To:	
Fagrådet human toksikologi (Norway)	
National toxicology organisations in Denmark, Sweden, Finland, Iceland and Norway	
Eurotox	

Announcement on the initiation of a Nordic initiative to assess and address competency gaps in toxicology

## A Nordic initiative to assess and address competency gaps in toxicology

Society expect that chemicals and products are safe for humans and the environment. These safety assessments must be based on the best scientific data available. Well-educated and competent scientists with adequate and appropriate training in toxicological sciences are needed to conduct the studies and interpretate findings for risk assessment. Multidisciplinary teams staffed with specialists trained in areas like environmental chemistry, toxicology, endocrinology, exposure assessments and ecotoxicology must be in place to cover the broad spectrum of knowledge areas needed to perform these tasks.

The science of toxicology is undergoing a rapid development the last 10 years, combining in vivo data with in vitro, in silico and epidemiological data in order to study the hazards of chemicals and to provide science based risk assessments. In the last decades society have been successful in identifying and taking regulatory actions for the most toxic and persistent chemicals, and the Nordic countries have been instrumental to push for European regulation. These efforts must be continued since more and more chemicals are being synthesised and taking into commerce, and we have many challenges remaining in order to protect society for adverse effects of chemicals already in the anthroposphere.

Funding for toxicology and related sciences research and training of future toxicologists as well as further training of existing professionals in the use and application of new assessment methods is under pressure. Eurotox and the Finnish and Norwegian Societies of Toxicology have already produced reports and letters to their national governments to bring this topic on the political agenda.

Representatives from universities and institutions in the five Nordic countries met in Stockholm on the 24<sup>th</sup> of October and agreed that Nordic cooperation is warranted to assess if there is a competency gap and suggest actions. As a first step, a survey will be conducted to map how many toxicologists/ecotoxicologists and environmental chemists are needed in the next 10-20 years and compare this with the number that are currently in training. In addition, current training programs will be mapped.

In order to deliver these activities in a timely manner a grant proposal to the Nordic council will be prepared in order to hire a resource who can focus on this task. Additional funding might be required to develop specific training programs.

Please assist in any future activities and in the meantime feel free to contact your national representatives for input and discussion.

Åke Bergman Hubert Dirven

Senior professor Section leader Toxicology and Risk Assessment

Stockholm and Örebro univ. Norwegian Institute of Public Health

Ake.Bergman@oru.se Hubert.Dirven@fhi.no

## **Participants**

Denmark Anette Schnipper, National Food Institute, Technical University of Denmark

Email: Anette Schnipper <ansc@food.dtu.dk>

Lisbeth E. Knudsen, Department of Public Health, University of Copenhagen

Email: Lisbeth E. Knudsen < liek@sund.ku.dk >

Karin Sørig Hougaard, The National Research Center for the Working Environment

Email: Karin Sørig Hougaard (KSH) < KSH@nfa.dk>

Finland Kimmo Peltonen, Tukes, Helsinki

Email. Kimmo Peltonen < Kimmo. Peltonen @tukes. fi>

Jaana Rysä, School of Pharmacy, University of Eastern Finland,

Email: Jaana Rysä < iaana.rysa@uef.fi>

Matti Viluksela, University of Eastern Finland, Email: Matti Viluksela <matti.viluksela@uef.fi>

Iceland Hrönn Jörundsdottir, Matis Icelandic Food and Biotech R&D,

Email: Hrönn Jörundsdottir < hronn@matis.is>

Halldór Pálmar Halldórsson, University of Iceland, Email: Halldór Pálmar Halldórsson < halldor@hi.is>

Norway Hubert Dirven, Norwegian Institute of Public Health,

Email: Hubert Dirven < <a href="mailto:Hubert.Dirven@fhi.no">Hubert.Dirven@fhi.no</a>>

Åse Krøkje, Norwegian University of Science and Technology,

Email: Åse Krøkje <ase.krokje@ntnu.no>

Johan Øvrevik, University of Oslo,

Email: Johan Øvrevik < Johan. Ovrevik @fhi.no >

Sweden: Annika Hanberg (IMM, Karolinska Institutet),

Email: Annika Hanberg <annika.hanberg@ki.se>

Ingrid Ericson Jogsten (Swaccs), Örebro University

Email: Ingrid Ericson Jogsten < ingrid.ericson@oru.se>

Åke Bergman (Swaacs), Örebro University

Email: Åke Bergman < ake.bergman@oru.se >