3Rs self-assessment tools:
The role of the AWERB

Dr Jessica Eddy
NC3Rs Regional Programme Manager (GW4)

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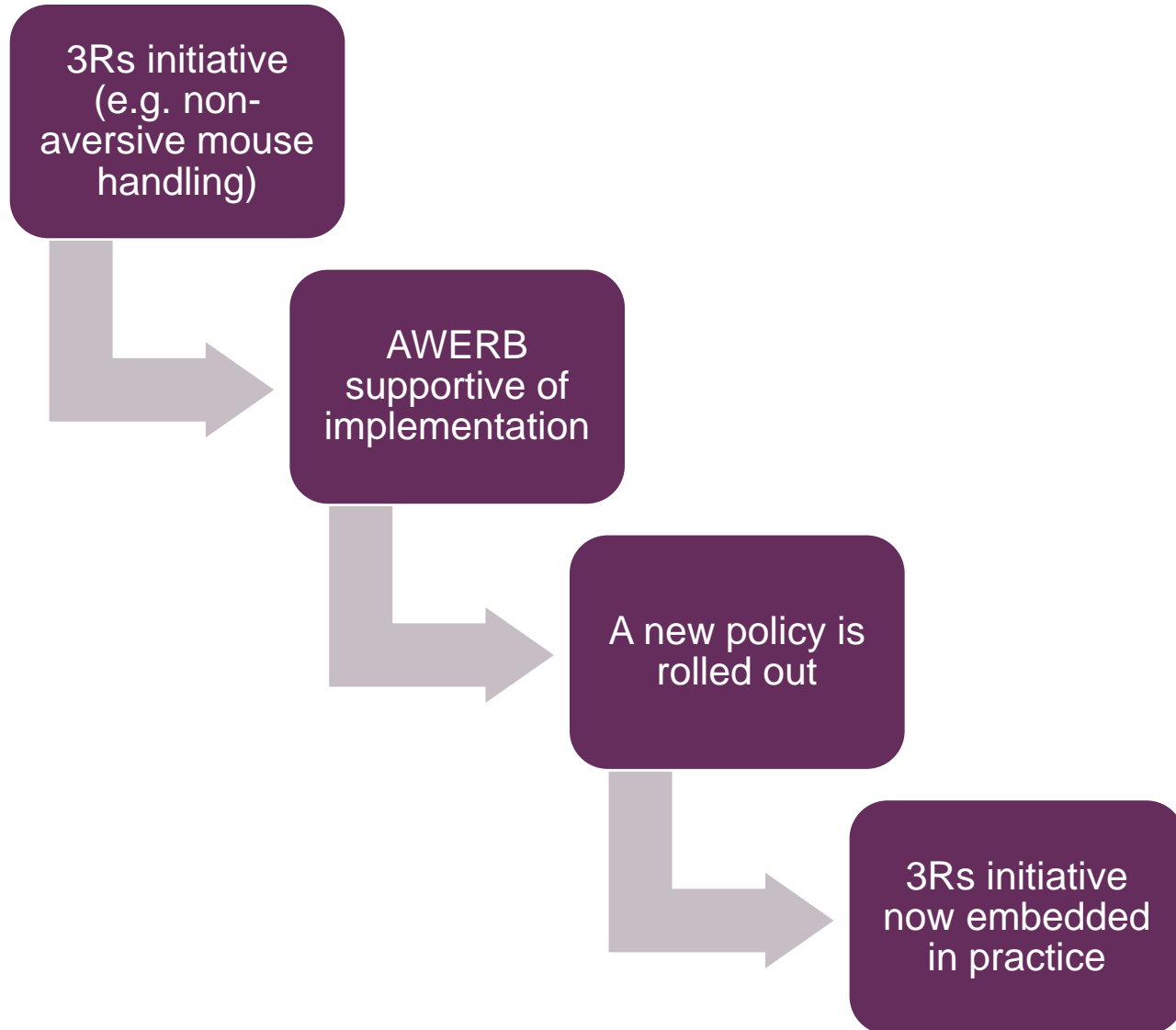
Pioneering Better Science

Outline

- Putting the 3Rs into practice.

- The role of the AWERB in supporting the 3Rs.

