

## **BO HOLMSTEDT MEMORIAL FUND (BHMF) (EUROTOX)**

Professor Bo Holmstedt was a prominent toxicologist both nationally and internationally, well-known in the toxicology community for his outstanding research, engagement in education, contributions to toxicological organisations and role as a leading authority in toxicological evaluation. He covered wide ranges, both geographically, scientifically, culturally and intellectually.

He was born 1918 in the southern part of Sweden and studied medicine at the Karolinska Institutet. He graduated as a MD PhD 1952 in pharmacology, as toxicology and became a full professor in toxicology at the Karolinska Institutet 1964. He finished his academic carrier as head of the Toxicology Unit, Institute of Environmental Medicine at the same institute.

He was on the editorial board of many journals in pharmacology and toxicology. He was a member of many scientific societies both in Sweden and abroad such the Swedish Society of Toxicology, first President and honorary member, Society of Toxicology USA, and European Society of Toxicology, founding member. He held several leading positions, most prestigious President of the International Union of Toxicology (1983-1986). He published around 250 scientific papers and wrote around 50 book chapters. He received the Merit award from SOT 1987 and EUROTOX for his contributions to toxicological science.

Professor Holmstedt's main field of scientific interest was mechanism of action of toxic compounds, and he performed pioneer work within several of these fields for which he received international recognition. During the 1940-ies and 1950-ies he studied organo phosphate compounds with cholinesterase inhibiting effect. In his dissertation thesis 1951 he described the synthesis of tabun, the well-known nerve gas with previous horrendous usage, its pharmacological effects, and atropin as its effective antidot. He used his knowledge about cholinesterases to develop a histochemical method to reveal cholinergic nerves,

During the 1960-ies Holmstedt started to use gaschromatography in combination with massspectrometry in order to directly identify the structure of hallucinogens, drugs and their metabolites. Together with collaborators he developed a new technique, called massfragmentography, which had a markedly improved sensitivity. This made it possible to identify and quantify endogenous compounds not detected earlier, drugs and their metabolites in body fluids. This became most appropriate during the Alpha Helix expedition to the Amazons 1967, when he and his collaborators identified hallucinogens, 5-metoxy-N,N-dimethyltryptamine and  $\beta$ -carboline-alkaloids, used by different tribes of Indians in South America. A similar finding was the identification of "hog", a product abused in USA, as 1-(1-phenylcyclohexyl)piperidine and the finding of cannibinol in marijuana smokers.

From this very short summary it is obvious that Bo Holmstedt contributed to many central areas of pharmacology and toxicology in a constructive and interdisciplinary way. He saw the importance of toxicology as an important medical discipline and worked hard to establish its recognition both in science, education and chemical regulation, both nationally and internationally. There are many toxicologists today who owe him a debt of gratitude that they had the opportunity to contribute to the development of toxicology. Professor Bo Holmstedt was a true scientist., knowledgeable and critical in detail, without losing the overview.

In honor of Professor Bo Holmstedt, the BHMF in Collaboration with EUROTOX has established the Bo Holmstedt Memorial Lecture to be presented annually at the EUROTOX meeting by an outstanding European Toxicologist. As Bo Holmstedt had an great interest in the teaching of toxicology and supported research in developing countries, a travel lecture fellowship has been established.

### **BO HOLMSTEDT MEMORIAL TRAVELLING LECTURESHIP AWARDS**

This award is presented by the Bo Holmstedt Memorial Foundation to recognize excellence in research and service in toxicology. One award is provided annually to promote greater collaboration between European and international scientist, and to enable a European Toxicologists to undertake a 3-4 week lecture tour. The award is intended to familiarize the recipient with research and regulatory issues in non-European countries, with a special interest in environmental health problems for people living in less-developed countries.

Candidates for these wards should primarily be established, mid-career European scientists who are members of either EUROTOX or European Society for Clinical Toxicology, and who have demonstrated the ability to develop collaborative relationship with international partner. One award is given each year in the amount of 6000 EURO.

Applications must include a statement of the applicant's experience and area of expertise. A proposed itinerary and its underlying rational should be provided, along with an indication of the benefits that the lectureship will confer on the applicant. The itinerary should preferentially include a visit at a university/research institute outside North America, e.g. a developing country.

Candidates should contact the itinerary hosts prior to submission of the application. The application should not exceed 1500 words.

The following format is suggested for the application:

1. Name and affiliation
2. Statement of experience and expertise
3. Proposed lecture itinerary
4. Rationale for itinerary
5. Statement of benefits to the applicant
6. Curriculum Vitae

### **BO HOLMSTEDT MEMORIAL LECTURE**

The Bo Holmstedt Memorial Lecture aims at recognising scientific excellence in the area of drug and chemical safety.

Nominations may be submitted by National Society EUROTOX Members, by EUROTOX speciality Sections, BHMF executive committee, or by at least 10 individual EUROTOX members.

The nomination letter should consist of.

1. Arguments supporting the nomination
2. Curriculum vitae of the candidate
3. List of 5-10 key publications.

The EUROTOX executive committee will select the two top-candidates, and the BHMF will select the recipient of the award. The awardee is invited to the congress where the lecture is held and is presented with a memorable.

***BHMF Executive committee***

Torbjörn Malmfors, Stockholm, President  
Maria Vahter, Stockholm, Scientific secretary  
Hans Temmink, EUROTOX  
Herman Autrup, Århus, Vice-president  
Peter Urs Geiger, Vienna, Treasurer and secretary