

ALTEX

ALTERNATIVES TO ANIMAL EXPERIMENTATION

Food for thought...

Lucy Meigs, Lena Smirnova, Costanza Rovida et al. Animal testing and its alternatives – the most important omics is economics

t⁴ Workshop Report

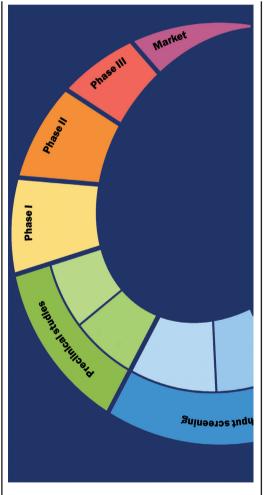
Anna Bal-Price,
Helena T. Hogberg,
Kevin M. Crofton et al.
Recommendation on
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for new approach
methods in toxicology:
Exemplified
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neurotoxicity

t⁴ Workshop Report David Pamies, Anna Bal-Price,

Christophe Chesné et al.

Advanced Good Cell

Culture Practice for human
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Barbara Birk, Alexander Stähle, Mathias Meier et al. Investigation of ruminant xenobiotic metabolism in a modified rumen simulation system (RUSITEC)

Research Article

Freia F. Schmid, Florian Groeber-Becker, Stefanie Schwab et al.

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Research Article

Andrey Poloznikov, Irina Gazaryan, Maxim Shkurnikov et al. In vitro and in silico liver models: Current trends, challenges and opportunities

BenchMarks

Marcel Leist and Jan G. Hengstler **Essential components of methods papers**

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Dear readers,

Twenty-six years ago, I wrote my first editorial for ALTEX (1992/1), which was then still published in German with the subtitle "Alternativen zu Tierexperimenten". Being one myself, the role of the animal protection officer (required by the German Animal Protection Law since 1986) was of special importance to me in the promotion of the 3Rs. It was my goal that animal protection officers should understand their role not as advocates of scientists towards the authorities or even as mediators between scientists and authorities but entirely as the advocates of the experimental animals. Their training should focus on recognizing and preventing pain, distress, suffering and fear of animals - "laboratory animal science" and not "animal experimentation science" should drive the often neglected third R – refinement. At that time, animal protection officers often themselves performed animal experiments. This felt wrong to me: I always argued that animal protection officers should – if at all – only perform animal experiments for the purpose of improvements for the animals in the sense of the 3Rs.

Among the articles in the 1992/1 issue of ALTEX were "Use of polyclonal antibodies from egg yolk of immunized chickens" and "Monoclonal antibodies: Comparative methods for *in vitro* production". While it has become rather quiet around the avian antibodies, much of modern research is now inconceivable without the *in vitro* production of monoclonal antibodies and it has become clear that fully animal-free recombinant antibodies are not only ethically but also scientifically superior to antibodies produced by hybridomas, as the latter are not always monospecific.

One year after writing my first editorial for ALTEX (this is the 43rd), I moved from the University of Konstanz to the editorial office of ALTEX in Zurich. The foundation FFVFF, today Animalfree Research, had to make the choice to either professionalize or discontinue ALTEX. The bulletin "Alternativen zu Tierexperimenten" had started out at the end of 1984 (it only gained the acronym ALTEX in 1991), edited by the FFVFF, with Christoph Reinhardt and Angelo Vedani as scientific directors and Irène Hagmann (foundation board member of the FFVFF) as copy editor. As the new editor-in-chief from August 1, 1993, I went in search of a suitable publisher and was successful in Heidelberg. ALTEX changed from self-publication to publication by Spektrum Akademischer Verlag in 1994 but still belonged to the FFVFF. After an intermezzo at Elsevier, ALTEX returned to Heidelberg and is now published by Springer Spektrum.

Today ALTEX no longer belongs to the FFVFF. The foundation was no longer able to support the publication of ALTEX alone in 2006. I decided to try to distribute the financial burden onto many shoulders by the establishment of the society "ALTEX Edition" in 2006. Twelve years later, this decision can be considered successful. While ALTEX's impact factor (IF) bobbed around 0.4 in the 1990s, it took a giant leap up and today stands at 5.232 (the five-year IF is 5.4). ALTEX is now on an equal footing with large, prestigious toxicological journals such as *Archives of Toxicology* (IF 5.7) and

Toxicological Sciences (IF 4.2). This breakthrough was achieved by changing from a dual language (mainly German, some English) to a purely English-language journal and by introducing a strict Gold Open Access policy in 2008. All content of ALTEX has been available free of charge on the website since then.

