

Conference Reports

Many (alternative) ways lead to Rome...

... impressions from Rome, the 7th World Congress on Alternatives & Animal Use in the Life Sciences, 2009

Normally books are printed after a conference (and the proceedings of the World Congress we just witnessed will follow in this journal). This conference, however, was itself imprinted by two books: *The Principles of Humane Experimental Technique and Toxicity Testing for the 21st Century: a Vision and a Strategy*.

This year marks the 50th birthday of the milestone publication of *The Principles* by Bill Russell and Rex Burch. Their classic book, which has served as the conceptual framework for what we understand today as the 3Rs of alternatives, continues to inspire an ever increasing array of activities, centers, societies, and projects. The second book, a report known informally as *Tox-21c*, was published in 2007 by the US National Research Council/National Academy of Sciences. Though it is only two years old, the impact of this slender volume is being felt worldwide.

These key books represent two approaches, two motivations to rethink animal experimentation. The 3Rs concept is driven by ethical concerns regarding animal use – the principles of reduction, refinement, and replacement offer a societal compromise that allows dialogue between those who want to abolish animal experimentation and those who consider it unavoidable.

A major thrust of WC7 was to take stock of this movement, which has gained momentum, especially in Europe, due to recent legislation. The ban on the use of

animals in cosmetic ingredient testing, which came into effect in March of this year, along with the start of REACH registration for chemicals and the ongoing revision of laboratory animal welfare legislation, represent only some of the current drivers. Conference speakers presented results from many EU projects, with a combined sponsorship of more than €100 million over the last few years.

More new projects are in the offing. As a highlight of the conference, the European Commission and the cosmetics industry, represented by the European Cosmetics Association (COLIPA), presented a joint call for proposals, offering €50 million for the development of alternative approaches for systemic toxicity. This is the largest targeted funding for the development of alternative approaches ever.

The 3Rs movement clearly is gaining momentum in Europe – the European Partnership for Alternative Approaches to Animal testing (EPAA) is a prime example. This momentum is also apparent in such international collaborations as this year's creation of the International Collaboration for Alternative Test methods (ICATM), which brings together, the US, the EU, Japan, and Canada, as well

as national centers in preparation, such as the Korean KoCVAM and the Brazilian BraCVAM. All of these initiatives and many more found a platform in Rome.



Herman Koeter



Alan Goldberg



Michael Balls and Horst Spielmann



Thomas Hartung

Conference sessions included many reports of tangible progress in the availability of alternative methods, especially in the cosmetic sector. The testing ban stimulated tremendous progress, particularly in the area of skin and eye irritation. The recently validated methods for skin irritation and eye corrosion made it to OECD test guidelines in record time. ECVAM also presented its first successfully validated method to identify (non-)eye-irritating compounds. At this point, though, it is applicable only for a limited class of chemicals (the microphysiometer or cytosensor method).

At least as impressive was the discussion stimulated by the US vision for toxicology in the 21st century (“Tox-21c”). The topic was widely discussed at WC7, from the initial plenary talk by Ray Tice to the final plenary by Mel Anderson. In just two years, the groundbreaking report gave rise to an alliance of US federal agencies aiming to implement the Tox-21c strategy, which is based on pathways of toxicity, human cells, and lower organisms. As of March 2009, Tox-21c is the US Environmental Protection Agency (EPA) toxicity testing strategy. Acknowledging the limitations of traditional approaches with regard to costs, throughput, predictive value, and animal use, Tox-21c clearly spells out the need for change and is leading the paradigm shift in toxicology.

Tox-21c and the authors of the report were winners in the awards program as well, garnering both the Doerenkamp-Zbinden Award and the CAAT Recognition Award.

The scientific program clearly reflected the WC7 motto, “Calling on Science,” with all the pillars of this new toxicology prominently represented: omics, stem cells, computational toxicology, integrated testing strategies, image analysis, and

systems toxicology, to name only a few. Indeed, the field of alternatives proved itself to be a dynamic, high-tech science with tremendous political and economic impact. The congress also offered ample opportunities for productive discussion and interaction among stakeholder groups. As just one example, the animal welfare organizations lobbied with a petition, asking conference attendees to indicate their support for the Tox-21c approach of the US federal agencies.

At the end of the conference, three of the pioneering advocates of the 3Rs over the last three decades – Michael Balls, Alan Goldberg, and Horst Spielmann – were named “Patrons of Animal Welfare in the Life Sciences,” acknowledging their key roles in bringing the 3Rs into the 21st century.

After five intense conference days at the beautiful site on a hill overlooking Rome, with some 300 presentations and 500 posters, attendees certainly left stimulated and with the understanding they helped shape a paradigm shift in toxicology. The work accomplished at WC7 will serve as a beacon, illuminating the path ahead and shining new light on other areas of animal use as well.

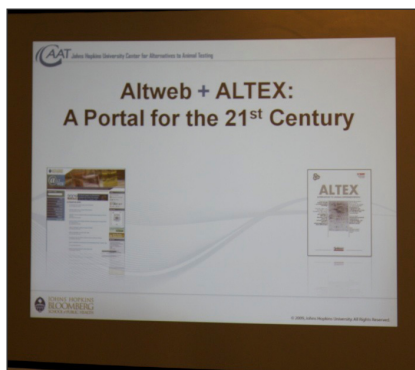
Surely Bill Russell and Rex Burch would approve. Their vision of the 3Rs is now well on its way to becoming a reality.

