Food for thought ...
Igor Linkov, Olivia Massey, Jeff Keisler, Ivan Rusyn and Thomas Hartung
From "weight of evidence" to quantitative data integration using multicriteria decision analysis and Bayesian methods

Concept article
Tilman Gocht, Elisabet Berggren, Hans Jürgen Ahr et al.
The SEURAT-1 approach towards animal free human safety assessment

Workshop report
Costanza Roida, Nathalie Alépée, Anne M. Api et al.
Integrated testing strategies (ITS) for safety assessment

Review article
Pete Otovic and Eric Hutchinson
Limits to using HPA axis activity as an indication of animal welfare

Research article
Maren Bernau, Prisca V. Kremer, Elke Pappenberger, Lena S. Kreuzer, Klaus Cussler, Andreas Hoffmann and Armin M. Scholz
Safety testing of veterinary vaccines using magnetic resonance imaging in pigs

Short Communication
Maria C. C. M. Inglez de Souza and Julia M. Matera
Bleeding simulation in embalmed cadavers: bridging the gap between simulation and live surgery

Calendar
Corners
News
Editorial

After our big birthday issue last October, we at ALTEX are now looking ahead to the journal’s next decade. We have taken this opportunity to freshen up our layout—we hope you like it. The introduction of the active hyperlinks in the online PDFs last year has made it easier for you to follow up on interesting references and websites and we are glad that the publishing fee for authors was accepted and most have been able to find a way to cover this. Please remember that the Society ALTEX Edition is an independent non-profit organization that is always open to new ideas, new contributors and new supporters.

In this year’s first issue, three papers deal with the concept of quantitative data integration, i.e., how information from different non-animal tests for specific molecular reactions can be combined to predict a toxicological reaction in humans:

Igor Linkov and collaborators give us Food for Thought … on how we can move on from “weight of evidence,” a term that has garnered criticism for being ill-defined and qualitative, to quantitative data integration and explain which methods are at hand to put this into practice.

Tilman Gocht et al. explain the concept behind SEURAT-1 and how it aims to reach the goal of safety testing without the use of animals. The approach is based on the definition of adverse outcome pathways, i.e., the molecular reaction pathways that lead to toxicological effects in the organism and, based on these, developing integrated testing strategies to predict toxicological effects of chemicals.

The concept of integrated testing strategies is also the subject of the t4 workshop report by Costanza Rovida et al. The report illustrates the current state of the art as well as the new concepts that must be developed to overcome challenges, including “Good ITS Practice,” which will keep the assessment transparent and give regulators confidence in dealing with these new tools.

A review by Pete Otorvic and Eric Hutchinson compiles the evidence that measuring cortisol levels of animals is insufficient to determine stress levels and so assess wellbeing. This lies both in methodological problems of measuring cortisol levels and in the observation that there is no robust correlation between all forms of stress and increased corticoid release. Other approaches to determining stress levels are described.

Veterinary vaccines must be tested for possible local reactions. Maren Bernau and colleagues demonstrate how this can been achieved non-invasively by MRI scans instead of pathological evaluations. This approach also reduces the number of animals needed for the assessment.

Maria Inglez de Souza and Julia Matera show how surgical training on animal cadavers can be more realistic and train further skills by recreating the blood circulation and simulating bleeding with a blood substitute. Their approach allows practicing multiple surgical interventions per cadaver before operating on live animal patients.

In the news we report on current legal developments in Europe regarding the Cosmetics Regulation and REACH, a variety of prestigious prizes recently awarded in the 3Rs field and also the establishment of a 3Rs graduate school and a center for alternatives. Experimental animal counts have declined, both in Germany and in the US, and new 3R relevant online resources are available.

In short, this issue shows how many different aspects play into the 3Rs.

Best wishes for your work in the 3Rs field in 2015.

Sonja von Aulock
Editor in chief, ALTEX
Aims and Scope

ALTEX is devoted to the open access publication of scholarly articles on alternatives to the use of animals for scientific purposes according to the 3R concept of Russell and Burch: Replace, Reduce and Refine. Articles describing experiments involving the use of animals for scientific purposes must attest that experiments were performed according to the ethical standards set in the instructions to authors and must be described in detail in accordance with the ARRIVE or GSPC guidelines.

ALTEX publishes research articles, short communications, reviews, as well as comments, corners, news and meeting reports.

Manuscripts submitted to ALTEX are evaluated by two expert reviewers. The evaluation takes into account the scientific merit of a manuscript and its contribution to animal welfare and the 3R principle.

ALTEX Proceedings publishes Abstract Books and Proceedings of scientific conferences. TIERethik is a German-language journal devoted to the bioethics of the relationship between animals and humans.

© Society ALTEX Edition, Kuesnacht, Switzerland
First name ____________________________________________

Last name ____________________________________________

Institute/Library 
(if applicable) ____________________________________________

Address ____________________________________________

State ____________________________________________

Zip code ____________________________________________

Country ____________________________________________

e-mail ____________________________________________

Date/signature ____________________________________________

Please send completed form to the above address.