

CURRICULUM VITAE

CHRISTOPHER J. KENNEDY

Citizenship: Canada

Professor

Department of Biological Sciences, Simon Fraser University, Burnaby, B.C., Canada, V5A 1S6

DATE AND PLACE OF BIRTH

February 6, 1960; Las Vegas, Nevada, USA

EDUCATION

B.Sc., Biological Sciences, Simon Fraser University, 1982

Ph.D., Environmental Toxicology, Simon Fraser University, 1990

PROFESSIONAL POSITIONS

September 2007 – Present

Professor

June 2007 – Present

Director, Animal Care Services

June, 1998 – August 2007

Associate Professor

January, 1991- May, 1998

Assistant Professor

April, 1989 - December, 1990

Postdoctoral Fellow

Rosenstiel School of Marine and Atmospheric Science,
Division of Marine Biology and Fisheries, University of
Miami

October, 1987 - December, 1987

Research Associate

Rosenstiel School of Marine and Atmospheric Science,
Division of Marine Biology and Fisheries, University of
Miami

PROFESSIONAL SOCIETIES AND ASSOCIATIONS

Physiology Section-American Fisheries Society

Canadian Aquatic Resources Section-American Fisheries Society

Society of Environmental Toxicology and Chemistry

Canadian Society of Zoologists

HONORS AND FELLOWSHIPS

National Institutes of Health, Individual National Research Service Award, 1990
Legion of Honor, Physiology Section, American Fisheries Society, 2002
President, Physiology Section, American Fisheries Society, 2002-2004

EDITORIAL SERVICE

Associate Editor Archives of Environmental Contamination and Toxicology (2005-present)
Associate Editor Comparative Biochemistry and Physiology Part C Pharmacology and Toxicology (2004-present)
Associate Editor Transactions of the American Fisheries Society (1999-2003)
Co-editor Proceedings of International Congress on the Biology of Fish (1998, 2000, 2002, 2004)
Reviewer for Individual Research Grants and Centers of Excellence Grants for NSERC, NSF UK, NIH
Reviews manuscripts for: Aquatic Toxicology, Environmental Toxicology and Chemistry, Physiological Zoology, Journal of the World Aquaculture Society, Comparative Biochemistry and Physiology, Fish Biology, Archives of Environmental Contamination and Toxicology, Ecotoxicology and Environmental Safety, Journal of Aquatic Animal Health, Environmental Science and Technology.

RESEARCH INTERESTS

Aquatic Toxicology, Ecotoxicology and Fish Physiology; Physiology of xenobiotic defense mechanisms in teleosts; Biology and bioenergetics of contaminant exposure; Environmental and life history modulators of xenobiotic toxicity; Development of sublethal and *in vitro* tests and water quality guidelines.

RECORD OF RESEARCH ACTIVITIES

Thesis

Toxicokinetics of Chlorinated Phenols and Polycyclic Aromatic Hydrocarbons in Rainbow Trout, *Oncorhynchus mykiss*. (1990)

Refereed Journal Publications

83. Osachoff, H. M. Mohammadali, R. Skirrow, E. Hall, L. Brown, G. van Aggelen, C. Kennedy and C. Helbing. (2013). Evaluating the treatment of a synthetic wastewater containing a pharmaceutical cocktail: compound removal efficiency and effects on juvenile rainbow trout. Environ. Sci. Technol. (in press).
82. Goulding, A. L. Shelley, P. Ross and C. Kennedy. Reduction in swimming performance in juvenile rainbow trout (*Oncorhynchus mykiss*) following sublethal exposure to pyrethroid insecticides. Comp. Biochem. Physiol. Part C. 157: 280-286.
81. Osachoff, H., K. Osachoff, A. Wickramaratne, E. Gunawardane, F. Venturini and C. Kennedy. (2013). Altered burst swimming in Rainbow trout (*Oncorhynchus mykiss*) exposed to natural and synthetic estrogens. J. Fish Biol. (in press).
80. Kennedy, C., K. Tierney and M. Mittelstadt. Inhibition of P-glycoprotein in the blood-brain barrier alters avermectin neurotoxicity and swimming performance in rainbow trout. Aquat. Toxicol. (in press).

