

Presentations and Abstracts:

1. Babish, J.G. June 2001 Presentation at NERA Meeting
2. Bowser, P.R., G.A. Wooster, R.G. Getchell and M.B. Timmons. 1998. Streptococcus iniae Infection in Tilapia (Oreochromis niloticus) in a Recirculation Production Facility: a Case Report. Third International Symposium on Aquatic Animal Health. 30 August - 3 September 1998. Baltimore, Maryland
3. Bowser, P.R. National Research Support Project No. 7 (NRSP7), The Minor Use Animal Drug Program. 1999 Annual Meeting of the Fish Health Section/American Fisheries Society and Western Fish Disease Workshop. Twin Falls, ID. 9-11 June 1999.
4. Bowser, P.R., G.A. Wooster, C.-Y. Chen, and R.S. Mo. 2003. Concurrent Infection of Hybrid Striped Bass (Morone chrysops X Morone saxatilis) with Three Bacterial Pathogens. 28th Eastern Fish Health Workshop. Gettysburg, PA. 21-24 April 2003.
5. Chen, C.-Y., G.A. Wooster, R.G. Getchell, and P.R. Bowser. Comparative elimination kinetics of oxytetracycline in four species of fish. Annual Meeting of the Fish Health Section/American Fisheries Society, Pensacola, FL, 6-8 September 2000.
6. Chen, C.-Y., G.A. Wooster and P.R. Bowser. Effect of Streptococcus Infection on Oxytetracycline Pharmacokinetics in Tilapia. 26th Annual Eastern Fish Health Workshop. Shepherdstown, WV, 23-26 April 2001.
7. Chen, C.-Y., G.A. Wooster, R.G. Getchell, P.R. Bowser and M.B. Timmons. 2002. Blood chemistries of healthy, nephrocalcinosis-affected, and ozone-treated tilapia in recirculation systems. Eastern Fish Health Workshop. Charleston, S.C. 18-22 March 2002.
8. Chen, C.-Y. and P.R. Bowser. 2002. Discriminant Analysis of the Blood Chemistry of Streptococcus iniae and Vibrio vulnificus-infected Tilapia, with Reference to Histopathology. International Symposium on Aquatic Animal Health. New Orleans, LA, 31 August - 6 September 2002.
9. Chen, C.-Y., C.-B. Chao, A. Alcaraz and P.R. Bowser. 2002. Comparative Histopathology of Streptococcus iniae and S. difficile-infected Tilapia. International Symposium on Aquatic Animal Health. New Orleans, LA, 31 August - 6 September 2002.
10. Conzelman, G.M., Babish, J.G., Davidson, J.N., McMillan, R.A. and Copeland, D.D. 1987. Pharmacokinetics of 1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo-7-(4-ethyl-1-piperazinyl)-3-q-quinoline-carboxylic acid (BAY Vp 2674) in chickens. Proc West Pharmacol Soc 30:393-395.
11. Courtin, F., Wetzlich, S., Gustafson, C. and Craigmill, A. Pharmacokinetics and milk residues of ceftiofur and metabolites in dairy goats. Proceedings of the 6th EAVPT International Congress. August 7-11, 1994, Edinburgh, Scotland.
12. Craigmill, A., Wetzlich, S., Bulgin, M. and Lane, M. Pharmacokinetics of ceftiofur sodium in sheep. Proceedings of the 5th Congress of the European Association for Veterinary Pharmacology and Toxicology. *Acta Veterinaria Scandinavia*, Supplementum 87, 120-122, 1991. (Published Abstract)
13. Craigmill, A., Wetzlich, S., Gustafson, C., Arndt, T. and Brown, S. Pharmacokinetics of ceftiofur and metabolites in sheep: single dose intravenous and intramuscular, and multiple dose intramuscular administrations. Proceedings of the 6th EAVPT International Congress. August 7-11, 1994, Edinburgh, Scotland.
14. Miller, L. January 2002, American Sheep Industry Association Annual meeting, San Antonio, TX
15. Miller, L. January 2002, North Central Region, Animal Health Advisory Committee, Washington, DC
16. Miller, L. February 2002, National Sheep Industry Improvement Center Board of Directors, Washington, DC

