



Hokkaido University  
Leading Graduate School  
Veterinary Science for One Health

Date : 16:15 ~ , 25<sup>th</sup> July (Thu) , 2013

Venue : Lecture Hall

## The 9th Leading Special Lecture



# Impacts of Medicines in the Natural Environment

**Alistair BA Boxall**

**Professor of Environment Department,  
University of York, UK**

Defra Hazardous Substances Advisory Committee

Chair of the Pharmaceutical Advisory Group of the Society of Environmental Toxicology and Chemistry.



Potential impacts of environmental pharmaceutical contamination on wildlife and humans

# The 9th Leading Special Lecture

## Impacts of Medicines in the Natural Environment

July 25, 2013, 16 : 15~17 : 30

Lecture Hall, Graduate School of Veterinary Medicine,  
Hokkaido University, JAPAN

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### Program

Chairperson: Prof. Mayumi Ishizuka  
(Hokkaido Univ, JAPAN)

16 : 15~17 : 15

Prof. Alistair B A Boxall  
(Environment Department, University of York)

17 : 15~17 : 30

Discussion



# Impacts of Medicines in the Natural Environment

**Alistair B A Boxall**

**Environment Department, University of York, Heslington, York, UK, YO10 5DD**

Following use by humans, pharmaceuticals are excreted into the sewage system and can then pass through sewage treatment plants into surface waters. Veterinary pharmaceuticals will be released to soils when manure is applied to land as a fertiliser. As pharmaceuticals are biologically active molecules, in recent years there has been increasing interest from scientists and the general public over the potential impacts of pharmaceuticals on aquatic and terrestrial organisms and on humans that consume drinking water or crops containing pharmaceuticals. In this talk, I will explain how pharmaceuticals move from humans and animals to soils surface waters and drinking water supplies and discuss the implications of presence of pharmaceuticals in the environment for ecological and human health. Solutions to minimise the impacts of pharmaceuticals on the environment and major knowledge gaps will also be presented.

Bio:



Alistair Boxall is Professor in Environmental Science in the Environment Department at the University of York. Alistair's research focuses on understanding emerging and future ecological and health risks posed by chemical contaminants in the natural environment. Alistair is a member of the Defra Hazardous Substances

Advisory Committee and is Chair of the Pharmaceutical Advisory Group of the Society of Environmental Toxicology and Chemistry. He regularly advises national and international organisations on issues relating to chemical impacts on the environment and has published extensively on the topic of pharmaceuticals in the environment.



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