79. Osachoff, H. L. Shelley, V. Furtula, G. van Aggelen and C. Kennedy. (2013). Induction and recovery of estrogenic effects following short-term 17 β -estradiol exposure in juvenile rainbow trout (*Oncorhynchus mykiss*). Arch. Environ. Contam. Toxicol. 65: 276-285.
78. Ross, P., C. Kennedy, L. Shelly, K. Tierney, D. Patterson, and MacDonald. (2013). The trouble with salmon: relating pollutant exposure to toxic effects in species with transformational life histories and lengthy migrations. Can. J. Fish. Aquat. Sci. 70: 1252-1264.
77. Osachoff, H., G. van Aggelen, T.P. Mommsen, and C.J. Kennedy. (2013). Dose responses and temporal trends in hepatic gene expression alterations in Chinook salmon (*Oncorhynchus tshawytscha*) exposed to sewage. Comp. Biochem. Physiol. Part D. 8: 32-44.
76. Kennedy, C., P. Stecko, D. Petkovich, and B. Truelson. (2012). Modulation of copper toxicity on olfactory mediated behaviours by dissolved organic carbon. Environ. Toxicol. Chem. 31: 2281-2288.
75. Shelley, L., P. Ross, K. Miller-Sanders, K. Kaukinen and C.J. Kennedy. (2012). Toxicity of atrazine and nonylphenol in juvenile rainbow trout (*Oncorhynchus mykiss*): Effects on general health, disease susceptibility and gene expression. Aquat. Toxicol. (in press).
74. Shelley, L., H. Osachoff, G. Van Aggelen, P.S. Ross, and C. Kennedy. (2012). Alteration of functional and gene expression endpoints in leukocytes from 17 β -estradiol-exposed rainbow trout (*Oncorhynchus mykiss*). Fish Shellfish. Immunol. (in press).
73. Marlatt, V.L., B.P. Lo, A. Ornostay, N.S. Hogan, C.J. Kennedy, J.R. Elphick, C.J. Martyniuk. (2012). The effects of the ureic-based herbicide linuron on reproductive endpoints in the fathead minnow (*Pimephales promelas*). Comp. Biochem. Physiol. Part C. 157: 24-32.
72. Kennedy, C.J. and P.S. Ross. (2012). Stress syndromes: heightened bioenergetic costs associated with contaminant exposure at warm temperatures in teleosts. Integr. Environ. Assess. Manag. (in press).
71. Lee, Y., M. Delafoulhouze, V. Otton, M. Moore, C. Kennedy and F. Gobas. (2013). Thin-film sorben-phase dosing to measure *in vitro* biotransformation rates of hydrophobic chemical in rainbow trout (*Oncorhynchus mykiss*) live S9 homogenates. Environ. Toxicol. Chem. (in press).
70. Tierney, K.B., Jessica L. Williams, Melissa Gledhill, Mark A. Sekela, and Christopher J. Kennedy. (2012). Environmental concentrations of agricultural-use pesticide mixtures evoke primary and secondary stress responses in rainbow trout. Env. Toxicol. Chem. 30: 2602-2607.
69. Kennedy, C. and C. Picard. (2012). Alterations in sockeye salmon (*Oncorhynchus nerka*) stress physiology, bioenergetics and seawater survival following rearing in low pH environments. Fish Physiol. Biochem. 38: 1131-1143.
68. Furtula, V., Liu, J., Chambers, P., Osachoff, H., Kennedy, C., and J. Harkness. (2012). Sterols as markers for sewage treatment plant efficiency and indicators of fecal contamination source. Water Air Soil Poll. 223: 1017-1031.
67. Waliwitiya, R., C. Kennedy, R. Nicholson, and C. Lowenberger. (2012). The synergistic effects of insecticidal phytochemicals and piperonyl putoxide on biotransformational enzyme activities in *Aedes aegypti* (Diptera: Culicidae). Accepted. J. Medical Entomology. (in press)
66. Shelley, L., P.S. Ross and C.J. Kennedy. (2011). The effects of an in vitro exposure to 17 β -estradiol and nonylphenol on rainbow trout (*Oncorhynchus mykiss*) peripheral blood leukocytes. Submitted to Comp Biochem Physiol Part C Vol. 155: 440-446.
65. Blanc, A., Rice, S. and C. Kennedy. (2010). Anthropogenically-sourced low concentration PAH: in situ bioavailability to juvenile Pacific Salmon. Ecotoxicology and Environmental Safety. 73: 849-857.
64. Tierney, K., Baldwin, D., Hara, T., Ross, P., Scholz, N., and C. Kennedy. (2010). Review: Olfactory toxicity in fishes. Aquat. Toxicol. 96: 2-26.

