

Poster #35

Endocrine Disruptors Research Program at the US Environmental Protection Agency

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Evidence suggests that environmental exposure to some anthropogenic chemicals may result in disruption of endocrine systems in human and wildlife populations. A number of the classes of chemicals suspected of causing endocrine disruption fall within the purview of the US Environmental Protection Agency's (EPA) mandates to protect both public health and the environment. While there is a wealth of information regarding endocrine disruptors, many critical scientific uncertainties still remain. EPA's Office of Research and Development (ORD) has a risk-based research program to address some of these uncertainties. ORD's research program is based upon a peer-reviewed Research Plan published in 1998 (www.epa.gov/ORD/WebPubs/final) and focuses on three main areas: 1) *Developing a better understanding of the science.* Research in this area includes determining: dose-response relationships, the effects of exposure to multiple endocrine disruptors, major sources of exposure, and approaches for managing risks. 2) *Determining the extent of the problem.* Research includes determining what effects are occurring in human and wildlife populations and what chemical classes are responsible. 3) *Supporting EPA's screening and testing program.* ORD research is developing needed *in vivo* and *in vitro* assays in support of the implementation of a screening and testing program for endocrine disruptors, required by the 1996 Food Quality Protection Act. Particular attention is focused on refining mammalian assays for estrogen, androgen, and thyroid activity and in developing and standardizing amphibian and fish bioassays. ORD's research program is conducted intramurally across three national laboratories and one national center and extramurally through the Science to Achieve Results (STAR) competitive grants program. EPA coordinates its extramural solicitations with other federal agencies under the auspices of the Committee on Environment and Natural Resources of the President's National Science and Technology Council.