

# Laboratory animal science and promotion of research for development

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The world is facing major political, economical and environmental changes. The economical depression is serious. Due to these changes in many parts of the world, there is a possibility that the problems of the developing countries and in Eastern Europe are buried under the "new" problems of the advanced countries and thus forgotten.

Many of the human and animal health problems as well as the reasons of low agricultural productivity remain unsolved in the developing countries. Table 1 presents the number of people infected with the 8 most common tropical diseases in the world. Some preventive and curative methods have already been invented, but the control of tropical diseases is nowhere near complete. The developing countries rely heavily on agriculture and basic industry. Because of the diseases affecting farm animals and crops, the productivity is weak. Additional methods should be invented, and agricultural chemicals developed so that they would not harm the nature and people.

At least some of the post-socialist countries in Europe can at the present moment be considered as developing countries. The tremendous economical and environmental damages are obvious. The standard of living is low, and an outbreak of diseases can be expected.

It is most important to strengthen the national research resources and to establish modern research facilities to the developing countries, so that they carry out research on the urgent above listed problems by themselves.

Experimental animals, their tissues, cells and other biological products are basic requirements for all biomedical, as well as agricultural research. The development, of course, will only be possible through efficient education and training possibilities created in collaboration with the advanced countries. Also other resources e.g. feed and water supplies, facilities and equipment (proper service and maintenance) as well as breeding and care of experimental animals

Table 1. Global toll: tropical infections.

	People infected (thousands)*	People at risk (millions)	Countries affected
Malaria	270 000	2 100	103
Schistosomiasis	200 000	600	76
Lymphatic filariasis	90 000	900	76
River blindness	17 000	90	34
Chagas disease	16-18 000	90	21
Leishmaniasis	12 000	350	80
Leprosy	10-12 000	1 600	121**
African sleeping sickness	25	50	36

Note: All figures provisional and subject to change if and when better data become available. Some people are infected with more than one disease.

\* Figures rounded.

\*\* Countries with more than 100 registered cases.

Source: World Health Organization, 1990.

(perhaps special species available in the area) should be taken care of so that the research results would be reliable.

In the 1988 ICLAS General Assembly in Bangkok, Thailand, a decision of principle was made that the matters of the developing countries would have the preference in ICLAS activities.

Since then, among other efforts, meetings and courses on laboratory animal science have been arranged in the developing countries, and the preference e.g. in granting scholarships have been given to applicants from these areas. An East African Center for Biomedical Research Resources is currently under consideration in Kenya, and some basic discussions have been carried out to start the planning of a similar Franchophone center in Cameroon. ICLAS is currently, together with the WHO, preparing Guidelines for the Establishment and Use of Laboratory Animal Facilities in Developing Countries. The document will have its final form during 1991.

It would be most valuable to create possibilities to the leaders and other personnel, technicians included, of laboratory animal facilities from the developing (and post-socialistic) countries to come to work in modern institutions. There they could learn the different work routines in practice, and after that hopefully train others in their home countries. ICLAS would like to encourage all its members to actively investigate the

possibilities to find or create suitable temporary jobs in their own countries for trainees from the developing countries.

Collaboration in teaching with different National and Regional Laboratory Animal Associations is also welcomed. There is a great need of courses at all levels in the developing countries. Perhaps such courses could be organized within the framework of developmental aid programs. Present courses in Europe, Japan and North America, remote from the problem areas mean that the travelling expenses make the participation impossible for the scientists and technicians from the developing countries.

The AALAS/ICLAS Joint Meeting and the General Assembly of ICLAS will be organized on October 20–24, 1991, in Buffalo, NY, USA. In order to be able to achieve the above listed goals, we need collaboration between different individual scientists, Institutes and Associations of Laboratory Animal Science. The AALAS/ICLAS Joint Meeting will provide an excellent opportunity for the discussions on the international policy for the promotion of research.

Therefore, on behalf of the International Council for Laboratory Animal Science, I would like to invite as many people as possible to participate in this meeting.

#### *References*

*WHO Features*, World Report on Tropical Diseases, No. 139, March 1990.