63. Gourley, M. and C. Kennedy. (2009). Energy allocations to xenobiotic transport and biotransformation reactions in rainbow trout (*Oncorhynchus mykiss*) during energy intake restriction. *Comp. Biochem. Physiol. Part C Toxicol. Pharmacol.* 150: 270-278.
62. Tierney, K., D. Patterson and C. Kennedy. (2009). The influence of maternal condition on offspring performance in sockeye salmon. *J. Fish Biol.* 75: 1244-1257.
61. Shelley, L., S. Balfry, P. Ross and C. Kennedy. (2009). Immunological effects of sub-chronic exposure to selected current-use pesticides in rainbow trout (*Oncorhynchus mykiss*). *Aquat. Toxicol.* 92: 95-103.
60. Waliwitiya, R., Kennedy, C., and Lowenberger, C. (2009). Larvicidal and antiovipositional activity of monoterpenoids and rosemary oil to the yellow fever mosquito *Aedes aegypti* (Diptera: Culicidae) *Pest. Manag. Sci.* 65: 241-248.
59. Hildebrand, J.L., O.S. Bains, D.S. H. Lee, and C.J. Kennedy. (2009). Functional and energetic characterization of P-gp-mediated doxorubicin transport in rainbow trout (*Oncorhynchus mykiss*) hepatocytes. (*Comp. Biochem. Physiol. Part C. Toxicol. Pharmacol.* 149: 65-72.
58. Lizardo-Daudt, H., O.S. Bains, C.R. Singh and C.J. Kennedy. (2008). Cadmium chloride-induced disruption of testicular steroidogenesis in rainbow trout. *Arch. Environ. Contam. Toxicol.* 55: 103-110.
57. Kennedy, C.J. and A.P. Farrell. (2008). Immunological alterations in juvenile Pacific herring, *Clupea pallasii*, exposed to aqueous hydrocarbons derived from crude oil. *Environ. Poll.* 153: 638-648.
56. Rudolph, B., I. Andreller and C.Kennedy. (2008). Reproductive success, early life stage development and survival of westslope cutthroat trout (*Oncorhynchus clarki lewisi*) exposed to elevated selenium in an area of active coal mining. *Environ. Science and Technol.* 42: 3109-3114.
55. Lizardo-Daudt, H. and C.J. Kennedy. (2008). Effects of cadmium chloride on the development of rainbow trout *Oncorhynchus mykiss* (Walbaum) early life-stages. *J. Fish Biol.* 73: 702-718.
54. Tierney, K.B., J.L. Sampson, P.S. Ross, M.A. Sekela and C.J. Kennedy. (2008). Salmon olfaction is impaired by an environmentally realistic pesticide mixture. *Enviro. Sci. Techno.* 42: 4996-5001.
53. Kennedy, C.J. and K.B. Tierney. (2008). Energy intake affects the biotransformation rate, scope for induction, and metabolite profile of benzo[a]pyrene in rainbow trout. *Aquat. Toxicol.* 90: 172-181.
52. Lizardo-Daudt, H., O.S. Bains, C.R. Singh and C.J. Kennedy. (2007). Biosynthetic capacity of rainbow trout (*Oncorhynchus mykiss*) interrenal tissue after cadmium exposure. *Arch. Environ. Contam. Toxicol.* 52:90-96.
51. Tierney, K.B., M. Casselman, S. Takeda and C.J. Kennedy. (2007). The relationship between cholinesteras inhibition and two types of swimming performance in chlorpyrifos-exposed salmon (*Oncorhynchus kisutch*). *Envir. Toxicol. Chem.* 26(5): 998-1004.
50. Loveridge, R., C. Bishop, J. Elliott and C. Kennedy. (2007). Polychlorinated biphenyls and organochlorine pesticides bioaccumulated in Green Frogs, *Rana clamitans*, from the lower Fraser Valley, British Columbia, Canada. *Bull. Environ. Contam. Toxicol.* 79: 315-318.
49. Tierney K.B., Singh, C., Ross P.S. and C.J. Kennedy. (2007). Relating olfactory neurotoxicity to altered olfactory-mediated behaviors in rainbow trout exposed to three currently-used pesticides. *Aquat. Toxicol.* 81: 55-67.
48. Tierney, K.B., Ross, P.S. and C.J. Kennedy. (2007). Linuron and carbaryl differentially impair baseline amino acid and bile salt olfactory responses in three salmonids. *Toxicology* 231: 175-187.