17. Miller, L. and Oeller, M. October 2002, American Dairy Goat Association annual meeting, Hagerstown, MD (joint presentation with Meg)
18. Miller, L. and Oeller, M. February 2003, American Sheep Industry Association Annual meeting, Washington DC
19. Miller, L. March 2003, North Central Region, Animal Health Advisory Committee, Washington, DC
20. Proceedings of the IR-4/FDA Workshop for Minor Use Drugs: Focus on Aquaculture. *Veterinary and Human Toxicology*, 33(Suppl 1):1-80, 1991.
21. Proceedings of the IR-4/FDA Workshop for Minor Use Drugs: Focus on Small Ruminants. *Veterinary and Human Toxicology*, 35(Suppl 2):1-72, 1993.
22. Proceedings of the NRSP-7/FDA Workshop: Drug Availability for Minor Species in the 21st Century. *Veterinary and Human Toxicology*, 40(Suppl 1):1-63, 1998.
23. Proceedings of the NRSP-7/FDA Workshop on Minor Use Drugs: Drugs in Aquaculture: Current Status - Future Goals. *Veterinary and Human Toxicology*, 40(Suppl 2):1-64, 1998.
24. Tort, M.J., A.J. Kuhl, G.A. Wooster and P.R. Bowser. 1998. Modification of tolerance of walleyes (*Stizostedion vitreum*) to bath treatment with hydrogen peroxide. Annual Meeting of the New York Chapter American Fisheries Society. 29-31 January 1998. Owego, NY.
25. Tort, M.J., G.A. Wooster and P.R. Bowser. 1998. Hydrogen peroxide as a therapeutic compound for bacterial gill disease in fish. SETAC-Europe. 14-18 April 1998. Bordeaux. France.
26. Tort, M.J., G.A. Wooster and P.R. Bowser. 1998. Hydrogen peroxide as a therapeutic compound for bacterial gill disease in fish. 1998 N.Y.S. Legislature Day at the Cornell Biological Field Station. 22 July 1998. Bridgeport, NY.
27. Tort, M.J., G.A. Wooster and P.R. Bowser. 1998. Hydrogen peroxide as a therapeutic compound for bacterial gill disease in fish. Annual Meeting of the American Fisheries Society. 23-27 August 1998. Hartford, CT.
28. Tort, M.J., G.A. Wooster and P.R. Bowser. 1998. Hydrogen Peroxide as a Therapeutic Compound for Bacterial Gill Disease in Fish. Third International Symposium on Aquatic Animal Health. 30 August - 3 September 1998. Baltimore, Maryland.
29. Tort, M.J., G.A. Wooster and P.R. Bowser. 1998. Hydrogen peroxide as a therapeutic compound for bacterial gill disease in fish. SETC 19th Annual Meeting. 15-19 November 1998. Charlotte, North Carolina.
30. Tort, M.J. and P.R. Bowser. 1999. Modification of tolerance of sensitive fish species to bath treatment with hydrogen peroxide. SOT 1999 Annual Meeting. 13-18 March 1999. New Orleans, Louisiana.
31. Wooster, G.A., C.M. Martinez, D.S. Ohara, and P.R. Bowser. 2003. Human Health Risk Associated with Formaldehyde Treatments Used in Aquaculture. 28th Eastern Fish Health Workshop. Gettysburg, PA. 21-24 April 2003.

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1. Babish, J.G., Coles, G.C., Tritschler, J.P. 2nd, Gutenmann, W.H. and Lisk, D.J. 1990. Toxicity and tissue residue depletion of levamisole hydrochloride in young goats. *Am J Vet Res* 51(7):1126-1130.
2. Beconi-Barker, M.G., Davison, K.L., Hornish, R.E., Arnold, T.S., Craigmill, A.L., Gilbertson, T.J., Smith, E.B., Vidmar, T.J., Hoffman, G.A., and Gatchell, C.L. [¹⁴C]Ceftiofur sodium absorption, distribution, metabolism, and excretion in sheep following intramuscular

injections. *Journal of Agriculture and Food Chemistry*, **43**:1589-1597, 1995.

