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ALTEX

ALTERNATIVES TO ANIMAL EXPERIMENTATION

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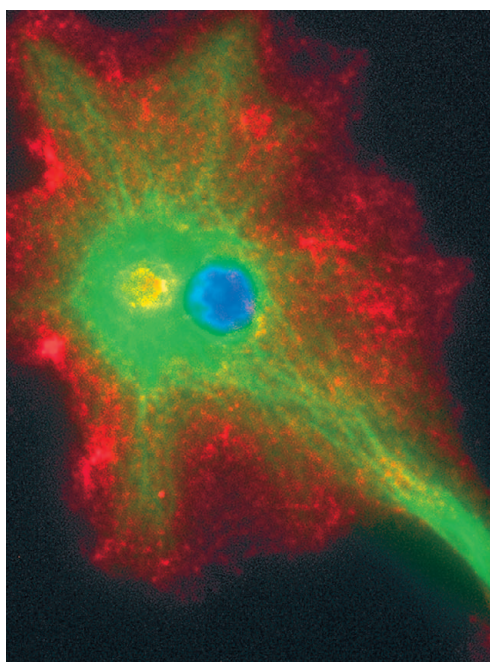
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Spektrum
AKADEMISCHER VERLAG

**Dear readers,**

with this issue *ALTEX* is starting into its 25th year. Published by an independent society, obligated to nothing but spreading the 3R idea. At the moment also without a contract with a publishing house. Springer are taking their time. And we will just sit it out. It goes without saying that we in the editorial office aim to produce especially exciting issues in this anniversary year.

Thomas Hartung's column „Food for thought...“ is being received very well. Whatever you have always wanted to know about alternative methods, here you will read about it. And, especially because this column also addresses so many errors and misunderstandings, we are intent on keeping it in print in both English and German. Many decision-makers in research funding, animal protection organisations and ethics committees do not constantly read in English. We want to make it easier for them to understand this complex matter by supplying the German translations.

In this issue, Thomas Hartung scrutinizes the limitations and fallacies of *in vivo* studies from a purely scientific perspective. This matter has certainly never been summarised so compactly before. And Marcel Leist, the Doerenkamp-Zbinden professor at the University of Konstanz and his co-workers Suzanne Kadereit and Stefan Schildknecht hit the nail in further with a second „Food for thought...“ article. They find that we, the 3R advocates, hide our light under a bushel far too often. Without the many alternative methods that have already been developed and are in use, our statistics on animal experiments would be catastrophic.

Two main articles by Albert Li from Columbia/Maryland/USA are stragglers from our Chennai-Series, i.e. detailed manuscripts based on talks that were held a year ago at the first Indian Congress for Alternative Methods. In his first article, Li describes his cryoconservable human liver cell culture systems, which play an important role in the preclinical testing of drugs. In his second article, Li describes a novel cell co-culture system (IdMOC) that he has developed, which allows the study of multi-organ interactions, which cannot be studied in conventional cell cultures. This is an important milestone that falsifies the common argument that interactions between different organs can only be studied in whole animals.

In the third main article, Markus Mitterhauser and Stefan Toegel from Wien call animal experiments that most of us hardly ever think about to our attention. The European Pharmacopoeia stipulates a number of animal experiments to identify bone seeking pharmaceuticals, i.e. drugs that accumulate in bone. The authors describe an *in vitro* model that simulates the binding between bone seeking substances and bone matrix.

They compared their results with those gained in animal experiments, which in this case caused only very minimal stress. The authors aim to make these animal experiments completely superfluous.

Excellent “news in short” enriches this issue of *ALTEX*. Nick Jukes writes an update on the efforts to achieve a humane biomedical education in Russia. This reminds me of a lecture I used to hold in Konstanz on the history of animal protection rights. Tsar Alexander III 1862 stopped a Russian animal protection law, because he felt the Russian population was not yet ready for such a law. How much easier it would be today if he had ratified that law.

Judith Benz-Schwarzberg, a new colleague of the Literature Report Team of *ALTEX* from the Interfaculty Centre for Ethics in the Sciences (IZEW) of the University of Tübingen once again interprets Albert Schweitzer's „Reverence for life“ and stresses that it is still very relevant today.