- Assessing your institution's 3Rs landscape.

- Demo of the 3Rs self-assessment tools.

- Why should AWERBs be encouraging the use of the tools at their institutions?

- Actioning the feedback from the institutional tool.

- Developing a 3Rs strategy.

Putting the 3Rs into practice

- The NC3Rs' mission is dependent on research organisations putting the 3Rs into practice.

- **This requires;**

  1. **A visible commitment to 3Rs across all levels.**

  2. **Active application of the 3Rs in the policy, practice and decision-making processes of the organisation.**

  3. **Effective challenge on the use of animals**.

- The NC3Rs is there to support the delivery of a strong 3Rs culture.

- The AWERB has a critical role in embedding the 3Rs in policy and practice.

The role of the AWERB in supporting the 3Rs

3Rs initiative (e.g. non-aversive mouse handling)

AWERB supportive of implementation

A new policy is rolled out

3Rs initiative now embedded in practice

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Assessing your institution's 3Rs landscape

What are the 3Rs self-assessment tools?

- The NC3Rs has developed two online, free-to-use 3Rs self-assessment tools:
  - Research Group Tool (RGT)
  - Research Institution Tool (RIT)
- These provide a framework for collating, tracking and benchmarking 3Rs activities and progress.
- Use of the tools is voluntary and confidential.

Benefits to using the tools

- **Focus efforts** – scores can be used internally to allocate resources and concentrate discussions on the most important 3Rs areas.

- **Find out what has worked before** – bespoke feedback gives advice and suggestions for improvement.

- **Track progress** – the self-assessment process can be repeated, and multiple scores logged over time, to see how the 3Rs culture has developed.

- **Demonstrate commitment to the 3Rs** – users may wish to share their scores externally (e.g. grant proposals, applications for approval to use animals, etc.).

- **Convert policy into practice** – a clear and comprehensive method for assessing 3Rs activities in relation to best practice, helping ensure 3Rs policy is reflected in actions.

The Research Group Tool

Who is the tool for?	Research groups who use animals in their research
Number of questions	10
Can more than one individual contribute?	Yes
Is a lead-user needed?	Yes
Does registration need to be approved by the NC3Rs office?	No

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Areas covered by the Research Group Tool

Engaging with the 3Rs

Developing and implementing 3Rs initiatives

Reviewing and improving research involving animals

Training in the 3Rs

Research Group Tool – Examples of multiple choice questions and answers

Training in the 3Rs

Are group members encouraged to attend 3Rs-focused events?

Resources are available for all group members to attend at least one 3Rs-focused event every 12 months.

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Research Group Tool – Feedback examples

Training in the 3Rs

*"**Attendance at events**: A [calendar of 3Rs-relevant events](#) hosted by different organisations can be found on the NC3Rs website. By making resources available for all group members to attend at least one 3Rs-focused event every 12 months, this ensures that everyone can access the latest information and reinforces the importance of the 3Rs in your group's work."*

The Research Institution Tool

Who is the tool for?	Universities and other academic, research-intensive organisations
Number of questions	38
Can more than one individual contribute?	Yes
Is a lead-user needed?	Yes
Does registration need to be approved by the NC3Rs office?	Yes

Areas covered by the Research Institution Tool

Leadership

People

Research and Infrastructure

Experimental Design and Reporting

Training

Publications and Wider Dissemination

Research Institution Tool – Multiple choice questions and answers

Leadership

Who has the main responsibility for driving and coordinating 3Rs activities across the institution?
e.g. The AWERB/IACUC, the Named Persons, an academic 3Rs lead, a network of departmental 3Rs champions.

Is there a clear and coordinated strategy to promote and implement the 3Rs across your institution?
e.g. A formal 3Rs strategy has been written as a standalone document. It summarises the status of animal use at your institution and identifies areas requiring improvement and/or opportunities to advance the 3Rs.

