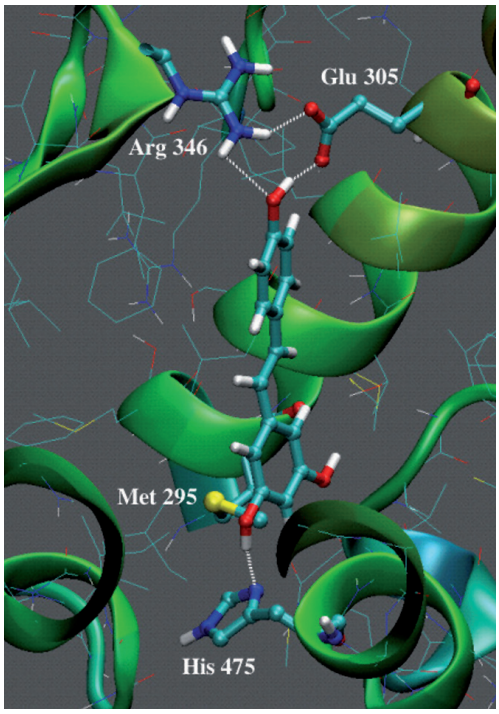
3/2009
Volume 26, No. 3
ISSN 1868-596X
153-252 (2009)

ALTEX

ALTERNATIVES TO ANIMAL EXPERIMENTATION



Spektrum
AKADEMISCHER VERLAG

The Doerenkamp-Zbinden foundation's chairs on alternatives to animal experimentation in research and education

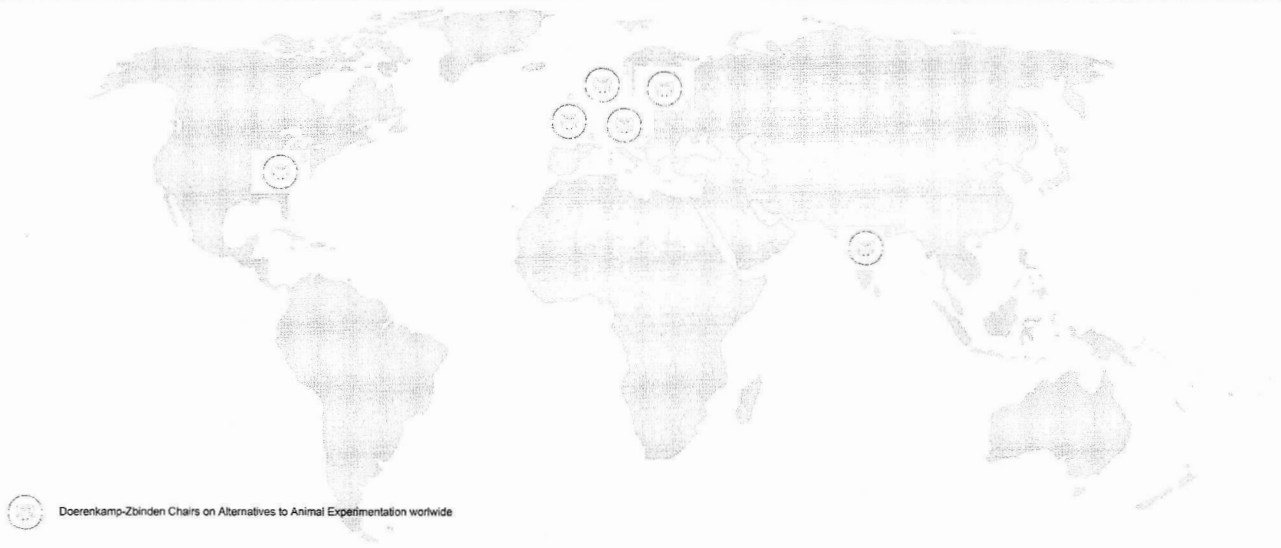
Doerenkamp-Zbinden Foundation for Alternatives in Biomedicine
Weinmanngasse 86, 8700 Kuesnacht ZH, Switzerland, www.doerenkamp.ch

Introduction

The DZS foundation is a Swiss-based foundation that has dedicated its activities and support to the development and promotion of alternatives to animal experimentation in biomedical research and education according to the well-known 3R principle (replacement, reduction and refinement) in the field of biomedicine. The foundation was created on the private initiative of the two namesakes, Hildegard Doerenkamp and Prof. Gerhard Zbinden († 1993), then head of the Institute for Toxicology of the Federal Institute of Technology and the University of Zurich in Schwerzenbach/Zurich.

Prof. Zbinden criticised the legal requirement of determining the so-called lethal dosage (LD50) of every new medication. As a toxicologist he rejected the painful killing of hundreds of mice and rats in order to test the safety of new drugs and also some chemicals. He argued that these procedures carried only little weight in the appraisal of the dangers of active substances and chemicals. Appreciating his contemporary approach to the issue H. Doerenkamp began to support toxicological research at Prof. Zbinden's institute financially, to observe the experiments and to discuss the aims and purposes behind them with the scientists, especially G. Zbinden. In the year 1985, H. Doerenkamp and G. Zbinden created the first foundation in the canton of Graubuenden in Chur, Switzerland. Its task was to award prizes for exceptional achievements in animal protection in biomedical research.

From that point on the foundation has undergone four eras of existence and development. Every era has been a crucial milestone in shaping the vision and the activities of the foundation. With all the years of experience and expertise of the eminent scientists in the field of biomedicine, the foundation has grown into a competent partner in and supporter of alternatives to animal experimentation in research and education.