We are especially happy to now finally be able to publish the positional papers that were composed on occasion of the meeting organised by Jörg Luy and Dagmar Borchers in 2007 in Berlin “Criteria and limits of ethically justifiable animal experiments“. Maria Biedermann, Regina Binder, Arianna Ferrari and Kathrin Herrmann open their views to discussion.

The news items include a small sensation. By financing a „Chair for *in vitro* alternative methods“ at the University of Konstanz, the Doerenkamp-Zbinden Foundation (DZF, Zurich) showed how alternative methods can also be propagated in basic research. Now, not yet two years after the chair in Konstanz started out, the DZF is establishing a further chair at the Faculty of Veterinary Medicine of the University of Utrecht. A fine signal that will further anchor the 3R principle in academia. As co-signatory of the contract of Utrecht, I am proud: both of the Doerenkamp-Zbinden Foundation and of the University of Utrecht, which has such a longstanding tradition of furthering alternative methods that the choice of a location for the chair was a very simple one.

Remarkable is also the uploading of a new website, which can become a very useful platform for enthusiastic discussions of *in vitro* toxicologists. *ALTEX*-editorial member Horst Spielmann is the moderator of the section acute systemic toxicity.

With best wishes

Franz P. Gruber



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Cover picture:

Embryonic stem cells and their differentiation to
various cell types are presently explored as basis
for alternative *in vitro* methods to predict human
toxicity. The cell on the cover (cell nucleus in
blue, cell boundaries in red) is an astrocyte (as
defined by the specific cytoskeletal protein GFAP,
in green), which was generated *in vitro* from
murine embryonic stem cells. Such cells, and
especially their human counterparts, will form the
basis of the FP7 EU project ESNATS.

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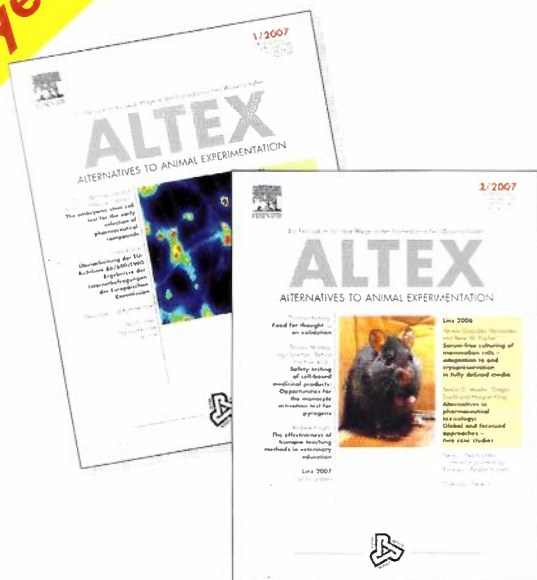
Aims and scope

ALTEX, edited by the Swiss Society ALTEX Edition is the official journal of MEGAT, the Middle European Society for Alternatives to Testing in Animals. ALTEX is devoted to the publication of research on the development and promotion of alternatives to animal experiments according to the 3R concept of Russell and Burch: Replace, Reduce, and Refine. ALTEX is publishing original articles, short communications, reviews as well as news and comments, meeting reports and book reviews in English and German. Animal experiments are defined by the editors as all experimental procedures using animals which may cause pain, suffering, and emotional harm to animals and which are conducted in testing, research and education or to obtain tissues, organs, and other animal derived products.

Besides covering the biomedical aspects of animal experimentation, ALTEX is also devoted to the bioethics of the complex relationship between man and animals. Articles published in ALTEX should express a basic concern about the dignity of living creatures. ALTEX is not only aimed at developing a new approach to recognise animals as partners but it also intends to introduce a scientific sight in the discussions on animal experiments. Articles devoted to the social and ethical aspects of this topic will, therefore, be judged according to stringent scientific standards. Manuscripts submitted to ALTEX are evaluated by two reviewers. The evaluation takes into account the scientific merit of a manuscript and the contribution to animal welfare and the 3R-principle.

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ALTEX



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