47. Kennedy, C.J. and A.P. Farrell. (2006). Effects of exposure to the water-soluble fraction of crude oil on the swimming performance and the metabolic and ionic recovery post-exercise in Pacific herring. *Environ. Toxicol. Chem.* 25: 2715-2724.
46. Tierney K.B., Ross P.S., Jarrard H.E., Delaney K.R. and Kennedy C.J. (2006). Changes in juvenile coho salmon olfaction during and after exposure to some current-use pesticides. *Environ. Toxicol. Chem.* 25: 2809-2817.
45. Tierney, K.B., A.L. Taylor, P.S. Ross, P.S. and C.J. Kennedy. (2006). The alarm reaction of coho salmon parr is impaired by the carbamate fungicide IPBC. *Aquat. Toxicol.* 79: 149-157.
44. Kennedy, C.J. and A.P. Farrell. (2006). Effects of exposure to the water-soluble fraction of crude oil on the swimming performance and the metabolic and ionic recovery post-exercise in Pacific herring. *Environ. Toxicol. Chem.* 25: 2715-2724.
43. Bains, O.S. and C.J. Kennedy. (2005), Alterations in respiration rates of isolated rainbow trout hepatocytes exposed to the P-glycoprotein substrate Rhodamine123. *Toxicology.* 214: 87-98.
42. Kennedy, C.J. and A.P. Farrell. (2005). Ion homeostasis and interrenal stress responses in juvenile Pacific herring, *Clupea pallasii*, exposed to the water-soluble fraction of crude oil. *J. Exp. Mar. Biol. Ecol.* 323: 43-56.
41. Farrell, A.P., C.J. Kennedy, and A. Kolok. (2004). Effects of wastewater from an oil sands refining operation on survival, hematology, gill histology and swimming of fathead minnows. *Can. J. Zool.* 82: 1519-1527.
40. Jarrard, H.E., K.R. Delaney, and C.J. Kennedy. (2004). Impacts of carbamate pesticides on olfactory neurophysiology and cholinesterase activity in Coho salmon (*Oncorhynchus kisutch*). *Aquat. Toxicol.* 69: 133-148.
39. Tierney, K.B., E. Stockner and C.J. Kennedy. (2004). Changes in immunological parameters and disease resistance in juvenile coho salmon (*Oncorhynchus kisutch*) in response to dehydroabietic acid exposure under varying thermal conditions. *Water Qual. Res. J. Can.* 39: 176-184.
38. Kennedy, C.J., K. Tierney and D. Higgs. (2004). Influence of diet and ration level on benzo[a]pyrene metabolism and excretion in rainbow trout, *Oncorhynchus mykiss*. *Arch. Env. Contam. Toxicol.* 47: 379-386.
37. Tierney, K.B., A.P. Farrell and C.J. Kennedy. (2004). The differential leucocyte landscape of four teleosts: juvenile *Oncorhynchus kisutch*, *Clupes pallasii*, *Culaea inconstans*, and *Pimephales promelas*. *J. Fish Biol.* 65: 906-919.
36. Bains, O.S. and C.J. Kennedy. (2004). Energetic costs of pyrene metabolism in isolated hepatocytes of the rainbow trout, *Oncorhynchus mykiss*. *Aquat. Toxicol.* 67:217-226.
35. Morrow, M., D. Higgs and C.J. Kennedy. (2004). The effects of diet composition and ration on biotransformation enzymes and stress parameters in rainbow trout, *Oncorhynchus mykiss*. *Comp. Biochem. Physiol. C.* 137: 143-154.
34. Maltby, J.D. Higgs, L. Albright and C. Kennedy. (2003). Effect of route of administration and carrier on bioavailability and kinetics of astaxanthin in Atlantic Salmon, *Salmo salar* L. *Aquaculture Research* 34: 829-838.
33. Basu, N., G. Iwama and C. Kennedy. (2003). The effects of stress on the association between hsp70 and the glucocorticoid receptor in rainbow trout. *Comp. Biochem. Physiol. A.* 134: 655-663.
32. Kennedy, C. (2003). Uptake and accumulation of mercury from dental amalgam in the common goldfish, *Carassius auratus*. *Environ. Poll.* 121: 321-326.
31. Basu, N., C. Kennedy, P. Hodson and G. Iwama. (2002). Altered stress responses in rainbow trout following a dietary administration of cortisol and B-naphthoflavone. *Fish Physiol. Biochem.* 25:131-140.

