BIOGRAPHICAL SKETCH

Provide the following information for the key personnel and other significant contributors in the order listed on Form Page 2. Follow this format for each person.

NAME	POSITION TITLE
Cooper, Keith Raymond, Ph.D.	Professor
Department of Biochemistry and Microbiology School of Biological and Environmental Sciences	

EDUCATION/TRAINING *(Begin with baccalaureate or other initial professional education, such as*

INSTITUTION AND LOCATION	DEGREE *(if applicable)*	YEAR(s)	FIELD OF STUDY
The College of William & Mary, Williamsburg, VA	B.S.	1973	Biology
Texas A&M University, Galveston, TX	M.S.	1976	Marine Biology
University of Rhode Island, Kingston, RI	Ph.D.	1979	Animal Pathology
Thomas Jefferson University, Philadelphia, PA	M.S.	1981	Industrial Toxicology

A. Positions and Honors.

Positions

1979 -1981	NIEHS Postdoctoral Fellow in Toxicology, Department of Pharmacology, Thomas Jefferson University, Philadelphia, PA
1981 – 1986	Assistant Professor, Rutgers University, Joint Graduate Program in Toxicology, Department of Biochemistry/Microbiology, Cook College, New Brunswick, NJ
1986 - 1994	Associate Professor, Department of Biochemistry/Microbiology
1994 – present	Professor I, Department of Biochemistry/Microbiology
1999 - 2001	Chairman, Department of Biochemistry and Microbiology, Cook College Rutgers University
2001 - 2002	Associate Dean of Research and NJAES, Cook College, Rutgers University
2003 - 2005	Acting Executive Dean of Agriculture and Natural Resources, Executive Director of New Jersey Agricultural Experiment Station, Dean of Cook College
2002 - 2005	Dean of Research & Graduate Programs/Cook College, Senior Associate Director/New Jersey Agricultural Experiment Station (NJAES)
2005 – 2006	Executive Vice Dean of Agriculture and Natural Resources and Executive Director of Rutgers' EcoComplex

B. Peer-reviewed Publications 2008-2003 (115 total since 1982):

Cooper K.R. and Wintermyer M.2008. A Critical Review: 2,3,7,8 –tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD) effects on gonad development in bivalve mollusks. Envir. Toxic. Chem. (submitted).

McCormick J.M., Haggblom M.M., **Cooper, K.R**., and White L.A. 2008. The Brominated flame Retardant, Tetrabromobisphenol A (TBBPA) and its metabolites, bisphenol A (BPA) and Tetrabromobisphenol A dimethyl ether (TBBPA DME), cause chemical specific lesions in the developing zebrafish (*Dania rerio*) embryo. *Aquatic Toxicology* (submitted).

Gloria B. Post, **Keith R. Cooper**, and Betty Jane Boros-Russo.2008. Occurrence and potential significance of perfluorooctanoic acid (PFOA) detected in New Jersey public drinking water systems (submitted). Envir. Health Persp.

Spitsbergen, J. M., Blazer, Vicki S., Bowser, Paul R., Cheng, Keith C., Cooper, **Keith R., Cooper**, Timothy K., Frasca Jr., Salvatore, Groman, David B., Harper, Claudia M., Law, Jerry M. (Mac), Marty, Gary D., Smolowitz, Roxanna M., St. Leger, Judy, Wolf, Douglas C., Wolf, Jeffrey C., (2008). Finfish and aquatic invertebrate pathology resources for now and the future, *Comparative Biochemistry and Physiology*, doi: 10.1016/j.cbpc.2008.10.002

Hillegass, J.M., Villano, C.M., **Cooper, K.R.** and White, L.A. 2008. Glucocorticoids Alter Craniofacial Development and Increase Expression and Activity of Matrix Metalloproteinases in Developing Zebrafish (Danio rerio). *Tox Sci* (accepted).

Hillegass, J.M., Villano, C.M., **Cooper, K.R**. and White, L.A. 2007. Matrix metalloproteinase-13 (MMP-13) is required for zebrafish (*Danio rerio*) development and is a target for glucocorticoids. *Tox. Sci*.100(1), 168-179.

Domico, L. Yang I, Buckley B., Zeevalk, G.D. and **Cooper, K.R**. 2008. Measurement of the Mn/Zn-ethylene-bis-dithiocarbamate Mancozeb in biological matrixes and demonstration of uptake by neuronal cells. *Tox. Sci*. (submitted).

Domico, L. **Cooper, K.R**., Bernard, l.P. and Zeevalk, G. 2007. Reactive oxygen species generation by the ethylene-bis-diothiocarbamate (EBDC) fungicide mancozeb and its contribution to neuronal toxicity in mesencephalic cells. *Neurotoxicology,* doi:10.1016/j.neuro.2007.04.008.

Wintermyer M.L. and **Cooper, K.R**. 2007. The development of an aquatic bivalve model: Evaluating the toxic effects on gametogenesis following 2,3,7,8-tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD) exposure in the eastern oyster (*Crassostria virginica*). *Aquatic Toxicology*. **81**, 10-26.

Domico, L., Zeevalk, G., Bernard, L., and **Cooper, K**., 2006. Acute neurotoxic effects of Mancozeb and Maneb in mesencephalic neuronal cultures are associated with mitochondrial dysfunction. *Journal of Neuroscience.* **27**, 816-825.

Patyna, P.J., Brown, R.A., Davi, R.A., Letinski, D.J., Thomas, P.E., **Cooper, K.R**. and Parkerton, T.F. 2005. Hazard evaluation of diisononyl and diiodecyl phthalate in a Japanes Medaka multigeneration assay. *Ecotoxicology and Environmental Safety.* **65** (1), 36-47.

Wintermyer, M., Skaidas, A., Roy, A., Yang, Y., Georgapoulos, P., Burger, J. and **Cooper, K**., 2005. The development of a physiological-based-pharmacokinetic (PBPK) model using the distribution of 2,3,7,8-tetrachlorodibenzo-p-dioxin in the tissues of the eastern oyster (*Crassostrea virginica*). *Marine Environmental Research* **60**, 133-152.

Gemma J, Mesia-Vela S., Wintermyer ML, **Cooper K.R**, Kauffman FC and Porte C. 2004. Esterification of vertebrate-like steroids in the eastern oyster (Crassostrea virginica). Marine envir. Research **58**, 481-484.

Hunter J.G., Burger, J and **Cooper K.R**. 2003. Use of an integrated food web model for Ecological Risk Assessment. *J. Environmental Science and Health.* **38,** 1201-1214.

Wintermyer M. and **Cooper K**. 2003. Dioxin/furan and polychlorinated biphenyl concentrations in eastern oysters (*Crassostrea virginica* Gmelin) tissues and the effects on egg fertilization and development. *J. Shellfish Res.* **22**, 737-746.

Burger J, Hunter J.G. and **Cooper K. R**. 2001 Using integrated food web and population based models for environmental monitoring and decision making. *Remediation* **12**(1), 87-102.

Current Grants:

NIEHS Training Grant Co-PI, 2007-2012. $325,000 per year

NIH Center Grant; Effects of Chromium on Neuronal Cell Survival. Co-PI, 2008-2009. $25,000

Pending Grants:

NJDEP, MTBE Effects on Embryonic Development. $54,000 PI 2009-2010.