

Research Ethics and Policy Series



(R)Evolution of the 3Rs: Reflections on Art, Ethics, and Science

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The 3Rs serve as a universal touchstone, with respect to refinement, reduction, and replacement, for veterinary staff, ethical review committees and scientists. Russell and Burch established these terms as part of a new applied science in 1959, aiming to improve animal welfare using application of the 3Rs as a development tool for scientific methodology. In consideration of animal use, the anticipated benefits of scientific inquiry are to be balanced against the potential impacts borne by the animals themselves; this ethical calculation is referred to as the 'harm-benefit' analysis. Over time, rigid interpretations of the classic 3Rs in study design (refinement), statistical analysis (reduction), and selection of alternatives to live animals (replacement) have stifled the spirit of their initial intent and limited scientific progress and production of translatable and reproducible results. The exquisiteness of the 3Rs is that much like classical artwork, they are inherently subject to broad interpretation across the contemporary biomedical community. Reconsidering the classic 3Rs with progressive interpretations, in combination with other ethical tools of analysis and validity assessments, is essential for ongoing intricate considerations of appropriate and future animal use.

Monday, March 7, 2022 | 12:00-1:00pm Eastern

HYBRID! NEW in-person location: BRB0251 (Biomedical Research Building, 421 Curie Blvd) **Register in advance (for both in-person and virtual attendance):**

https://upenn.zoom.us/meeting/register/tJMrdOCtqjgoG9Mi_0Q4MSloZKzSeszY6OpB

Information: **Mary Pham**, Mary.Pham@pennmedicine.upenn.edu medicalethicshealthpolicy.med.upenn.edu/events

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