Montréal Declaration on the Synthesis of Evidence to Advance the 3Rs Principles in Science

A call for a change in the culture of planning, executing, reporting, reviewing and translating animal research

Adopted on the occasion of the Eighth World Congress on Alternatives and Animal Use in the Life Sciences: August 21-25, 2011, Montréal, Canada “The Three Rs: Together It’s Possible”

To fully implement the principles of humane science, including the unifying concept of the Three Rs (Replacement, Reduction, and Refinement of animal use), there is universal agreement that animals should only be used for scientific purposes when no appropriate Replacement alternative is available, and only when scientifically and ethically justified. Where animals continue to be used, it is both a scientific and ethical imperative to ensure that animal studies are of the highest relevance and quality, which includes taking into account all aspects of Reduction and Refinement.

To achieve this objective an important step is a thorough synthesis of the literature relevant to the research question at hand to produce scientifically sound and transparent summaries of all available evidence. As part of this practice all relevant studies addressing a specific research question are identified, appraised and selected following predefined criteria. The quality of the study design, its conduct and results are evaluated, and if appropriate, the results of individual studies are pooled using statistical analyses.

As a consequence widespread use of this practice should: 1) identify areas where additional animal studies may not be warranted, 2) improve the scientific quality of animal studies, 3) better inform the ethical review of animal studies, 4) help to achieve the Three Rs, 5) improve scientific reporting, and 6) improve the value of animal research models.

In order to achieve the objective the participants of WC8 agree to the greater use of systematic and explicit methods to synthesize all the relevant evidence.