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Research Institution Tool – Feedback examples

Leadership

*"**Leadership:** Having a dedicated member of staff driving and coordinating your institution's 3Rs activities is key to ensuring that these activities are successful. By entrusting this role to a senior member of staff, you are demonstrating the importance of the role, making it more likely that other members of staff will be supportive and get involved."*

*"**Taking a strategic approach:** Your institution's general policy on animal work should include a commitment to the 3Rs, but a more detailed, standalone 3Rs strategy document should also exist. This should outline the status of the 3Rs at your institution and priorities for improvement. For help with developing and implementing a 3Rs strategy, see this [guidance document](#) produced by the NC3Rs."*

Research Institution Tool - Results

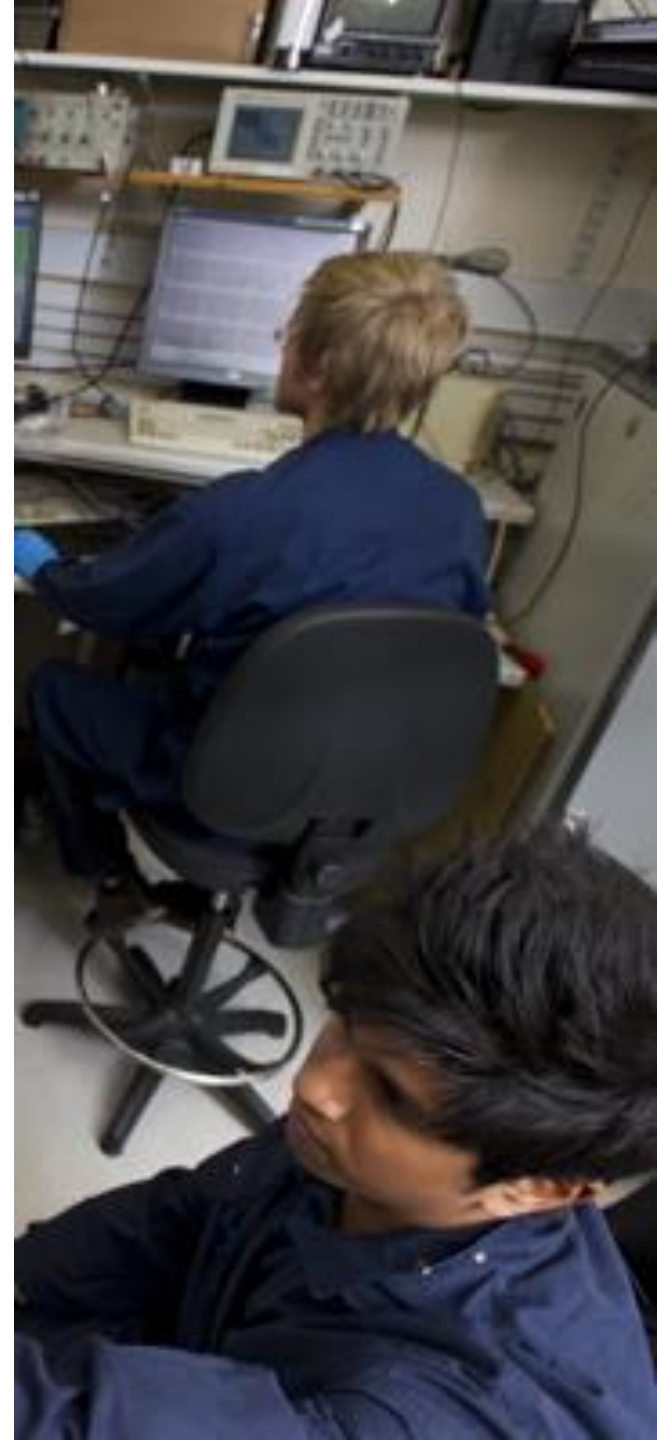|	
Fair	Leadership: taking a strategic approach
Fair	People: ensuring the right culture
Poor	Research and infrastructure: supporting the best science
Fair	Experimental design and reporting: robust and reproducible studies
Fair	Training: building capability
Poor	Publications and wider dissemination: sharing impacts

Tracking progress

Leadership

100
90
80
70
60
50
40
30
20
10

People

Publications and wider dissemination

Research and infrastructure

Training

Experimental design and reporting

WEBINAR TEST (2020-11-02)
WEBINAR TEST 2 (2020-11-24)

(Click titles above to amend view on spider diagram)

Fair	Leadership: taking a strategic approach
Fair	People: ensuring the right culture
Poor	Research and infrastructure: supporting the best science
Fair	Experimental design and reporting: robust and reproducible studies
Fair	Training: building capability
Poor	Publications and wider dissemination: sharing impacts

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An honest reflection

- The self-assessment needs to be an honest reflection of the 3Rs culture within your group or institution.

