Investigator(s): Richard Valentine, Professor, Civil and Environmental Engineering

**Project Title:** Influence of Riverbank Filtration on NDMA Formation Potential

Year Funded: 2003

Amount Received: \$20,000

### Investigator(s):

Patrick O'Shaughnessy, Professor, Occupational and Environmental Health, Keri Hornbuckle, Associate Professor, Civil & Environmental Engineering

**Project Title:** Air Dispersion Modeling of Confined Animal Feeding Operations

Year Funded: 2003

Amount Received: \$18,800

## **Publications:**

Sigurdarson ST, O'Shaughnessy PT, Watt JA, Kline JN. Experimental human exposure to inhaled grain dust and ammonia: towards a model of concentrated animal feeding operations. Am J Ind Med. 2004 Oct;46(4):345-8.

#### Investigator(s):

Hans-Joachim Lehmler, Associate Research Scientist, Occupational and Environmental Health; Keri Hornbuckle, Associate Professor, Civil & Environmental Engineering

## **Project Title:**

Enantoselective Enrichment of Chiral Polychlorinated Biphenyl (PCBs) Congeners in Complex Mixture in Vivo

Year Funded: 2003

Amount Received: \$20,000

## **Publications:**

Lehmler HJ, Robertson LW, Garrison AW, Kodavanti PR. Effects of PCB 84 enantiomers on [3H]-phorbol ester binding in rat cerebellar granule cells and 45Ca2+-uptake in rat cerebellum. Toxicol Lett. 2005 Apr 28;156(3):391-400. Epub 2005 Jan 23.

I. Kania-Korwel, K.C. Hornbuckle, A. Peck, W.W. Sułkowski, G. Ludewig, L.W. Robertson, H.-J. Lehmler, Comparison of PCB congener profiles in tissues of PCB-treated rats. Organohalogen Compounds 2004, 66: 2874-2881.

Kania-Korwel, G. Ludewig, L.W. Robertson, K.C. Hornbuckle, A. Peck, P. Espandiari, C.G. Gairola, W.W. Sułkowski, H.-J. Lehmler, Biochemical effects of an environmental Chlorofen mixture in comparison with Aroclor 1254 in rats. Organohalogen Compounds 2004, 66: 2943-2950.

H.-J. Lehmler, I. Kania-Korwel, J.K. Avants, K.C. Hornbuckle, W.W. Sulkowski, L.W. Robertson, W.A. Garrison, Distribution of chiral PCBs in selected tissues in the laboratory rat. Organohalogen Compounds 2004, 66: 441-448.

Kania-Korwel, K.C. Hornbuckle, A. Peck, G. Ludewig, L.W. Robertson, W.W. Sulkowski, P. Espandiari, C.G. Gairola, H.-J. Lehmler. Congener specific tissue distribution of Aroclor 1254 and a highly chlorinated environmental PCB mixture in rats. Environ. Sci. Technol. 2005: 39, 3513-3520.

#### Grant Awards:

NIH 1K25ES012475-01A1. H-J Lehmler, PI. Distribution of PCB Atropisomers. 9/3/04 – 7/31/09. \$662,948.

## Investigator(s):

Gabriele Ludewig, Occupational and Environmental Health; Larry W. Robertson, Professor, Occupational and Environmental Health; Elaine Smith, Professor, Department of Epidemiology

#### **Project Title:**

Exploring the Mechanism(s) of Increased Prostate Cancer Risk after Exposure to Polychlorinated Biphenyls (PCBs)

## Year Funded:

2003

# Amount Received:

\$20,000

## **Publications:**

Ritchie JM, Vial SL, Fuortes LJ, Robertson LW, Guo H, Reedy VE, Smith EM. Comparison of proposed frameworks for grouping polychlorinated biphenyl congener data applied to a case-control pilot study of prostate cancer. Environ Res. 2005 May;98(1):104-13.

## Investigator(s):

Sigurdur Sigurdarson, Fellow Associate, Occupational and Environmental Health; Gunnar Gundmundsson, Staff Physician, Department of Internal Medicine, University Hospital of Iceland, Joel N. Kline, Associate Professor, Department of Internal Medicine, Peter S. Thorne, Professor, Department of Occupational and Environmental Health; Kristin Thomasson, Chief Medical Officer, Administration of Occupational Safety and Health in Iceland.

## **Project Title:**

Respiratory Disease and the Agricultural Environment: A Study on Environmental Factors Associated with Respiratory Symptoms in Icelandic Farmers

Year Funded: 2003

Amount Received: \$20,000