

www.altex-edition.org http://altweb.jhsph.edu/altex

A journal for new paths in biomedical science

Vol. 28 (Issue 2/2011)

Official organ of: ASCCT, American Society for Cellular and Computational Toxicology, Fairfax, VA, USA; CAAT, Center for Alternatives to Animal Testing, Johns Hopkins University, Baltimore, MD, USA; CAAT-Europe, University of Konstanz, Konstanz, Germany; Doerenkamp-Zbinden Chairs in Germany, India, The Netherlands, Switzerland and USA; EUSAAT, European Society for Alternatives to Animal Testing, Vienna, Austria; t4 – transatlantic think tank for toxicology, Baltimore, USA, Konstanz, Germany, Utrecht, The Netherlands

Issued by:

Society ALTEX Edition, Kuesnacht, Switzerland

Board:

Stefanie Schindler

(President, Konstanz, Germany)

Carol Howard

(Vice-President, Baltimore, USA)

Mardas Daneshian (Konstanz, Germany) Markus Deutsch (Hinwil, Switzerland)

Daniel Favre (Thonex, Switzerland)

Thomas Hartung (Baltimore, USA)

Claudia Mertens (Winterthur, Switzerland)

Franz P. Gruber (CEO, Kuesnacht,

Switzerland)

Members:

The members of the Society ALTEX Edition can be found at www.altex-edition.org

ALTEX Editorial Office Europe:

Sonja von Aulock (Editor in chief, Konstanz, Germany) Franz P. Gruber (Kuesnacht, Switzerland) Petra Mayr (Editor ALTEXethik, Bad Münder, Germany)

Carolin Rauter (Konstanz, Germany) Goran Krummenacher (Webmaster,

Zurich, Switzerland)

Address:

Society ALTEX Edition Weinmanngasse 86

8700 Kuesnacht ZH, Switzerland

Phone: +41 44 380 0830 Fax: +41 44 380 0832 e-mail: editor@altex.ch

ALTEX Editorial Office USA:

Thomas Hartung (Editor USA, Baltimore, MD, USA)

Carol Howard (Baltimore, MD, USA) Michael M. Hughes (Baltimore, MD, USA)

Address:

Johns Hopkins University Baltimore 615 N Wolfe Street, W7032 Baltimore, MD 21020, USA

Phone: +1 410 614 4990 Fax: +1 410 614 2871 e-mail: thartung@ihsph.edu

Editorial Board:

Mohammad A. Akbarsha (Tiruchirappalli, India)

Bas J. Blaauboer (Utrecht, The Netherlands) Miroslay Cervinka (Hradec Cralove.

Czech Republic)

Nicole Clemann (Basel, Switzerland) Pierre Cosson (Geneva, Switzerland) Klaus Cußler (Langen, Germany)

Andrzej Elzanowski (Warsaw, Poland) Gerhard Gstraunthaler (Salzburg, Austria)

Thomas Hartung (Baltimore, USA) Jan G. Hengstler (Dortmund, Germany) Marcel Leist (Konstanz, Germany)

Coenraad F. M. Hendriksen (Bilthoven, The Netherlands)

Brigitte Rusche (Neubiberg, Germany) Walter Pfaller (Innsbruck, Austria)

Stefanie Schindler (Konstanz, Germany) Klaus R. Schröder (Linz, Austria)

Horst Spielmann (Berlin, Germany) Jan van der Valk (Utrecht, The Netherlands) Angelo Vedani (Basel, Switzerland)

Gilman D. Veith (Two Harbors, USA)

ALTEX Online: www.altex-edition.org

Altweb: http://altweb.jhsph.edu
ALTEX is indexed in MEDLINE,
Current Contents[®], SciSearch[®]
and ISI Document Solution[®] and
Embase.

Cover picture:

Sewing pattern used to illustrate the possible complexity of pathways of toxicity. See Hartung and Mc Bride, p. 83-93.

Layout: H. P. Hoesli, Zurich, Switzerland

Print: Stuertz GmbH, Wuerzburg, Germany

Distribution:

ALTEX, Weinmanngasse 86 8700 Kuesnacht ZH, Switzerland Phone: +41 44 380 0830, Fax: +41 44 380 0832 Fax Germany: +49 7531 25833 e-mail: subs@altex.ch

Publisher:

Spektrum Akademischer Verlag Springer Science + Business Media

Circulation: 1,000

Issues: 5 per annum (four English and one German) plus supplements

Subscription rates:

Full Subscription (four English issues plus ALTEXethik):

Standard: 90 € Library: 170 €

(companies, institutes, libraries)

Student: 52 €

(please fax proof of student status)

Animal Protection: 52 €

(members of animal protection organizations)

Engl.-Subscription (only four English issues):

Standard: 80 € Library: 160 €

(companies, institutes, libraries)

Student: 42 €

(please fax proof of student status)

Animal Protection: 42 € (members of animal protection organizations)

 $ALTEXethik\ Subscription:$

ALTEXethik: 15 € (only the German issue)

All prices include P&P for all European countries and the USA.

Additional costs for shipment outside of Europe and USA: 20 € for 4 issues, 25 € for 5 issues. Please ask for special subscription rates for India.

Aims and Scope - Protecting More Than Animals

ALTEX publishes original articles, short communications, reviews, as well as news and comments, meeting reports and book reviews.

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. Animal experiments are defined by the editors as all experimental procedures involving the use of animals in testing, research and education or to obtain tissues, organs, and other animal-derived products which may cause pain or distress to animals.

Besides covering the biomedical aspects of animal experimentation, ALTEX is also devoted to the bioethics of the complex relationship between humans and animals. Articles published in ALTEX must express a basic concern for the dignity of living creatures and the recognition of animals as our partners. All articles will 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 its contribution to animal welfare and the 3R principle.

© Copyright: Society ALTEX Edition, Kuesnacht ZH, Switzerland