30. Farrell, A.P., C.J. Kennedy, W. Cheng and M.A. Lemke. (2001). Acute toxicity of monochloramine to juvenile chinook salmon (*Onchorynchus tshawytscha* Walbaum) and *Ceriodaphnia dubia*. Water Qual. Res. J. Canada. 1:133-149.
29. Ganassin, R.C., S.M. Sanders, C.J. Kennedy, E.M. Joyce and N.C. Bols. (2000). Development and characterization of a cell line from Pacific herring, *Clupea harengus pallasii*, sensitive to both naphthalene cytotoxicity and infection by viral hemorrhagic septicemia virus. Cell Biol. Toxicol. 15:299-309.
28. Kennedy, C.J., R. Loveridge and L. McDonald. (2000). The Effects of Selenium Contamination in Adult Cutthroat Trout (*Oncorhynchus clarki lewisi*) Eggs, Larvae and Fry. Arch. Environ. Toxicol. Chem. 39:46-52.
27. Seubert, J. and C.J. Kennedy. (2000). The toxicokinetics of benzo[a]pyrene in rainbow trout under varying salinity regimes. Arch. Environ. Toxicol. Chem. 38:342-349.
26. Bendell-Young, L., A.P. Farrell, C.J. Kennedy, A. Kermode, M. Moore, and A. Plant. (2000). Ecological viability of wetlands receiving oil sands effluent. Can. Tech. Rep. Fish. Aquat. Sci. 2144: 23.
25. Bendell-Young, L., K. Bennett, A. Crowe, C.J. Kennedy, A. Kermode, M. Moore, A., A. Plant, M. Moore and A. Wood. (2000). Assessing the ecological characteristics of wetlands receiving an industrial effluent Ecol. Applications 10: 310-322.
24. Johnston, B., G. Alexander and C.J. Kennedy. (1999) Thermal modulation of the toxicokinetics of benzo[a]pyrene in isolated hepatocytes of sablefish (*Anoplopoma fimbria*), black rockfish (*Sebastes melanops*), and chub mackerel, (*Scomber japonicus*). Comp. Biochem. Physiol. C.124: 157-164.
23. Farrell, A.P., E. Stockner, and C.J. Kennedy. (1998). A study of the lethal and sublethal toxicity of Polyphase P-100, an antisepstain fungicide containing 3-iodo-2-propynyl butyl carbamate (IPBC), on fish and aquatic invertebrates. Arch. Env. Contam. Toxicol. 35:472-478.
22. Wilson, J.M., M.M. Vijayan, C. Kennedy, G. Iwama and T.W. Moon. (1998). B-naphthoflavone abolishes the interrenal sensitivity to ACTH stimulation in rainbow trout. J. Endocrinol. 157:63-70.
21. Johnston, B., J. Seubert and C.J. Kennedy. (1998). Biochemical effects of didecyldimethylammonium chloride (DDAC) exposure and osmoregulatory stress on juvenile coho salmon, *Oncorhynchus kisutch*. Arch. Environ. Toxicol. Chem. 34:275-279.
20. Farrell, A.P., C.J. Kennedy, A. Wood, B.D. Johnston and W. Bennett. (1998). Acute toxicity of a didecyldimethyl-ammonium chloride-based wood preservative, Bardac 2280, to aquatic species. Env. Toxicol. Chem. 17: 1552-1557.
19. Seubert, J. and C.J. Kennedy. (1997). The toxicokinetics of benzo(a)pyrene in juvenile coho salmon, *Oncorhynchus kisutch*, during smoltification. Fish Physiol. Biochem. 16:437-447.
18. Vijayan, C. Pereira, R. Forsyth, C. Kennedy and G. Iwama.(1997). Handling stress does not affect the expression of hepatic heat shock protein 70 and conjugation enzymes in rainbow trout treated with B-Naphthoflavone. Life Sciences 61:117-127.
17. Lemke, A. and C.J. Kennedy. (1997). The uptake, distribution and metabolism of benzo[a]pyrene in coho salmon, *Oncorhynchus kisutch*, during the parr-smolt transformation. Env. Toxicol. Chem. 16:1384-1388.
16. Wood, A.W., B.D. Johnston, A.P. Farrell and C.J. Kennedy. (1996) Effects of didecyldimethylammonium chloride (DDAC) on the swimming performance, gill morphology, disease resistance and biochemistry of rainbow trout (*Oncorhynchus mykiss*). Can. J. Fish. Aquat. Sci. 53:2424-2432.