WC7 was organized by Herman Koëter, Brussels, and Thomas Hartung, Baltimore and Konstanz, on behalf of the Alternative Congress Trust. We look forward to the 8th World Congress in Montreal in 2011.

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First Pan-African Seminar on Alternatives to Animal Experiments

Kenya, Institute of Education, 23.-24. September 2009

A groundbreaking initiative to promote and implement replacement alternatives across Africa was held in Nairobi, Kenya.

The First Pan-African Seminar on Alternatives to Animal Experiments in Education and Training was held on 23.-24. September 2009 at the Kenya Institute of Education.

Co-organised by InterNICHE and its partner organisation, the Africa Network for Animal Welfare (ANAW), the 2-day Alternatives Seminar brought together 22 campaigning organisations from 12 African countries, InterNICHE experts from England, Mexico, India and Egypt, and over 100 Kenyan teachers, surgeons and government officials.

The Kenyan Minister for Wildlife and Forestry, Hon. Dr. Noah Wekesa, opened the animal protection workshop that was held in advance of and in preparation of the Alternatives Seminar. In his presentation, Dr. Wekesa stated his appreciation of the importance of pan-African events and acknowledged the potential of new technologies and alternatives.

The Alternatives Seminar builds on the experience of InterNICHE outreach tours and alternatives demonstrations by dovetailing the organisation's skills and resources with the initiatives and local knowledge of campaigners and teachers in the host country.

Previous outreach tours have included the training of over 400 teachers in 10 cities across India, and a 5-country-tour of Latin America with over 30 seminars and meetings. The InterNICHE Multimedia Exhibition at the recent VII World Congress on Alternatives showcased a range of teaching and training tools from the InterNICHE Alternatives Loan System. This library provided over 100 software alternatives, models, mannekins and simulators for demonstration at the event in Kenya.

Following an introduction and review of the Kenyan and African situation by ANAW Director Josphat Ngonyo and colleagues, international experts provided lectures and demonstrations on humane education and the process of replacement. InterNICHE Co-ordinator Nick Jukes introduced the range and quality of alternatives and explained the organisation's commitment to the 1R of replacement to help guarantee ethical and effective acquisition of knowledge and skills.

India's foremost campaigner for alternatives, Snehal Bhavsar, described her strategies for catalysing curricular change across the state of Gujarat in India, including her success in achieving an 80% reduction of animal use in education. Sofia Ponce presented the vision and activities of the Center for Animal Alternatives in Education (CAAE) programme at the University of Guadalajara in Mexico. Fawzy Elnady from the University of Cairo in Egypt addressed information and communications technology in relation to alternatives with a global and African overview.

Further presentations included the rationale for seeing caring as an essential clinical skill, which must be placed at the heart of veterinary and medical training; the use of the POP-trainer for live

laparoscopic surgical training without animal experiments; and the use of the Biopac Student Lab for self-experimentation as an alternative in physiology practical classes.

InterNICHE works with teachers and producers of alternatives to encourage the freeing of learning tools from license restrictions and limited geographical availability. Demonstrations and hands-on experience of alternatives at the Alternatives Seminar were followed by distribution of resources to the participants, including freeware and other low-cost or no-cost alternatives, whose impact can now be measured globally.

Discussion workshops addressed the opportunities and challenges within Africa and allowed for sharing of experience. The talks and diverse international perspectives encouraged the pan-African and Kenyan campaigners to reflect on culturally-appropriate strategies for the introduction of alternatives in their countries.

Josphat Ngonyo from ANAW said, "We intend that the Alternatives Seminar will empower participants to be ambassadors for alternatives in their own countries. They will shortly have the information, resources and support from InterNICHE for this to be achieved. The impact on Kenya will be considerable, particularly now with government support for humane approaches and innovative technology in education and training."

Nick Jukes from InterNICHE added, "We applaud the Kenyan government's interest in humane education and are confident in the pedagogical, ethical and economic advantages of replacement alternatives. We hope that other countries will follow Kenya's lead, and that the Alternatives Seminar will play a role in facilitating the process of change right across the continent."

Notes:

- (1) The organisation of the event was made possible thanks to the generous support of the Anti-Vivisection Union (South Australia), the Doerenkamp-Zbinden Foundation (Switzerland), the Maria Norbury Foundation (USA), and an anonymous donor (USA). Further thanks go to the International Association Against Painful Experiments on Animals (IAAPEA) (UK), the On Shore Foundation (USA), the New England Anti-Vivisection Society (NEAVS) (USA) and Hope Ferdowsian (USA).
- (2) African countries represented include DR Congo, Egypt, Ethiopia, Kenya, Nigeria, Rwanda, Sierra Leone, Somalia, South Africa, Tanzania, Uganda and Zimbabwe.
- (3) Kenyan government officials included Hon. Dr. Noah Wekesa, Minister for Wildlife and Forestry; Dr. Julius Kipng'etich, Director, Kenya Wildlife Service; Hon. Adan Duale, Asst. Minister of Livestock Development; Dr. Peter Ithondeka, Director, Department of Veterinary Services

Nick Jukes
InterNICHE Co-ordinator