- This will help you get the most out of the tool and receive appropriate feedback on 3Rs improvements.

- Your answers and results will remain confidential.

Data security and confidentiality

- **The NC3Rs can view** information required for system functionality and metrics:
  - High level administrative actions (for example the creation of an account).
  - Total number of users and self-assessments in progress.
  - Average times between submissions across all accounts in system.
  - Average scores for each section across all self-assessments in system (Will allow future benchmarking against whole population).
  - Free text box suggestions of ways to expand the question sets/statements.

- **The NC3Rs cannot view** information related to individual self-assessments:
  - Answers to questions.
  - Correspondence between lead and sub-users.
  - Individual scores or feedback.

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Live demo of the Research Institution Tool

Why should AWERBs be encouraging the use of the tools at their institutions?

- Benchmark how your institution is doing in relation to 3Rs activities.

- The feedback can be used to determine priority areas for improvement.

- Identify where the institution is performing well and where there are opportunities to be exemplary.

- 3Rs responsibilities for AWERBs are more than just PPL reviews- the tools provide a mechanism to fulfil these additional responsibilities.

- Results from research groups completing a 3Rs self-assessment can be used to inform a PPL review (one AWERB does this annually).

- Should lead to an improvement in 3Rs culture; identifies further opportunities to develop and implement 3Rs advances.

- Results are a starting point to develop a 3Rs strategy and action plan.

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Where should AWERBs start on completing an institutional self-assessment?

- The AWERB should discuss who across the institution should be the lead-user for the tool (e.g. AWERB Chair, BSU Director, NVS etc).

- It might help to appoint a sub-group of people who will work together to complete an assessment (e.g. AWERB Chair, BSU Director, NVSs, NACWOs, NTCO, NIO, NC3Rs RPM, engaged researchers etc.).

- Your institution may have already have a 3Rs group who may be best placed to work together to complete an assessment.

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Different ways of approaching an institutional 3Rs self-assessment (1)

- The AWERB/3Rs group identifies a lead-user for the assessment and suggests potential sub-users.

- Lead and sub-users **separately complete the questions** they can within the system.

- The **lead-user accepts the most appropriate answer** for each question and submits the self-assessment.

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Different ways of approaching an institutional 3Rs self-assessment (2)

- The AWERB/3Rs group identifies a lead-user for the assessment and suggests potential sub-users.

- Lead and sub-users **separately complete the questions** they can within the system, but then **come together for discussions** on which are the most appropriate answers to accept for each question using **either the PDF of the question set** or accepting the **answers in real time** within the system.