15. Kennedy, C.J., R.M. Sweeting, J.A. Johansen, A.P. Farrell and B.A. McKeown. (1995). Acute effects of chlorinated resin acid exposure on juvenile rainbow trout, *Oncorhynchus mykiss*. Environ. Toxicol. Chem. 14:977-982.
14. Johansen, J.A., C.J. Kennedy, R.M. Sweeting, A.P. Farrell and B.A. McKeown. (1994). Sublethal effects of tetrachloroguaiacol on juvenile rainbow trout, *Oncorhynchus mykiss*, following acute and chronic exposure. Can. J. Fish. Aquat. Sci. 51:1967-1974.
13. Kennedy, C.J. and P.J. Walsh. (1994). The effects of temperature on the uptake and metabolism of benzo[a]pyrene in isolated gill cells of the gulf toadfish, *Opsanus beta*. Fish Physiol. Biochem. 13: 93-103.
12. Kennedy, C.J., N.J. Gassman and P.J. Walsh. (1992). Uptake and metabolism of benzo[a]pyrene in the scleractinian corals, *Favia fragum* and *Montastrea annularis*. Mar. Biol. 113: 313-318.
11. Kennedy, C.J., L.S. Schulman, D.B. Baden and P.J. Walsh. (1992). Toxicokinetics of brevetoxin, PbTx-3 in the gulf toadfish, *Opsanus beta*, following intravenous administration. Aquat. Toxicol. 22: 3-14.
10. Gassman, N.J. and C.J. Kennedy. (1992). Characterization of cytochrome P-450 and xenobiotic metabolizing enzyme activities in the scleractinian coral, *Favia fragum*. Bull. Mar. Sci. 50: 320-330.
9. Law, F.C.P., S. Abedini and C.J. Kennedy. (1991). A biologically-based toxicokinetic model for pyrene in rainbow trout. Toxicol. Appl. Pharmacol. 110: 390-402.
8. Kennedy, C.J. and P.J. Walsh. (1991). The effects of temperature on benzo(a)pyrene metabolism and adduct formation in the gulf toadfish, *Opsanus beta*. Fish Physiol. Biochem. 9: 179-187.
7. Kennedy, C.J., K.A. Gill and P.J. Walsh. (1991). *In vitro* metabolism of benzo(a)pyrene in the blood of the gulf toadfish, *Opsanus beta*. Mar. Environ. Res. 31: 37-53.
6. Kennedy, C.J., K.A. Gill and P.J. Walsh. (1991). Temperature acclimation of xenobiotic metabolizing enzymes in cultured hepatocytes and whole liver of the gulf toadfish, *Opsanus beta*. Can. J. Aquat. Sci. 48: 1212-1219.
5. Kennedy, C.J. and F.C.P. Law. (1990). Toxicokinetics of selected polycyclic aromatic hydrocarbons in rainbow trout following different routes of chemical administration. Environ. Toxicol. and Chem. 9: 133-140.
4. Kennedy, C.J., K.A. Gill and P.J. Walsh. (1990). The effects of nifurpirinol treatment on the activities of hepatic xenobiotic transforming enzymes in the gulf toadfish, *Opsanus beta* (Good and Bean). J. Fish Diseases 13: 525-529.
3. Kennedy, C.J., K.A. Gill and P.J. Walsh. (1989). The effects of temperature on the uptake of benzo(a)pyrene in the gulf toadfish, *Opsanus beta*. Environ. Toxicol. and Chem. 8: 863-869.
2. Kennedy, C.J., K.A. Gill and P.J. Walsh. (1989). Thermal modulation of benzo[a]pyrene metabolism by the gulf toadfish, *Opsanus beta*. Aquat. Toxicol. 15: 331-344.
1. Kennedy, C.J. and F.C.P. Law. (1986). Toxicokinetics of chlorinated phenols in rainbow trout following different routes of chemical administration. Can. Tech. Report Fish. Aquat. Sci. 1480:124-125.