3. Bowser, P.R. and Babish, J.G. 1991. Enrofloxacin in salmonids. *Vet Hum Toxicol* 33 Suppl 1:46:48.

4. Bowser, P.R., Wooster, G.A., St Leger, J. and Babish, J.G. 1992. Pharmacokinetics of enrofloxacin in fingerling rainbow trout (*Oncorhynchus mykiss*). *J Vet Pharmacol Ther* 15(1):62-71.

5. Broome, R.L., Brooks, D.L., Babish, J.G., Copeland, D.D. and Conzelman, G.M. 1991. Pharmacokinetic properties of enrofloxacin in rabbits. *Am J Vet Res* 52(11):1835-1841.

6. Bulgin, M.S., Lane, V.M., Archer, T.E., Baggot, J.D., and Craigmill, A.L. Pharmacokinetics, safety and tissue residues of sustained-release sulfamethazine in sheep. *J. Vet. Pharmacol. Therap.*, **14**(1), 36-45, 1991.

7. Chen, C.-Y., G.A.Wooster, R.G.Getchell and P.R.Bowser. 2001. Nephrocalcinosis in tilapia (*Oreochromis niloticus*) from a recirculation aquaculture system: a case report. *Journal of Aquatic Animal Health*. 13:368-372.

8. Chen, C.-Y., G.A. Wooster, R.G. Getchell, P.R. Bowser, and M.B. Timmons. 2003. Blood Chemistry of Healthy, Nephrocalcinosis-affected, and Ozone-treated Tilapia in a Recirculation System, with Application of Discriminant Analysis. *Aquaculture* 218:89-102.

9. Craigmill, A.L., Pass, M.A., and Wetzlich, S. Comparative pharmacokinetics of amoxicillin administered intravenously to sheep and goats. *J. Vet. Pharm. and Thera.*, **15**(1):72-77, 1992.

10. Craigmill, A.L., Brown, S.A., Wetzlich, S.E., Gustafson, C.R., and Arndt, T.S. Pharmacokinetics of ceftiofur and metabolites after single intravenous and intramuscular administration and multiple intramuscular administrations of ceftiofur sodium to sheep. *J Vet Pharm & Thera*, **20**(2):139-144, 1997.

11. Craigmill, A.L., Holland, R.E., Robinson, D., Wetzlich, S., and Arndt, T. Serum pharmacokinetics of oxytetracycline in sheep and calves and tissue residues in sheep following a single intramuscular injection of a long-acting preparation. *Journal of Veterinary Pharmacology and Therapeutics*, 23:345-352, 2000.

12. Craigmill, Arthur L. A physiologically-based pharmacokinetic model for oxytetracycline residues in sheep. *Journal of Veterinary Pharmacology and Therapeutics*, 26(1):55-63, 2003.

13. Courtin, F., Craigmill, A.L., Wetzlich, S.E., Gustafson, C.R. and Arndt, T.S. Pharmacokinetics of ceftiofur and metabolites after single intravenous and intramuscular administration and multiple intramuscular administrations of ceftiofur sodium to dairy goats. *J Vet Pharmacol Therap*, **20**(5):368-373, 1997.

14. Dieterich, Robert A. and Craigmill, A.L. Safety, efficacy, and tissue residues of ivermectin in reindeer. *Rangifer*, **2**(10):53-56, 1990.

15. Eltom, S.E., Babish, J.G., and Schward, W.S. 1993. The postnatal development of drug-metabolizing enzymes in hepatic, pulmonary and renal tissues of the goat. *J. Vet. Pharmacol Ther* 16(2):152-163.

16. Marley, S.E., Knapp, S.E., Rognlie, M.C., Thompson, J.R., Soppa, T.M., Button, S.M., Wetzlich, S., Arndt, T., and Craigmill, A. 1995 Efficacy of ivermectin pour-on against *Ostertagia ostertagi* infection and residues in the American bison, *Bison bison*. *J Wildlife Dis*, **31**(1):62-65.

17. Marley, S.E., Knapp, S.E., Rognlie, M.C., Thompson, J.R., Soppa, T.M., Button, S.M., Wetzlich, S., Arndt, T., and Craigmill, A. Efficacy of ivermectin pour-on against *Ostertagia ostertagi* infection and residues in the American bison, *Bison bison*. *Journal of Wildlife Disease*, **31**:62-65, 1995.