- If using a PDF of the question set, the lead-user then logs back into the system to accept the chosen answers and submits the self-assessment.
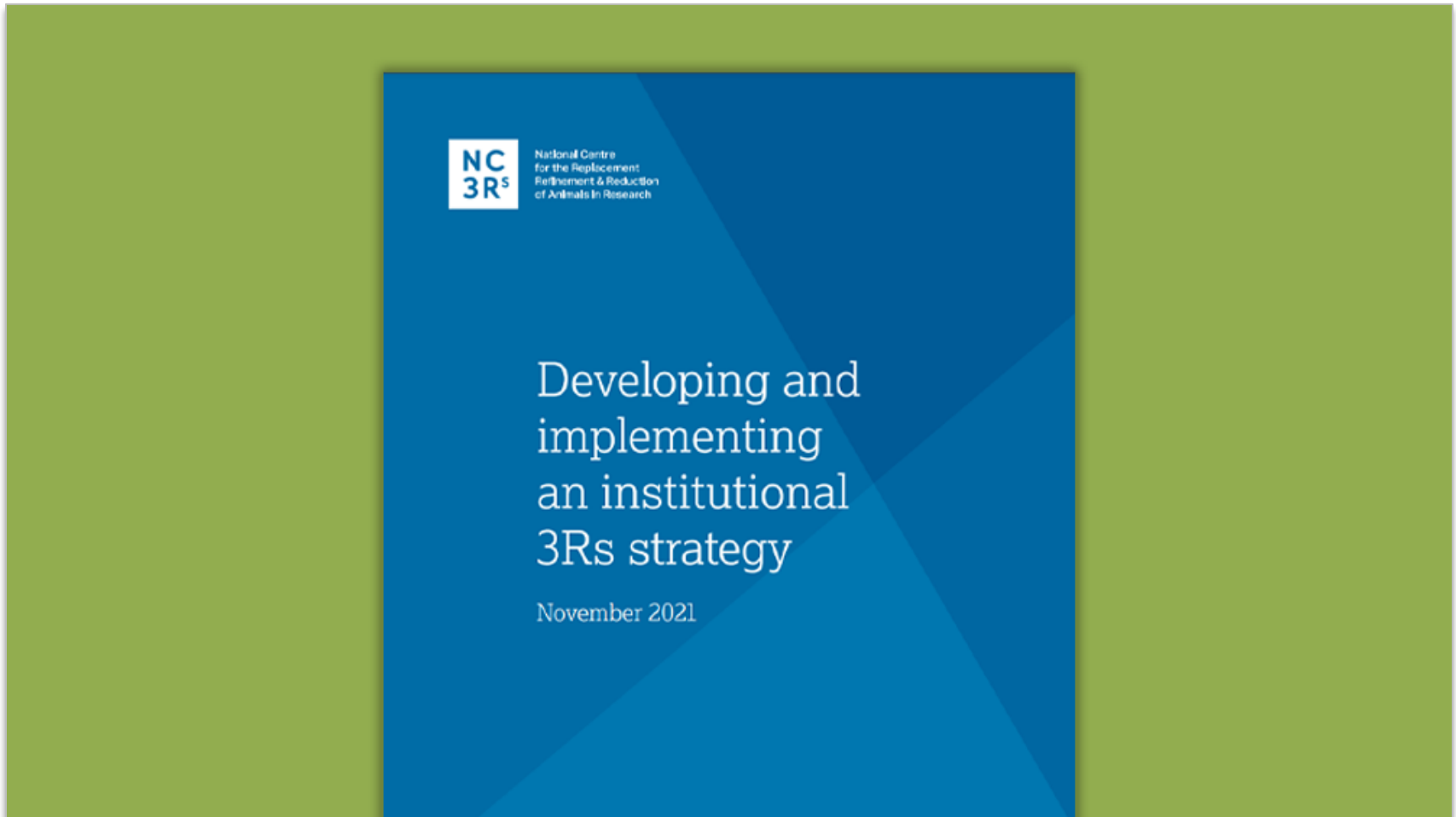
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Different ways of approaching an institutional 3Rs self-assessment (3)

- The AWERB/3Rs group appoints a lead-user for the assessment (this could be an administrator).

- AWERB/3Rs subgroup **meeting time is set aside to discuss** the most appropriate answers for each question using the PDF of the question set or completing the question set in real time within the system.

- If using a PDF of the question set, the lead-user then logs back into the system to answer the questions as agreed and accepts these answers for submission.

- There will **likely need to be a few 1-2hr meetings** to get through the entire question set.

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Actioning feedback

- Those involved in completing an institutional 3Rs self-assessment could present the results at an AWERB meeting where time is carved out for discussion.

- Following discussion, the feedback can be used to determine priority 3Rs areas for improvement.

- These identified areas could form part of an institutional 3Rs strategy.

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How to develop a 3Rs strategy

Real world example: University of Birmingham

- NC3Rs 3Rs self-assessment tool used by 3Rs Focus Group

- Tool feedback used as basis for their 3Rs strategy

Comments and recommendations

Your institution's commitment to the 3Rs should be made clear to all members of staff, driven by senior members of staff and supported by existing infrastructure.

Your responses in the LEADERSHIP section indicate your institution has made some progress in committing to the 3Rs but needs to make further improvements in fully realising and communicating this commitment. Read the following detailed analysis of your responses for feedback and guidance on how to improve.

