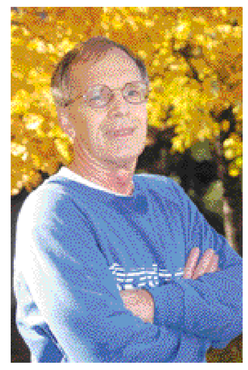
The 7th International Symposium on Fish Endocrinology is honored to recognize the life-time achievement of

John H. Youson



John H. Youson
Professor Emeritus

Professor John Youson's career has spanned over 40 years. During this time he has made many significant contributions to the field of fish endocrinology using morphology, physiology, and molecular biology. Beyond his prolific achievements and service to the field, which embraced collaborations around the world, are his enthusiasm for discovery and his commitment to the next generation of scientists. John's intellect, work ethic, and principles, which are laced with a measure of understated humor, are inspiring, especially to those he mentored and with whom he collaborated. Below are highlights of his career and contributions to the field of fish endocrinology.

As Ph.D. student collecting lamprey

As university administrator

John's time line

1969 — Ph.D., University of Western Ontario

Youson, J.H., and I.C. Potter. 1979. A description of the stages of metamorphosis in the anadromous sea lamprey, *Petromyzon marinus* L. *Can. J. Zool.* 57: 1808-1817.

1973 — First to characterize "interrenal" tissue in lamprey. Then went on to describe the phylogeny and products of this tissue and the corpuscles of Stannius in most "primitive" bony fishes.

Lintlop, S.P., and J.H. Youson. 1983. Concentration of tri-iodothyronine in the sera of the sea lamprey, *Petromyzon marinus*, and the brook lamprey, *Lampetra lamottenii* at various phases of their life cycle. *Gen. Comp. Endocrinol.* 49: 187-194

1978 — First to localize thyroglobulin in lamprey

1979 — Definitive description of lamprey metamorphosis

John's research areas

Evolution of vertebrate organ systems

e.g., kidney, adrenal cortex, thyroid gland, pancreatic islets

Youson, J.H. 1988. First metamorphosis. In *Fish Physiology*, Vol. IIB, edited by W.S. Hoar and D.J. Randall, Academic Press, New York, pp 135-196.

1983 — Characterized role of thyroid hormones in lamprey metamorphosis

1988 — Definitive description of 'first" metamorphosis in fishes

Structure, distribution, & function of regulatory peptides

e.g., insulin, glucagon/GLP, somatostatins, PP-family peptides

SS-34 A A A V A G S P Q Q L L P L G Q R E R K A G C K N F F W K T F S S C
SS-37 A L R A A A V A G S P Q Q L L P L G Q R E R K A G C K N F F W K T F S S C

1992 — Corresponding member, Accademia Perloritan del Pericolanti, Messina, Italy

1993 — First to induce metamorphosis in captive sea lamprey

1997 — Fellow, Japan Society for the Promotion of Science

Developmental processes

e.g., lamprey metamorphosis, with emphasis on control by genetic, physiologic, and environmental factors

Youson, J. H., .and A. A. Al-Mahrouki. 1999. Ontogenetic and phylogenetic development of the endocrine pancreas (islet organ) in fishes. *Gen. Comp. Endocrinol.* 116: 303-335.

1999 — Definitive description of the development and evolution of the fish endocrine pancreas

2003 — D.R. Campbell Award, University of Toronto
J.C.B. Grant Award, Canadian Association of Anatomy, Neurobiology, and Cell Biology

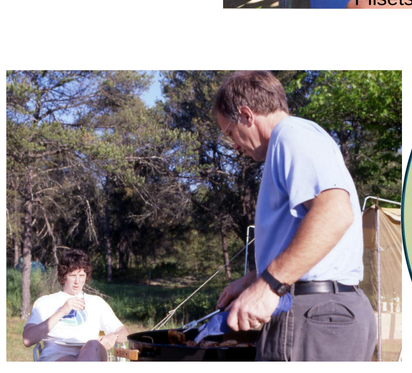
2005 — Formally "retired" from the University of Toronto
Fry Medal, Canadian Society of Zoologists

Youson, J. H. 2007. Peripheral endocrine glands. I: The gastroenteropancreatic endocrine system and the thyroid gland. In *Fish Physiology, Vol. 26, Primitive Fishes*, D. McKenzie, C. Brauner, A. Farrell, eds. Elsevier, San Diego, pp. 381-455.
Youson, J. H. 2007 Peripheral endocrine glands. II: The adrenal glands and the corpuscles of Stannius. In *Fish Physiology, Vol. 27, Primitive Fishes*, D. McKenzie, C. Brauner, A. Farrell, eds. Elsevier, San Diego, pp. 457-513.

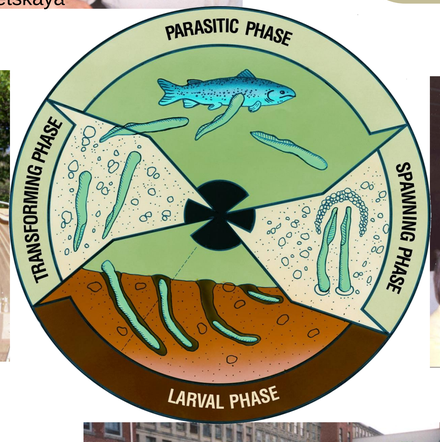
2007 — Definitive description of "peripheral endocrine glands" in "primitive" fish

2011 — Collaborates on biomedical applications of lamprey metamorphosis (e.g., liver disease)

Present — Continues to analyze and write about the evolution of endocrine systems



The grill master "sportsman" and the first "Uncle John Burgers"



Friends and colleagues

Other highlights and achievements:

- Published 254 referred journal articles
- 25 symposium proceedings, reviews, or book chapters
- Editor, General & Comparative Endocrinology (2001-present)
- Editorial board, Comparative Hepatology (2002-present)
- Council member, International Federation of Comparative Endocrine Societies (2001-2005)
- Associate Principal-Research and Graduate Studies, University of Toronto, Scarborough Campus (2000-2003)
- Vice President (interim), University of Toronto, and Principal, Scarborough Campus (2003)
- Mentored 33 graduate students and 7 postdocs