

6th International Symposium on Fish Endocrinology is honored to recognize the Life-time Achievement of

Professor Dr. John Geoffrey Eales



Major Area of Scientific Contribution

Dr. Geoff Eales has been a dominant force in the field of thyroid endocrinology in fish for more than 30 years. He trained under Professor Bill Hoar in the University of British Columbia and spent the majority of his career at the University of Manitoba, retiring in 2005. The rainbow trout, is his favourite animal model although he has also worked on other fish species including agnathans and cartilaginous fishes. Research areas for which he is well known includes:

- 1) kinetics analysis of hormone secretion and clearance,
- 2) elucidation of conjugation and deiodinase pathways using biochemical and molecular biological approaches,
- 3) characterization of thyroid hormone nuclear receptors,
- 4) effects of environmental influences and anthropogenic chemicals on the thyroid hormone system,
- 5) steroid and thyroid hormones interactions in growth, metabolism, sexual maturation and reproduction, and
- 6) participation of thyroid hormone in sensory mechanisms such as olfaction and vision.

Collectively, Geoff's work has done much to elucidate the role of thyroid hormones in fish physiology and has set the standard for investigations in comparative endocrinology.

Dr. Eales has mentored 22 MSc, 9 PhD students and 7 post-doctoral fellows and research associates. At least 11 of his former graduate students are active in different areas of fish biology and endocrinology research in government laboratories and academic institutions. Among them are a current Dean of Science, an Associate Dean of Science, and two former Chairs and one Associate Chair of a department.

Highlights of Recognition by Peers & Service to the Scientific Community

Editor-in-chief of the Canadian Journal of Zoology (1988-1994)

Member of the Board of Editors of General and Comparative Endocrinology (1975-2001)

Fry Medal (Canadian Society of Zoologists; awarded 1998)

Fellow of the Royal Society of Canada (elected 1988)

Examples of Major Significant Publications

Reviews:

Eales, J.G. 1997. Iodine metabolism and thyroid-related functions in organisms lacking thyroid follicles: Are thyroid hormones also vitamins? *Proc. Soc. Exp. Biol. Med.* 214:302-317.

Eales, J.G. 2006. Modes of action and physiologic effects of thyroid hormones in fish. *In Fish Endocrinology Edited by M. Reinecke, G. Zaccane and B.G. Kapoor.* Science Publishers, Enfield, NH

Primary Research Articles:

Higgs, D.A., and Eales, J.G. 1977. Influence of food deprivation on radioiodothyronine and radioiodide kinetics in yearling brook trout, *Salvelinus fontinalis* (Mitchill) with a consideration of the extent of L-thyroxine conversion to 3,5,3'-tri-iodo-L-thyronine. *Gen. Comp. Endocrinol.* 32:29-40.

Bres, O., Plohman, J.C., and Eales, J.G. 2006. A cDNA for a putative type II deiodinase in the trout (*Oncorhynchus mykiss*): Influence of holding conditions and thyroid hormone treatment on its hepatic expression. *Gen. Comp. Endocrinol.* 145:92-100.