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20. Robbins, P.K., Tell, Lisa A., Needham, Martha L., Craigmill, Arthur L. Pharmacokinetics of piperacillin after intramuscular injection in red-tailed hawks (*buteo jamaicensis*) and great horned owls (*bubo virginianus*). *Journal of Zoo and Wildlife Medicine* 31(1):47-51, 2000.
21. Saez, J.A. and P.R. Bowser. 2000. Hydrogen peroxide concentrations in hatchery culture units and effluent during and after treatment. *North American Journal of Aquaculture*. 63:74-78.
22. Shoaf, S.E., Schwark, W.S., Guard, C.L. and Babish, J.G. 1987. The development of hepatic drug-metabolizing enzyme activity in the neonatal calf and its effect on drug disposition. *Drug Metab dispos* 15(5):676-681.
23. Stoffregen, D.A., Wooster, G.A., Bustos, P.S. Bowser, P.A. and Babish, J.G. 1997 Multiple route and dose pharmacokinetics of endrofloxacin in juvenile Atlantic salmon. *J Vet Pharmacol Ther.* 20(2):111-123.
24. Tell, L., Harrenstein, L., Wetzlich, S., Needham, M., Nappier, J., Hoffman, G., Caputo, J., and Craigmill, A. Pharmacokinetics of ceftiofur sodium in exotic and domestic avian species. *J Vet Pharmacol Therap*, 21(2):85-91, 1998.
25. Tort, M.J., A.J. Kuhl, G.A. Wooster and P.R. Bowser. 1998. Modification of tolerance of walleye (Stizostedion vitreum) to bath treatment with hydrogen peroxide. *Journal of the World Aquaculture Society*. 29:499-504.
26. Tort, M.J., C. Jennings-Bayshore, D. Wilson, G.A. Wooster and P.R. Bowser. 2002. Assessing the effects of increasing hydrogen peroxide dosage on rainbow trout (Onchorhynchus mykiss) gills utilizing a digitized scoring methodology. *Journal of Aquatic Animal Health*. 14:95-103.
27. Tort, M.J., D. Pasnik, C. Fernandez-Cobas, G.A. Wooster and P.R. Bowser. 2002. Quantitative scoring of gill pathology of walleyes (Stizostedion vitreum) exposed to hydrogen peroxide. *Journal of Aquatic Animal Health*. 14:154-159.
28. Tort, M.J., C. Fletcher, G.A. Wooster, and P.R. Bowser. 2003. Stability of hydrogen peroxide in aquaria as a fish disease treatment. *Journal of Applied Aquaculture* 14:(3/4) (in press).
29. Tort, M.J., G.A. Wooster and P.R. Bowser. 2002. Effects of Hydrogen Peroxide on Hematology and Blood Chemistry Parameters of Walleye (Stizostedion vitreum). *Journal of the World Aquaculture Society* (in press).
30. Tripi, C.M. and P.R. Bowser. 2001. Toxicity of hydrogen peroxide to pre-exposed young-of-the-year walleye (Stizostedion vitreum): effects of water quality and age of fish. *Journal of the World Aquaculture Society*. 32:416-421.
31. Vancutsem, P.M., Babish, J.G. and Schwark, W.S. 1990. The fluoroquinolone antimicrobials: structure, antimicrobial activity, pharmacokinetics, clinical use in domestic animals and toxicity. *Cornell Vet* 80(2):173-186.
32. Vancutsem, P.M., and Babish, J.G. 1993. Effects of ciprofloxacin and endrofloxacin on zoxaxolamine kinetics, plasma concentration and sleeping times in mice. *Toxicol Lett* 69(1):1-14.

33. Vancutsem, P.M. and Babish, J.G. 1996. In vitro and in vivo study of the effects of endrofloxacin on hepatic cytochrome P-450. Potential for drug interactions. *Vet Human Toxicol* 38(4):254-359.

Dissertations:

Maria Tort, Ph.D. January, 2000.

Graduate Field of Environmental Toxicology, Cornell University.

Ph.D. Dissertation: Studies of Hydrogen Peroxide for the Treatment of Bacterial Gill Disease in Fish.

Chun-Yao Chen, Ph.D. January, 2003

Graduate Field of Comparative Biomedical Sciences, Cornell University.

Ph.D. Dissertation: General Fish Health Management: The Tilapia Model.