

# Guidance on Continuing Education in the 3Rs For the Research Community

## 1. Purpose and Context

This guidance document helps members of the research community, including students, principal investigators (PIs), research technicians, animal care staff, and Animal Care Committee (ACC) members, identify, pursue, and document continuing education (CE) activities related to the Three Rs (Replacement, Reduction, Refinement) of animal use in science.

Ongoing learning in the 3Rs is a cornerstone of a culture of care: a shared commitment to improving animal welfare, scientific quality, and ethical responsibility.

## 2. Why Continuing Education in the 3Rs Matters

- Animal welfare and science evolve together: Staying informed ensures that welfare and research integrity advance together.
- The 3Rs apply across species and disciplines: Opportunities for refinement exist at all levels, from cephalopods to large mammals.
- CCAC expectations: CE is part of institutional compliance and accreditation.<sup>1</sup>
- Building a culture of care: Engagement in CE strengthens respect, responsibility, and collaboration across the research community.

## 3. What Counts as Continuing Education in the 3Rs

Continuing education includes any **intentional** activity that builds awareness, knowledge, or application of the 3Rs.

### A. Formal Learning Opportunities

- Webinars, workshops, or seminars **focused on the 3Rs, refinement techniques, or ethics.**
- Conference sessions (e.g., CALAS, CCAC National Workshop, IAT, LAVA, LASA, AALAS, FELASA, WC11) with **3Rs content.**
- Graduate courses or continuing studies modules addressing **animal welfare, alternatives, or ethics**

### B. Informal and On-the-Job Learning

- Lab or facility discussions on **refinements or welfare assessments.**
- Implementing a new **refinement** and documenting outcomes (e.g., housing, handling, enrichment, anesthesia).
- Internal training sessions or lunch-and-learns focused on **3Rs or ethics** (e.g., analgesia, enrichment, humane endpoints).
- Reading and discussing publications or CCAC guidelines specifically focused on **3Rs concepts.**

### C. Contribution and Leadership Activities

- Presenting a poster or talk highlighting a **refinement, welfare improvement, or 3Rs initiative.**
- Leading or contributing to a **3Rs working group, subcommittee, or outreach activity.**
- Mentoring or teaching others on **3Rs principles** in animal care or research methods

### D. Self-Directed Learning

---

<sup>1</sup> [CCAC guidelines on training of personnel working with animals in science. 2015](#)

- Completing **3Rs focused** online modules or open-access training (e.g., NC3Rs, Norecopa, RSPCA).
- Subscribing to newsletters or podcasts focused on **animal welfare** or **alternatives** (e.g., NC3Rs, FRAME, ALTEX).
- Reviewing institutional or CCAC **3Rs resources** and reflecting on their application in practice.

#### 4. Clarifying What Does Not Count

Not every learning activity qualifies as continuing education in the 3Rs. The key is **intent and relevance**.

Reading research papers, protocols, or manuals that are part of your regular work (even if they involve animals) does not count as 3Rs CE unless you are specifically engaging with:

- Alternative approaches (Replacement).
- Design or procedural improvements that reduce animal use (Reduction).
- Welfare-oriented improvements such as handling, enrichment, analgesia, or humane endpoints (Refinement).

Example:

Reading an NC3Rs paper on refined handling techniques and adopting them **does** count.

Reading a paper about a new disease model using procedures you already perform **does not** count.

#### 5. Documentation and Reflection

Maintain a record to demonstrate engagement and encourage reflection. For example:

| Date | Activity | 3Rs Relevance | Key Takeaway / Change in Practice |
|------|----------|---------------|-----------------------------------|
|      |          |               |                                   |

Templates or lab-specific forms may be used, or individuals may maintain their own logs.

#### 6. Embedding Continuing Education into a Culture of Care

Creating a culture of care means making learning routine, valued, and shared:

- **Students:** Build awareness and curiosity about 3Rs in science.
- **PIs:** Encourage teams to engage and share what they learn.
- **Technicians and care staff:** Contribute practical refinements and best practices.
- **ACC members:** Maintain up-to-date understanding of welfare science.

Small, regular learning moments collectively strengthen a culture of care.

#### 7. Resources and Examples

- CCAC: <https://ccac.ca/en/training/>
- NC3Rs: <https://www.nc3rs.org.uk/>
- Norecopa: <https://norecopa.no/> (a particularly robust section on wildlife)
- FRAME: <https://frame.org.uk/>
- CALAS/ACSAL: [Symposia](#), Professional development sessions and webinars