

Susan C. Laws

Education

- B.S., Meredith College, Raleigh, NC; Biology, 1975.
- M.S., North Carolina State University, Raleigh, NC; Physiology, 1982.
- Ph.D., North Carolina State University, Raleigh, NC; Biochemistry, 1988.

Professional Experience

- 1985-Present: Research Biologist, EPA.

Research Interests

- Female Reproductive Toxicology
- Receptor Biochemistry
- Endocrine Disruptors and Mechanisms of Action

Professional Activities

- Member, RTD Endocrine Disruptor Screening Program Team, assisting the Office of Science, Coordination and Policy, US EPA, with development and validation of Tier I Screening Battery, 1999-present.
- Briefing on the effects of atrazine on steroidogenesis in Wistar rats, EPA Office of Pesticides Program, Washington, DC, July 2007.
- Editorial Boards: Journal of Toxicology and Environmental Health, Birth Defects Research: Developmental and Reproductive Toxicology.
- Briefing on interpreting mechanistic data from in vitro and in vivo endocrine assays, EPA Office of Water. 2006.
- Member, EPA's Categorization and Prioritization Community of Practice, National Center for Computational Toxicology. 2005-present.
- Member, Review Board: ReProTect Program, European Commission, Joint Research Centre, Institute for Health and Consumer Protection, European Centre for the Validation of Alternative Methods. 2005.
- Member, Endocrine Disruptors Testing and Assessment Validation Management Group for Non-Animal Testing, Organization for Economic Cooperation and Development. 2004-present.
- EPA Bronze Medal, 2004.
- Briefing on effects of atrazine on steroidogenesis, EPA Office of Prevention, Pesticides, and Toxic Substances. 2004.
- Member, Graduate Faculty Advisory Committee, Department of Molecular and Structural Biochemistry, North Carolina State University. 2000-2004.

Invited Lectures/Symposia

- Overview of NHEERL's Endocrine Disruptor Research Program. Federal-State Toxicology and Risk Analysis Committee (FSTRAC) meeting, Durham, NC, October, 2007.
- Atrazine Workgroup Meeting, Syngenta Crop Protection: The effects of atrazine on the hypothalamic-pituitary-adrenal axis. 2006
- EPA Office of Water, Washington, DC: Interpreting mechanistic data from in vitro and in vivo endocrine assays. 2006.
- EPA Science to Achieve Results Progress Review Workshop: Effects of endocrine disrupting chemicals on reproduction: Reducing scientific uncertainties. 2006.
- 1st Meeting of the Quantitative Structure Activity Relationships Task Force, Organization for Economic Cooperation and Development. Ispra, Italy: Appropriate interpretation of data from the estrogen receptor competitive binding assay. 2005.
- Atrazine Workgroup Meeting, Syngenta Crop Protection: Update on studies evaluating the effects of atrazine on steroidogenesis. 2005.
- North Carolina Regional Meeting of Industrial Hygienists: Endocrine disrupting chemicals and their effects on human health. 2004.
- Atrazine Workgroup Meeting, Syngenta Crop Protection: Studies to evaluate the effects of atrazine on steroidogenesis. 2004.
- European Centre for the Validation of Alternative Methods Workshop on Detection of Chemicals Affecting Fertility – Development of a Test Strategy. European Commission, Joint Research Centre, Institute for Health and Consumer Protection. Ispra, Italy: Development and validation of in vitro assays for the detection of endocrine disrupting chemicals. 2004.
- Ninth Plenary Meeting, National Advisory Council for Environmental Policy and Technology, Endocrine Disruptor Methods Validation Subcommittee: In vitro aromatase assay: Prevalidation studies. 2003.
- Endocrine Disruptor Research Program Review Workshop, Research Triangle Park, NC: Development and validation: In vitro protocols that identify endocrine disrupting chemicals. 2003.
- Endocrine Disruptors Program Review Workshop, EPA Office of Research and Development, National Center for Environmental Research, Research Triangle Park, NC: Validation of an in vivo assay for the evaluation of environmental chemicals on pubertal development and thyroid function in female rats. 2002.

Selected Publications

Laws SC, Stoker TE, Ferrell JM, Hotchkiss MG, Cooper RL. 2007. Effects of altered food intake during pubertal development in male and female Wistar rats. *Toxicol. Sci.* 100:194-202. [Abstract](#)

Cooper RL, Laws SC, Das PC, Narotsky MG, Goldman JM, Tyrey EL, Stoker TE. 2007. Atrazine and reproductive function: Mode and mechanism of action studies. *Birth Defects Res B Dev Reprod Toxicol.* 80:98-112. [Abstract](#)

Stoker TE, Ferrell JM, Laws SC, Cooper RL, Buckalew AR. 2006. Evaluation of ammonium perchlorate in the endocrine disruptor screening and testing program's

male pubertal protocol: Ability to detect effects of thyroid endpoints. *Toxicology*. 228:58-65. [Abstract](#)

Laws SC, Yavanhxay S, Cooper RL, Eldridge JC. 2006. Nature of the binding interaction for 50 structurally diverse chemicals with rat estrogen receptors. *Toxicol Sci*. 94:46-56. [Abstract](#)

Laws SC, Stoker TE, Goldman JM, Wilson VS, Gray LE, Cooper RL. 2006. The U.S. EPA's Endocrine Disruptor Screening Program: *In vitro* and *in vivo* mammalian Tier I screening assays. In: *Developmental and Reproductive Toxicology, A Practical Approach*. Ed.: R. Hood, CRC Press, Boca Raton, FL.

Gray LE, Wilson VS, Noriega NC, Lambright CS, Furr JR, Stoker TE, Laws SC, Goldman JM, Cooper RL, Foster P. 2004. Use of the laboratory rat as a model in endocrine disruptor screening and testing. 42:425-37. [Abstract](#)

Cooper RL, Laws SC, Narotsky MG, Goldman JM, Stoker TE. 2004. Hormonal control of ovarian function following chlorotriazine exposure: Effect on reproductive function and mammary gland tumor development. In: *Ovarian Toxicology*. Ed.: P. Hoyer, CRC Press, Boca Raton, FL.

Goldman JM, Laws SC, Cooper RL. 2004. Assessment of toxicant-induced alterations in ovarian steroidogenesis: A methodological overview. In: *Ovarian Toxicology*. Ed.: P. Hoyer, CRC Press, Boca Raton, FL.

Stoker TE, Laws SC, Crofton KM, Hedge JM, Ferrell JM, Cooper RL. 2004. Assessment of DE-71, a commercial polybrominated diphenyl ether (PBDE) mixture, in the EDSP male and female pubertal protocols. *Toxicol Sci*. 78:144-55. [Abstract](#)

Laws SC, Ferrell JM, Stoker TE, Cooper RL. 2003. Pubertal development in female Wistar rats following exposure to propazine and atrazine biotransformation by-products, diamino-s-chlorotriazine and hydroxyatrazine. *Toxicol Sci*. 76:190-200. [Abstract](#)

Stoker TE, Guidici DL, Laws SC, Cooper RL. 2002. The effects of atrazine metabolites on puberty and thyroid function in the male Wistar rat. *Toxicol Sci*. 6:198-206. [Abstract](#)