Recognizing the interest of many readers and supporters in the ethics of the animal-human relationship, which had traditionally been the focus of the fourth issue of ALTEX in every year, the new German-language journal TIERethik was launched in 2011 to focus on selected aspects of the animal-human relationship that go beyond animal experiments. And ALTEX Proceedings became the venue for the publication of abstracts and conference proceedings.

Some themes have been at the center of the 3Rs field for many years, e.g., animal-free antibodies, the quality of cell and tissue cultures (a rapid development from primitive monolayers poorly reflecting the metabolism and functions of primary cells 25 years ago to today's serum- and antibiotic-free, high-throughput human-on-a-chip cultures). Other developments were unthinkable 25 years ago: that authorities are now pushing away from animal experiments and consider them – next to ethical considerations – not clinically relevant, too slow and too expensive (21st century toxicology), and that animal experiments once would be considered the last resort to assess the toxicological risk of chemicals in European legislation, i.e., REACH (Registration, Evaluation, Authorization and restriction of Chemicals).

The success of ALTEX is also the result of personal contributions. Sonja von Aulock took over as editor-in-chief in 2011 (I have taken care of the administrative and financial affairs as CEO since then) and set the bar higher than I had with regard to the quality of the articles. The increased IF made ALTEX more attractive, the manuscripts came rolling in and the page count increased despite the higher rejection rate. A few authors appear on many of the most cited articles, some of which are downloaded from the website up to 1600 times within a short time of appearing and have had a lasting effect on the journal and the field. The "Food for thought..." contributions, which Thomas Hartung started more than ten years ago, and the t⁴ project, driven by Thomas Hartung and Marcel Leist, with ALTEX as the official organ, bring quality to the journal. Marcel Leist has now also started an article series called "BenchMarks": ALTEX is thriving.

On August 1, 2018 the roles of editor-in-chief and CEO will be reunited in one person as they were from 1993 to 2010. Sonja von Aulock will fill this dual role splendidly, I wish her and the small ALTEX team continued success. I will now represent the Doerenkamp-Zbinden Foundation on the board of ALTEX Edition and so will remain loyally and also officially connected with the society.

Kind regards

I.P. Caule

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ALTEX

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Cover Picture

High through-put system-based drug discovery paradigm. Excerpt of Fig. 1 from Poloznikov et al., 397-412.

Aims and Scope

The journal ALTEX – Alternatives to Animal Experimentation publishes open access academic articles on the development and implementation of alternatives to the use of animals for scientific purposes and informs on international developments in this field.

ALTEX publishes research articles, concept articles, opinion articles, reviews, consensus reports, short communications, letters, comments, corners and meeting reports. Current news and events are posted online.

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.

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LINZ 2018

21st European Congress on Alternatives to Animal Testing

EUSAAT European Society for Alternatives to Animal Testing The European 3Rs Society

EUSAAT 2018

18th Annual Congress of EUSAAT

www.eusaat-congress.eu

23 – 26 September 2018 – University of Linz, Austria





Call for abstracts

Topics/tentative sessions

- International progress in 3Rs research: New funding initiatives & global cooperation
- Refinement & Reduction: welfare, culture of care, best practice approaches, avoidance of severe suffering
- Replacement advanced molecular technologies for implementation of 3Rs: bio-printing, -omics technologies, systems biology approaches
- 3D Models & multi-organ-chips (MOC), human-organ-chips (HOC)
- Stem cell models and technology (hiPS, ES, mES, miPS)
- In Silico Models: toxicology & efficacy of drugs, chemicals & cosmetics
- Disease Models using HUMAN cells, tissues and organs
- Implementing EU Dir 63/2010 update on legal and ethical issues
- 3Rs in education and academia
- REACH I the most frequently used alternatives: "Read Across, WoE (Weight of Evidence) & QSAR"
- REACH II meeting the 2018 deadline!
- Advanced safety testing of cosmetics and consumer products
- Alternatives to animal testing in food safety, nutrition and efficacy
- Specific Endpoints of Toxicity: repeated-dose toxicity, inhalation, sensitization, repro- ductive & developmental toxicity (mEST & hEST), carcinogenesis, nanotoxicology
- Neurotoxicology & Developmental Neurotoxicology (DNT)
- Ecotoxicology
- Efficacy and safety testing of drugs, medical devices & biopharmaceutics (incl. vaccines, blood components, allergenics, somatic cells, gene therapies, tissues, recombinant therapeutic protein and living cells used in cell therapy)
- Intra- and interspecies differences translational aspects
- Advanced GMO models CRISPR/Cas in vivo & in vitro
- Biological barriers: lung, gut, kidney & skin, blood-brain & blood-saliva barriers
- Initiative for Implementing Serum Free Culture Media
- "Young Scientists" session
- Free communications

Deadlines for the submission of abstracts:

for oral presentations: 31 May 2018 for posters: 31 May 2018

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