

MistraPharma

News May 2009

MistraPharma is a Swedish research programme funded by the Foundation for Strategic Environmental Research (Mistra)



A Healthy Future - Pharmaceuticals in a Sustainable Society

This book is a popular scientific presentation which covers the whole chain for a sustainable use of pharmaceuticals; production, lifestyle, fair allocation in the world, distribution, use, environmental effects, wastewater treatment and legal requirements. The book is primarily meant for authorities, pharmaceutical industries, the healthcare, wastewater treatment plants and Universities.

The purpose of the book is to provide important knowledge about risks addressed to the use of human pharmaceuticals. The book suggests measures to minimize the risks in order to reach a more sustainable society.

The book has been published in collaboration between MistraPharma, Apoteket AB and Stockholm County Council. It is available in both English and Swedish.

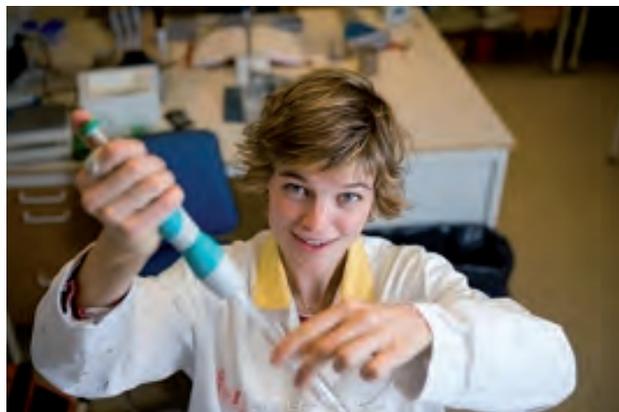
You can order the book from Apoteket AB:
order.trycksaksdistribution@apoteket.se or +46-10 - 447 50 70
Assign the item number 2184-01 (English) or 2182-01 (Swedish)

Insensitive species are used for environmental risk assessments of pharmaceuticals

Fish are more likely to be affected by pharmaceuticals in the environment than are waterfleas and algae. This is shown in a doctoral thesis at the Sahlgrenska Academy at University of Gothenburg, Sweden. Basing the assessment on species that are insensitive can lead to an underestimation of the actual risks to the environment.

Fish and frogs have many more target molecules that are similar to those in humans, and we therefore suggest using more comprehensive tests in such species', says Lina, whose study was recently awarded 'the AstraZeneca Award for Best Publication in Risk Assessment, Modeling and Theoretical Studies'.

For more information contact: Lina Gunnarsson, doctoral student,
telephone +46-739- 76 46 22, e-mail lina.gunnarsson@fysiologi.gu.se



MistraPharma - what's happening?

The research in MistraPharma has been running for almost a year and a half now and the level of activity is high. Through successful technical development in Umeå we now have access to analytical methods for as many as 130 active pharmaceutical substances which is a great strength in the future research. The bioconcentration experiments have been expanded to cover as many as 120 substances. This was made possible with help from the program's strategic budget. The data that these experiments will generate will be a most important basis for the program's further prioritizing of substances.

Lina Gunnarsson (Göteborg University) successfully defended her thesis entitled "On the use of genomics to assess environmental risks of pharmaceuticals" on May 7th. At Lund university experiments are ongoing on sorption, biodegradation and ozonation. At Stockholm University standard algae and fish embryo tests are being performed. Adverse effects in these tests have been identified at high concentrations only (i.e. concentrations well above what is environmentally relevant). The group in Uppsala is currently performing a long-term frog study using a highly prioritized substance, and at KTH we are investigating how data from standardized and non-standardized tests are incorporated and evaluated in the regulatory risk assessment process.

The field-study has furthermore started. As I write this, fish are caged outside the waste water treatment plant in Skövde, and we keep our fingers crossed that everything will proceed according to plans.

On April 2nd the book "A Healthy Future. Pharmaceuticals in a

sustainable society" was officially released. The book has been produced in collaboration between MistraPharma, Apoteket and Stockholm County Council, and it is also MistraPharma's first yearly report.

The cooperation with the programme Board and Reference group continues to be stimulating and constructive. We recently got two new members of the programme Board; Christina Åkerman, Director General at the Swedish Medical Products Agency has replaced Gunnar Alván, and Berit Balfors, Associate Professor at KTH, has replaced Björn Hårsman. I wish to thank both Gunnar and Björn for their significant contributions, and welcome Christina and Berit to MistraPharma.

In summary, the program is progressing successfully and keep moving towards a healthier future.



Christina Rudén
The programme director for MistraPharma.

The MistraPharma project - and the view from the Drug and Therapeutics Committees

Pharmaceutical drugs are one of the most important tools for treatment and prevention of diseases. The availability of pharmaceutical drugs is vital for human health in a global perspective. However, these compounds are also recognized as potential environmental pollutants and of concern for species in aquatic ecosystems. Thus, it is important that we achieve more knowledge for developing valid risk management strategies. In my opinion, the MistraPharma programme is an important part of this process which will facilitate for the health care services to obtain a wise drug use with environmental considerations.

The drug and therapeutics committees (DTC) in Sweden play an important role for the information, education and guide lining concerning pharmaceutical drug use in the health care. As a representative for the DTCs, I participate in the MistraPharmas work package "Stakeholder communication". This enables the DTCs to give and to share the complex perspectives of "drugs and environment" from the view of the patients and prescribers in health care system. The use of the DTC's network in the communication process from the MistraPharma project to the health care system facilitates most

probably the introduction of environmental aspects on pharmaceutical drug use. This includes activities to stimulate risk management strategies when prescribing drugs, in the process of drug cassation and for developing good standards for avoiding environmental pollutions in the production of pharmaceutical drugs.



Lars Lööf
Prof., Chairman of LOK (network for the Drug and Therapeutics Committees in Sweden).

If you have any questions you are welcome to contact us!

Christina Rudén (Programme director) +46 8 790 95 87
Karin Liljelund (Communication manager) +46 8 789 04 26

www.mistrapharma.se