Doerenkamp-Zbinden Chairs on Alternatives to Animal Experimentation worlwide

The era of the chairs to alternatives to animal testing

In the last era, which started in 2004, the foundation's course has been strongly streamed into the direction of promotion of replacement and reduction alone. The last era of the foundation can also be called an era of chairs on alternatives to animal experimentation. Realizing the importance and the role of chairs on alternatives to animal experimentation the foundation has, up to now, focused on establishing endowed chairs at several universities. The first chair named "Doerenkamp-Chair for Innovations in Animal and Consumer Protection" was installed in 2003 at the University of Erlangen-Nuremberg (Germany) by the foundress H. Doerenkamp personally. This chair has been installed for the period of 5 years and is now in a prolongation phase of 2 more years. It has been mainly focused on refinement and reduction by imaging techniques in biomedical research. In 2006, a "Foundation-Professorship for *In vitro* Methods for the Replacement of Animal Experiments" was installed at the University of Constance (Germany). The exceptionally good start of these chairs motivated the foundress to encourage the decision to place the emphasis of the foundation's work on the establishment of further university chairs. Since then the following chairs have been established: In October 2008 at Utrecht University (The Netherlands) the "Doerenkamp-Zbinden Professorship for Alternative Methods in Toxicology" was installed. The chair will be financed for six years. In January 2009 in co-operation with the Egon-Naef Foundation the DZS established the "Doerenkamp-Naef-Zbinden Professorship on Alternative Methods to Animal Experimentation" at the University of Geneva (Switzerland). The chair will be financed for five years. Also in January 2009 the "Doerenkamp-Zbinden Endowed Chair for Evidence-based Toxicology" was established at the Johns Hopkins University, Baltimore, USA. This chair has been permanently installed for as long as the Johns Hopkins University exists. In July 2009 a contract for five years was signed with the Bharathidsan University, Tiruchirappalli/Tamil Nadu in India to found a "Mahatma Gandhi Doerenkamp Center for alternatives to the use of animals in life science education" with a "Gandhi-Gruber-Doerenkamp chair for Alternatives to the Use of Animals in Life Science Education and *in vitro* Toxicology".

The DZF chairs worldwide

1 – The Doerenkamp-Chair for Innovations in Animal and Consumer Protection, Friedrich-Alexander University, Erlangen-Nuremberg, Germany

2 – The Foundation-Professorship for *In vitro* Toxicology, University of Constance, Germany

3 – The Doerenkamp-Zbinden Professorship for Alternative Methods in Toxicology, Utrecht University, The Netherlands

4 – The Doerenkamp-Naef-Zbinden Professorship on Alternative Methods to Animal Experimentation, University of Geneva, Switzerland

5 – The Doerenkamp-Zbinden Endowed Chair for Evidence-based Toxicology, at the Johns Hopkins University, Baltimore, USA

6 – The Mahatma Gandhi Doerenkamp Center for Alternatives to the Use of Animals in Life Science Education and *in vitro* Toxicology – the Gandhi-Gruber-Doerenkamp Chair, the Bharathidasan University, Tiruchirappalli/Tamil Nadu, India

The

Doerenkamp-Zbinden Foundation

for Alternatives in Biomedicine awards the

Doerenkamp-Zbinden Honour Award 2009

to

Daniel Acosta, Jr., University of Cincinnati; **Melvin Andersen**, The Hamner Institutes for Health Sciences; **Henry Anderson**, Wisconsin Division of Public Health; **Chris Austin**, National Institute of Health; **John Bailar III**, University of Chicago; **Kim Boekelheide**, Brown University; **Robert Brent**, Thomas Jefferson University; **John R. Bucher**, US EPA; **Gail Charnley**, Health Risk Strategies; **Vivian Cheung**, University of Pennsylvania; **Ralph Cicerone**, National Academy of Sciences; **Francis S Collins**, National Institutes of Health; **Michael Firestone**, United States Environmental Protection Agency (US EPA); **George M. Gray**, US EPA; **Sidney Green**, Howard University; **Robert Kavlock**, US EPA; **Karl Kelsey**, Harvard University; **Nancy Kerkvliet**, Oregon State University; **Melissa Kramer**, US EPA; **Daniel Krewski**, University of Ottawa; **Abby Li**, Exponent, Inc.; **Ellen Mantus**, National Academy of Sciences; **Lawrence McCray**, Massachusetts Institute of Technology; **Otto Meyer**, The National Food Institute; **D. Reid Patterson**, Reid Patterson Consulting; **William Pennie**, Pfizer, Inc.; **Robert Scala**, Exxon Biomedical Sciences (retired); **Gina Solomon**, Natural Resources Defense Council; **Martin Stephens**, The Humane Society of the United States; **Raymond Tice**, National Institute of Environmental Health Sciences/National Toxicology Program, **James Yager**, Johns Hopkins University; **Lauren Zeise**, California Environmental Protection Agency; **Hal Zenick**, US EPA

for

Toxicity Testing in the 21st Century: a Vision and a Strategy

which calls for a collaborative effort across the toxicology community to rely less on animal studies and more on *in vitro* tests using human cells and cellular components to identify chemicals with toxic effects

Rome, 1st September 2009

F. P. Gruber

Franz P. Gruber (President DZF)

Doerenkamp-Zbinden Foundation, Weinmanngasse 86, 8700 Kuesnacht, Switzerland

Toxicology in the 21st Century:

We propose a shift from primarily in vivo animal studies to in vitro assays, in vivo assays with lower organisms, and computational modeling for toxicity assessments

Francis S. Collins, George M. Gray and John R. Bucher (2008)

F.S.C. is Director of the National Human Genome Research Institute (NHGRI), National Institutes of Health,
G.M.G. is Assistant Administrator for the Office of Research and Development, U.S. Environmental Protection Agency,
J.R.B. is Associate Director of the U.S. National Toxicology Program, National Institute of Environmental Health Sciences (NIEHS),