

## Timothy S. Gross

*Research Physiologist*

USGS - Florida Caribbean Science Center

7920 NW 71<sup>st</sup> St.

Gainesville, FL 32653

Phone: 352-378-8181 ext. 323

Fax: 352-378-4956

E-mail: tim\_s\_gross@usgs.gov



---

### EDUCATION

- 1986 Ph.D., Reproductive Physiology; University of Maryland, Department of Animal Sciences, College Park, MD  
1978 M.S., Zoology/Physiology; Indiana University of Pennsylvania, Biology Department, Indiana, PA  
1975 B.S., Zoology; Indiana University of Pennsylvania, Biology Department, Indiana, PA

### AREAS OF SPECIALIZATION

Ecotoxicology, Environmental Physiology, and Wildlife/Comparative Endocrinology. Assessment of wildlife responses to environmental contaminants and changing environments.

### PROFESSIONAL EXPERIENCE

- 1997 - present **Research Physiologist**, U.S. Department of the Interior, U.S. Geological Survey/ Biological Resources Division, Florida Caribbean Science Center, Ecotoxicology Program  
1997 - present **Associate Scientist** (non-tenured associate professor), University of Florida, Department of Physiological Sciences, Center for Environmental and Human Toxicology, College of Veterinary Medicine  
1992 - 1997 **Associate Scientist/Scientific Director**, University of Florida, Reproductive Analysis Laboratory, Biotechnologies for The Ecological, Evolutionary and Conservation Sciences Program (BEECS), Interdisciplinary Center for Biotechnology Research (ICBR)  
1989 - 1992 **Reproductive Physiologist/Director of Research**, Omaha's Henry Doorly Zoo  
1986 - 1989 **Post-Doctoral Research Associate**, University of Florida, Department of Dairy Science

### OUTSIDE PROFESSIONAL ACTIVITIES

Society for the Study of Reproduction - Member (1981-present); Society of Environmental Toxicology and Chemistry - Member (1994-present); University of Florida, Department of Wildlife Ecology and Conservation, and College of Natural Resources and the Environment - Adjunct Faculty 1992-present); EPA's Endocrine Disruption Screening and Testing Committee (EDSTAC) - Scientific Advisory Board / Member May 1998-1999.

### CONTRACTS AND GRANTS

U.S. Fish and Wildlife Service, "Environmental contaminants and endocrine disruption in willdife in South Georgia," 1994-1995 (\$75K); U.S. Environmental Protection Agency, "Endocrine disruption and lake Apopka alligators," 1994 (\$60K); St. Johns River Water Management District, "Lake Apopka alligator population survey," 1994-96 (\$20K); U.S. Geological Survey "Reconnaissance study of endocrine disruption in fish in US waterways," 1994-1997(\$250K); NIEHS/EPA Superfund, "Endocrine disruptive effects of chlorinated hydrocarbons in wldlife," 1995-2000 (\$580K over 5 years); NBS/Best Program, "Reconnaissance study of endocrine disruption in fish in the Mississippi River basin,"

(\$210K) 1995-2000; U.S. Army Corps Engineers, "Effects of beach renourishment on sea turtle sex differentiation," (\$35K per year) 1995-2001; U.S. Environmental Protection Agency, "Immuno-toxicological effects of endocrine disrupting contaminants in alligators," 1998-2000 (\$480K); U.S. Environmental Protection Agency, "Environmental contaminants and reproductive dysfunction in bonnet head sharks," 1998-2000 (\$62K); Georgia Pacific Corporation, "Endocrine disrupting effects of papermill mill effluents in largemouth bass," (\$150K/year) 1998- 2004; Novartis/Ecorisk, " Effects of atrazine treatment and sex differentiation in alligators and freshwater turtles," (\$105K: 1998-99); Novartis/Ecorisk, "Effects of atrazine in largemouth bass," (\$74,720: 1999-2000); NIEHS/EPA Superfund, "Developmental toxicity and chlorinated hydrocarbon exposures in wildlife," 2000-2005 (\$1,860,000 over 5 years); USGS-Place-Based Program, "Effects and exposure assessments for wildlife in the South Florida ecosystems", 2000-2005 (\$100K per year).

### **ACADEMIC INVOLVEMENT**

Committee chair: three PhD and eight MS student degree committees; Committee member: eight PhD and fifteen MS student degree committees at the University of Florida since 1992. Committee member: three PhD students as adjunct faculty at Clemson University, University of Georgia, and Texas Tech University since 1996. Guest lecturer: University of Florida since 1992.

### **PUBLICATIONS** - Selected Journal Articles: (over 70 refereed publications)

**Gross, T.S.**, L.J. Guillette, H.F. Percival, G.R. Masson, J.M. Matter, A.R. Woodward. 1994. Contaminant induced reproductive anomalies in Florida alligators. *Comp. Path Bull.* 4:2-8.

Guillette, L.J., **T.S. Gross**, G.R. Masson, J.M. Matter, H.F. Percival and A.R. Woodward. 1994. Developmental abnormalities of the gonad of juvenile alligators from contaminated and control lakes in Florida. *Environmental Health Perspectives*, 102:680-688.

Facemire, C.F., **T.S. Gross** and L.J. Guillette. 1995. Reproductive impairment in the Florida panther. *Environmental Health Perspectives*. 103:79-86.

Bevans, H.E., S.L. Goodbread, J. Miesner, S.A. Watkins, **T.S. Gross**, N.D. Denslow and T. Schoeb. 1996. The occurrence of semivolatile organic compounds and assessments of carp endocrinology and histology in Las Vegas Wash and Las Vegas and Callville Bays of Lake Mead, Nevada. *Water Resources Investigative Report 96-4266*, pp 1-12.

Goodbread, S.L., R.J. Gilliom, **T.S. Gross**, N.D. Denslow and W. Bryant. 1997. Reconnaissance of 17-beta-estradiol, 11-keto-testosterone and vitellogenin in common carp of United States Streams: potential contaminant effects. *Water Resources Open File Report*.

**Gross, T.S.**, R. Roberts, J. Montes de Oca, and H.F. Percival. *In press*. Sex reversal in freshwater turtles as a response to endocrine-disrupting environmental contaminants. *Env. Tox. & Chem.*

### **Selected Abstracts and Papers Presented:** (over 150 total)

Sepúlveda, M. S., Gallagher, E., Shoeb, T., Denslow, N.D., Holm, S., Gross, D.A., Ruessler, S. and **Gross, T. S.** Effects of Paper Mill Effluents on Reproduction and Health of Largemouth Bass (*Micropterus salmoides*) in Florida. 19th Annual meeting SETAC, Charlotte, NC, November 15-19, 1998.

**Gross, T.S.**, Wieser, C., Kernaghan, N., Gross, D.A., Sepúlveda, M. S., Johnson, W.E., Higman, J., and Holm, S. Endocrine Disruption in Largemouth Bass and Environmental Contaminants: A Reconnaissance Study of the Lower St. Johns River Basin. 19th Annual meeting SETAC, Charlotte, NC, November 15-19, 1998.