

# Robert A. Angus

## Education:

- B.S. (Zoology) University of Wisconsin, Madison, Wisconsin, 1968
- Ph.D. (Zoology) University of Connecticut, Storrs, Connecticut, 1977

## Academic Positions:

- Postdoctoral Research Associate, University of Connecticut, 1998
- Assistant Professor of Biology, University of Alabama at Birmingham, 1978-1984
- Associate Professor of Biology, University of Alabama at Birmingham, 1985-1998
- Professor of Biology, University of Alabama at Birmingham, 1998-present

## Selected Publications (Peer-Reviewed):

Viamonte, L.D., Marion, K.R., Hofer, S.C., **Angus, R.A.** 2007. Five Mile Creek bioassessment study: baseline evaluation of stream health using fish communities. *Journal of the Alabama Academy of Science* 78:231-247.

McClintock, J.B., **Angus, R.A.**, McClintock, F.E. 2007. Abundance, diversity and fidelity of macroinvertebrates sheltering beneath rocks during tidal emersion in an intertidal cobble field: Does the Intermediate Disturbance Hypothesis hold for less exposed shores with smaller rocks? *Journal of Experimental Marine Biology and Ecology* 352:351-360.

Gavand, M.R., McClintock, J.B., Amsler, C.D., Peters, R.W., **Angus, R.A.** 2007. Effects of sonication and advanced chemical oxidants on the unicellular green alga *Dunaliella tertiolecta* and cysts, larvae and adults of the brine shrimp *Artemia salina*: a prospective treatment to eradicate invasive organisms from ballast water. *Marine Pollution Bulletin* 54(11):1777-1788.

Stanko, J.P., **Angus, R.A.** 2007. In vivo assessment of the capacity of androstenedione to masculinize female mosquitofish (*Gambusia affinis*) exposed through dietary and static renewal methods. *Environmental Toxicology and Chemistry* 26(5):920-926.

Estes, E.C.J., Katholi, C.R., **Angus, R.A.** 2006. Elevated fluctuating asymmetry in eastern mosquitofish (*Gambusia holbrooki*) from a river receiving paper mill effluent. *Environmental Toxicology and Chemistry* 25(4):1026-1033.

**Angus, R.A.**, Stanko, J.P., Jenkins, R.L., Watson, R.D. 2005. Effects of 17 $\alpha$ -ethynylestradiol on sexual development of male western mosquitofish (*Gambusia affinis*). *Comparative Biochemistry and Physiology, Part C* 140:330-339.

Stanko, J.P., **Angus, R.A.** 2005. Paper manufacture and its impact on the aquatic environment. *Reviews of Environmental Contamination and Toxicology* 185:67-92.

Jenkins, R.L., Wilson, E.M., **Angus, R.A.**, Howell, W.M., Kirk, M., Moore, R., Nance, M., Brown, A. 2004. Production of androgens by microbial transformation of progesterone in vitro: a model for androgen production in rivers receiving paper mill effluent. *Environmental Health Perspectives* 112: 1508-1511.

Blackwell, E.A., **Angus, R.A.**, Cline, G.R., Marion, K.R. 2003. Natural growth rates of *Ambystoma maculatum* in Alabama. *Journal of Herpetology* 37: 608-612.

Jenkins, R.L., Wilson, E.M., **Angus, R.A.**, Howell, W.M., Kirk, M. 2003. Androstenedione and progesterone in the sediment of a river receiving paper mill effluent. *Toxicological Sciences* 73:53-59.

**Angus, R.A.**, Weaver, S.A., Grizzle, J., Watson, R.D. 2002. Reproductive characteristics of male mosquitofish (*Gambusia affinis*) inhabiting a small southeastern U.S. river receiving treated domestic sewage effluent. *Environmental Toxicology and Chemistry* 21:1404-1409.

**Angus R.A.**, McNatt H., Howell W.M. and Peoples S.D. 2001. Gonopodium development in normal and 11-ketotestosterone-treated mosquitofish (*Gambusia affinis*): a quantitative study using computer image analysis. *General and Comparative Endocrinology* 123:222-234.

Jenkins, R., **Angus, R.A.**, McNatt, H., Howell, W.M., Kemppainen, J.A., Kirk, M., and Wilson, E.M. 2001. Identification of androstenedione in a river containing paper mill effluent. *Environmental Toxicology and Chemistry* 20:1325-1331.

Tolar, J.F., Mehollin, A.R., Watson, R.D., and **Angus, R.A.** 2001. Mosquitofish (*Gambusia affinis*) vitellogenin: identification, purification, and immunoassay. *Comparative Biochemistry and Physiology Part C* 128:237-245.

Onorato, D., **Angus, R.A.**, and Marion, K.R.. 2000. Historical changes in the ichthyofaunal assemblages of the upper Cahaba River in Alabama associated with extensive urban development in the watershed. *Journal of Freshwater Ecology* 15:47-63.

**Angus, R.A.**, B. Dass, and P.D. Blanchard. 1999. Quantification of the expression of a temperature-sensitive pigment allele in sailfin mollies (*Poecilia latipinna*) by image analysis. *Pigment Cell Research* 12(2):126-130.

Onorato, D., Marion, K.R. and **Angus, R.A.** 1998. Longitudinal variations in the ichthyofaunal assemblages of the upper Cahaba River: possible effects of urbanization in a watershed. *Journal of Freshwater Ecology* 13:139-154.

Onorato, D., **Angus, R.A.**, and Marion, K.R. 1998. Comparison of a small-mesh seine and a backpack electrofisher to evaluate fish populations in a north-central Alabama stream. *North American Journal of Fisheries Management* 18:361-373.