Dear readers,

The theoretical process of introducing an alternative method sounds straightforward: a scientist thinks up a new method, its publication leads to its validation, and it is subsequently accepted by the authorities and replaces, reduces or refines animal experiments. But that is not all there is to it: shortcuts may be possible when there is proof that an animal experiment does not provide useful information or when political decisions ban certain experiments; on the other hand, political pressure cannot magic alternatives that ensure consumer or patient safety and accepted methods will only reduce the use of animals when they are performed correctly. Perhaps a new approach to this process can overcome a variety of obstacles and solve a number of problems. The current issue of ALTEX contrasts a vision of the future with the current reality of regulatory toxicological testing.

In their "Food for thought …" article, **Thomas Hartung** and **Mary McBride** paint a picture of the exciting opportunities offered to toxicology from unravelling the human toxome, i.e. the identification and interactions of proposed "pathways of toxicity". This vision is based on the assumption that the number of such pathways is finite, and includes a roadmap to approach the challenge.

Troy Seidle and colleagues examine whether information gained by performing acute systemic toxicity studies with different exposure routes, i.e., applying the test substance to the skin versus the lung, actually provides sufficiently different information to necessitate both approaches.

On a similar note, **Raija Bettauer** describes experiments on chimpanzees performed in the development of monoclonal antibody therapies in the past 30 years and examines whether they have provided relevant safety information that would justify the use of these animals.

In the field of cosmetics the development of alternative methods has been driven by the European Union banning the sale of cosmetics tested on animals, with the final deadline approaching in 2013. This deadline has been called into question by a draft experts report and an extension of up to nine years has been recommended. **Katy Taylor and colleagues** from the BUAV summarize their critique of this draft report.

Unfortunately, even an internationally accepted test guideline does not ensure that an alternative method is performed as it should be. This calls into question the quality of the results and undermines the aim of using as few experimental animals as possible. **Costanza Rovida** examines this problem using the example of Local Lymph Node Assays (LLNA) performed for REACH purposes.

Hildegard Doerenkamp, foundress of the Doerenkamp Zbinden Foundation, which has supported the work of many scientists who have published in ALTEX, set up six chairs on alternatives and co-funded numerous conferences in this research area, passed away in February 2011. ALTEX is indebted to her for her longstanding support of the journal.

In other news, we report on the EU animal use statistics for 2008, which document the use of 12 million animals in the 27 Member States, one million of which are used for regulatory testing. The European Chemicals Agency (ECHA) calls for submission of information to reduce animal testing for REACH (Registration, Evaluation and Authorisation of Chemicals) and announces the phasing out of the first substances of high concern. ALTEX joins in the adoption of the ARRIVE guidelines for reporting on animal experiments and welcomes the launch of the Journal of Animal Ethics and the publication of the first Chinese book on alternatives to animal experiments. Two prizes and three conference reports, as well as the four regular corners, round off this issue.

Hoping to see many of you at the 8th World Congress on Alternatives and Animal Use in the Life Sciences in Montreal,

Sonja von Aulock Editor in chief, ALTEX