

## THE HISTORY OF LABORATORY ANIMALS AND THE 3RS

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This talk will give an introduction to the history of the use of laboratory animals with focus on the history of the three Rs (3Rs). We will see how animal experimentation has been performed early in our civilization, and how the suffering of animals has been justified. This will include Rene Descartes's mechanical view of animals in the seventeenth century, and Charles Darwin's ambivalent relationship to animal experimentation, which he views as cruel but necessary. In the 1870s the Danish Foundation for Protection of Animals ("*Dyrenes Beskyttelse*") and Professor Peter Panum discussed the use of animals in research, which led to Denmark passing one of Europe's first laws to protect laboratory animals. A law that was later modified after the author Karen Blixen took part in the debate.

In the middle of 1950s the Universities Federation for Animal Welfare decided to sponsor research in the field of laboratory animal welfare. Two years later two English scientists, zoologist William W.S. Russell and micro-biologist, Rex L. Burch prepared a report on the ethical aspects of using laboratory animals. In 1959 (hundred years after Charles Darwin's "*The Origin of Species*") they published the book: "*The Principles of Humane Experimental Technique*". This book founded the concept of the 3Rs: replacement, reduction and refinement. Today, the concept of the 3Rs is widespread, and this concept is incorporated into the laboratory animal legislation of many countries, including EU directives and Danish legislation. The Danish 3R-Center is deeply embedded in a long-established tradition of internationalism.