Sharing

6.4.1 Obtaining appropriate consent for data sharing must be a key action for all researchers. This may require consent from research participants to share data about them, or consent from research partners to make the results of data open and available.

6.5 Infrastructure

6.5.1 The University will provide mechanisms and services for storage, backup, registration, deposit and retention of research data assets in support of current and future access, during and after completion of research projects.

6.6 Storing Data

- 6.6.1 During the active phase of research, data will be stored on the University's research data facilities. Research data must not be stored on a personal drive, including H:\drive, personal devices, home computers and so forth.
- 6.6.2 Researchers may need to make arrangements for:
 - 6.6.2.1 physical security controlling access to rooms or cabinets, creation of "safe haven" facilities
 - 6.6.2.2 logged access to media and hardware
 - 6.6.2.3 adequate backup and retrieval

6.7 Dissemination and Deposit

- 6.7.1 RAE and REF rules have always allowed for data as one of the many different forms of output to be submitted for assessment, but such submissions are rare. RGU promotes the concept of research data as an output, created and curated suitably for submission in research assessment exercises.
- 6.7.2 Researchers at RGU should deposit data sets as open data on the RGU repository, or on other suitable academic repositories. In cases where consent to share open data has not been obtained, meta-data should be deposited. Any data which is retained elsewhere, for example in an international data repository must be registered with the University and rights of access maintained.

6.8 Intellectual Property & Copyright

6.8.1 Researchers must not hand over to commercial publishers or agents exclusive rights to reuse or publish research data without retaining the rights to make the data openly available for re-use, unless this is a condition of funding.

6.9 ORCiD

6.9.1 All researchers at RGU, including research students, will register for an ORCid which will be recorded on the research information system. ORCiD ensures that outputs (including data) are correctly identified with the appropriate academic.

7. Implementation

- 7.1 Schools are responsible for implementing this policy through their standard operating procedures. These should include:
 - 7.1.1 Data management planning
 - 7.1.2 Data documentation and metadata
 - 7.1.3 Sharing data between collaborators
 - 7.1.4 Storing data and infrastructure

- 7.1.5 Consent for data publication and dissemination and ethical handling of data
- 7.1.6 Depositing Data and Open Data
- 8. Review
- 8.1 This policy will be reviewed every three years or updated as required.

APPENDIX 1 ORIGINAL DATA MANAGEMENT PRINCIPLES IN RGU RESEARCH INTEGRITY POLICY

- i. Research data will be managed to the high standards/in accordance with defined best practice in accordance with Research Councils UK RCUK Common Principles on Data Policy and throughout the research data lifecycle as part of the University's commitment to developing research best practice/research excellence.
- ii. Responsibility for research data management through the development and adherence to a sound research data management plan during any research project or programme lies primarily with principal investigators.
- iii. All new research proposals [from date of adoption] must include research data management plans or protocols that explicitly address data capture, management, integrity, confidentiality, retention, access, sharing, re-use and publication.
- iv. The University will provide training, support, advice and where appropriate guidelines and templates for the research data management and research data management plans.
- v. The University will provide mechanisms and services for storage, backup, registration, deposit and retention of research data assets in support of current and future access, during and after completion of research projects.
- vi. Any data which is retained elsewhere, for example in an international data service or domain repository, must be registered with the University and rights of access maintained.
- vii. The legitimate interests of the subjects of research data must be protected.
- viii. Research data of future historical interest, and all research data that represent records of the University, including data that substantiate research findings, will be offered and assessed for deposit and retention in a University repository or an appropriate national or international data service or domain repository,
- ix. Exclusive rights to reuse or publish research data must not be handed over to commercial publishers or agents without retaining the rights to make the data openly available for reuse, unless this is a condition of funding

APPENDIX 2 Research Data Management – Summary of Roles & Responsibilities

	Institution	School	Academic
Guidance & Documentation	 Data Management Policy to support research integrity within RGU Data Management Standard Operating Procedure (SOP) TEMPLATE Guidance on legislative environment, applying it to RGU situation Support service to provide assistance & advice 	Implement Data Management Policy Adopt Data Management Standard Operating Procedure (SOP) TEMPLATE Raise awareness with staff & students of relevant guidance & policy	Be cognisant of policy & guidance framework & adapt working practices to be compliant Ensure students under supervision comply with policy and train them in best research practice
Skills Development & Resources	 Provide a range of materials & resources in Data Management Planning, Data Protection and Consent for Data Sharing Provide training (staff & research students) 	 Adopt & implement materials & resources as appropriate for research academic activity in the School Ensure staff & students develop skills e.g. by attending workshops on data management, completing online training resources such as MANTRA 	 Use resources to develop student material, e.g. "Managing & Sharing Data", MANTRA online materials Use materials when undertaking research Maintain own competence & develop skills Ensure students under supervision develop skills
Research Initiation & Review: - 1. Externally Funded Research 2. Internally Funded Research 3. Research Degrees 4. Taught Degrees	 Support production of data management plans (DMPs) & other proposal material Manage authorisation & review process 	Support production of Data Management Plans Manage authorisation & review process, including ethics (through School Research & School Ethics Committees) Ensure completion of Data Management Plans as part of transfer process / PGCert2	Complete Data Management Plans including requirements for infrastructure Submit for relevant authorisations including ethics committees Ensure research students complete Data Management Plans at appropriate stage of study Ensure taught students develop skills in data management
Management & Sharing of research data & materials with collaborators	Provide infrastructure for data storing & security Provide specialist advice Support & advise on metadata creation	Ensure staff and students comply with best practice Ensure that data is secured as a research output	Secure consent for data sharing Plan & manage transcription, anonymisation, digitisation Metadata creation Storage and security Use correct tools for data sharing that are GDPR compliant
Deposit & Archive of Data	 Provide infrastructure for data archive that allows data to be shared "openly" Provide specialist advice Advise on copyright, IP and Data Protection Advise on data deposit 	Ensure that data is deposited especially when projects come to an end, research students graduate or staff leave RGU	 Undertake "housekeeping" of data to ensure it is in a suitable state for archive Data cleaning & prep data sets



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