- **The institution's policy on animal use:** Including a commitment to the 3Rs in your institution's policy on animal use makes their importance clear. It demonstrates that all members of staff should be aware of the 3Rs and apply them to their own activities. If you have not done so already, you could provide examples of how your institution has committed to the 3Rs, as demonstrated by Queen Mary University of London.

  Because your institution's policy is visible to the public, your commitment to the 3Rs is clear to these key stakeholders, which helps to address any concerns about your use of animals in research.

- **Driving and coordinating activities effectively:** Having a dedicated member of staff driving and coordinating your institution's 3Rs activities is key to ensuring that these activities are successful. By entrusting this role to a senior member of staff, you are demonstrating the importance of the role, making it more likely that other members of staff will be supportive and get involved.

  By having a senior member of staff as your 3Rs lead this not only drives progress across the institution, but also sends a message that your institution's commitment to the 3Rs should be taken seriously.

  If your institution's academic 3Rs lead is not easily contactable by external individuals, you might be limiting local engagement, and inhibiting cross-institutional knowledge transfer. Consider making these details public – if there are security concerns, you can create a general email account (e.g. "3RsLead@[university].ac.uk").

  The member of staff responsible for the 3Rs at an institutional level should be recognised for this work, which you have ensured by including it in their job description and appraisal.

- **Taking a strategic approach:** Your institution's general policy on animal work should include a commitment to the 3Rs, but a more detailed, standalone 3Rs strategy document should also exist. This should outline the status of the 3Rs at your institution and priorities for improvement. For help with developing and implementing a 3Rs strategy, see this guidance document produced by the NC3Rs.

Created a 3Rs email address

Prepared 3Rs strategy

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University of Birmingham's 3Rs Strategy

- SMART objectives.

- What, How, Who and When.

- Tasks allocated across all roles and levels of seniority.

Reviewing 3Rs activities

- Developed around the 3Rs Strategy.

- Red/amber/green to indicate success.

- Additional activities listed at the end.

- Added to AWERB annual review document for review by the BMSU Strategic Group.

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Biomedical Services Unit

Appendix 1

3Rs Strategy Document 2021- review

Implementation of 3Rs ideas				
What	How	Who	When	Notes
Identifying new 3Rs ideas for implementation	Scoping for new ideas from external sources and looking for opportunities arising internally. Ideas to be raised at 3Rs Focus Group for discussion and further action.	NC3Rs Regional Programme Manager to horizon scan for opportunities arising through NC3Rs; BMSU Assistant Director, NIO, NVS, and NACWOs to monitor newsletters and online forums; Senior and Junior BMSU staff to scope for ideas at external events.	Within the next 12 months.	Janet Wood Award winners inspired zebrafish enrichment pilot study Presentation from RSPCA/UFAW event inspired items trialled for mouse enrichment pilot study Rat play pen based on success at Leicester University 3Rs Focus group identified that 3-fingered scruffing technique used elsewhere for mice to prevent constriction across the throat. Followed up with Named Persons who assessed in-house and confirmed no concerns as adjusted scruffing method already used.
Undertaking pilot studies to validate new refinements	A range of potential mouse enrichments have been identified but require validating before widespread use.	The BMSU apprentices, with support from Senior Technicians and the Assistant Director will undertake the pilot studies.	Within the next 6 months.	BMSU apprentices have validated CellPads as refinement for CD1s. Now being trialled with C57 single-housed males, and being used where identified a need for additional enrichment. Poster being prepared for IAT Congress.

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Summary

- The AWERB has a critical role in embedding the 3Rs in policy and practice.

- The NC3Rs has developed two 3Rs self-assessment tools; one for research groups and one for research institutions.

- AWERBs could incorporate the Research Group Tool into their review processes for project licences.

- There are different approaches an institution can take to completing a 3Rs self-assessment but the feedback is worth the effort involved.

- Results from an institutional 3Rs self-assessment can be used by the AWERB to determine priority 3Rs areas for improvement.

- AWERBs can turn these priority areas into a 3Rs strategy and action plan.

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National Centre
for the Replacement
Refinement & Reduction
of Animals in Research

Thank you!

For more information

✉ self-assessment@nc3rs.org.uk

🏠 https://3rsselfassessment.nc3rs.org.uk

🏠 www.nc3rs.org.uk

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