Core A - Synthesis Core [1]

The Synthesis Core is responsible for the synthesis, purification and characterization of individual PCB congeners and PCB metabolites required for all research projects. This includes the development of new synthetic approaches for the preparation of PCB derivatives and their characterization by x-ray crystallography. In addition, the Synthesis Core will provide the Analytical Core [2] with analytical PCB standard mixtures that are based on individual PCB congeners (and not technical Aroclors). These mixtures will significantly contribute to the high quality of the PCB analysis needed by most research projects.

The Synthesis Core has a long history of supporting researchers worldwide (especially from other Superfund basic research programs) by providing individual PCB congeners as well as PCB metabolites. The Synthesis Core endeavors to continue this support as part of our research translation efforts and, whenever possible, will make test compounds available to other research programs at no or reduced cost.

- **Core Leader: Hans-Joachim Lehmler, PhD**
  
  Dr. Lehmler is an experienced synthetic organic chemist with over twelve years of experience in the synthesis of polychlorinated biphenyls and their metabolites. He is currently a Professor in the University of Iowa Department of Occupational and Environmental Health. He has been involved in the NIEHS Superfund Program since 1998-first at the University of Kentucky and since 2003 at the University of Iowa. As Core Leader he will oversee and coordinate the chemical synthesis and the chemical characterization of synthetic compounds.

- **Larry W. Robertson, PhD, MPH**
  
  Dr. Robertson has over thirty years of experience in the synthesis of polychlorinated biphenyls, their metabolites and other environmental contaminants. His expertise in the synthesis of individual PCB congeners using the Cadogan and Ullmann coupling as well as the Sandmeyer reaction is an especially important asset for the Synthesis Core.

Contact

Please e-mail any inquiries relating to the Synthesis Core to Hans-Joachim Lehmler at hans-joachim-lehmler@uiowa.edu [3].

Attach files: [Standard Operating Procedure for the synthesis and handling of diazomethane](#) [4]
Source URL (modified on 02/07/2018 - 14:45):
https://iowasuperfund.uiowa.edu/support-cores/synthesis

Links
[1] https://iowasuperfund.uiowa.edu/support-cores/synthesis
[2] https://iowasuperfund.uiowa.edu/support-cores/analytical
[3] mailto:hans-joachim-lehmler@uiowa.edu