Book chapters

12. Kennedy, C., H. Osachoff and L. Shelley. (2014). Estrogenic endocrine disruptors in fish. In: Fish Physiology Book Series. Elsevier.
11. Kennedy, C. (2014). Organic contaminants and fish. In: Fish Physiology Book Series. Elsevier.
10. Kennedy, C. (2014). Multiple effects of oil and its components in fish. In: Impacts of oil spill disasters on North American marine fisheries and their habitats. CRC Press.

9. Kennedy, C. (2014). Endocrine disruption as a mechanisms of action underlying sublethal effects in Pacific Herring (*Clupea harengus pallasii*) exposed to the dissolved hydrocarbon fraction of crude oil. In: Impacts of oil spill disasters on North American marine fisheries and their habitats. CRC Press.
8. Kennedy, C.J. (2011). The Toxicology of Metals in Fishes. In: Encyclopedia of Fish Physiology: From Genome to Environment. Edited by A.P. Farrell. Elsevier.
7. Kennedy, C.J. (2011). The Toxicology of Organics in Fishes. In: Encyclopedia of Fish Physiology: From Genome to Environment. Edited by A.P. Farrell. Elsevier.
6. Kennedy, C. and K. Tierney. (2012). Mechanisms of protection/resistance at the organism level. In Encyclopedia of Sustainability Science and Technology. Edited by E. Laws. Springer International.
5. Tierney, K.B. and C.J. Kennedy. (2008). Background Toxicology. In: Oceans and Human Health. Edited by P.J. Walsh. Academic Press, NY.
4. Kennedy, C.J. and P.J. Walsh. (1997). The effects of temperature on xenobiotic metabolism. In: Global Warming-implications for freshwater and marine fish. Edited by C.M. Wood and G. McDonald. Cambridge University Press, Cambridge, UK.
3. Kennedy, C.J., R.M. Sweeting, J.A. Johansen, A.P. Farrell and B.A. McKeown. (1996). Lethal and sublethal effects of chlorinated resin acids and chloroguaiacols in rainbow trout. In: Fate and effects of pulp and paper mill effluents. Edited by M.R. Servos, K.R. Munkittrick, J.H. Carey and G.J. Van Der Kraak. St. Lucie Press, Boca Raton, FL.
2. Kennedy, C.J. (1995). Xenobiotics: designing an *in vitro* system to study enzymes and metabolism. In: Biochemistry and Molecular Biology of Fishes. Volume 3: Analytical Techniques. Edited by P. W. Hochachka and T. P. Mommsen. Elsevier Science, Amsterdam.
1. Kennedy, C.J. (1995). Xenobiotics. In: Biochemistry and Molecular Biology of Fishes. Volume 5: Environmental Biochemistry and Molecular Biology. Edited by P. W. Hochachka and T. P. Mommsen. Elsevier Science, Amsterdam.