# LOUIS TREMBLAY – Environmental Toxicologist

## QUALIFICATIONS

BSc, University of Montreal

MSc, McGill University

PhD, University of Guelph

## PROFESSIONAL AFFILIATIONS

Society of Environmental Toxicology and Chemistry (SETAC)

NZ Freshwater Sciences Society

Royal Society of NZ

## ROLE AT CAWTHRON

Louis is an Environmental Toxicologist in the Coastal & Freshwater Group involved in the development of methodologies to characterise the effects of anthropogenic stressors on the receiving environment. His research involves assessment of the toxicity of contaminants and complex mixtures like sewage effluent. Louis' main area of interest is the characterisation of the mechanisms of toxicity of microcontaminants on key New Zealand species.

## SPECIAL INTERESTS

- Development of biomarkers in New Zealand native species.
- Use of methodologies based on different levels of biological organisation, from molecular to whole animal, to characterise the effects of contaminants.
- Use a research approach based on the integration of the quadruple bottom line to generate acceptable environmental management options.
- Risk assessment of endocrine disrupting chemicals (EDCs) and remerging contaminants such as pharmaceuticals and personal care products (PPCPs).
- Risk of multiple stressors and complex mixtures.

## SELECTED PUBLICATIONS


Gadd JB, Northcott. GL and **Tremblay** LA. 2010. Passive secondary biological treatment systems reduce estrogens in dairy shed effluent. Environmental Science & Technology. 44: 7601-7606.

Leusch FDL, de Jager C, Puijker L, Levi Y, Lim R, **Tremblay** LA, Wilson VS, Sacher F and Chapman HF. 2010. Comparison of five in vitro bioassays to measure estrogenic activity in environmental waters. Environmental Science & Technology. 44: 3853-3860.



Allen W, Ataria JM, Apgar JM, Harmsworth G, **Tremblay** LA. 2009. Kia pono te mahi pūtaiao – Doing science in the right spirit. Journal of the Royal Society of New Zealand. 39: 239–242.

Rawson CA, **Tremblay** LA, Warne MSt.J, Kookana RS, Ying G-G, Laginestra E, Chapman JC, Lim RP. 2009. Bioactivity of POPs and their effects in mosquitofish in Sydney Olympic Park, Australia. Science of the Total Environment 407:3721-3730.

Novis P, Halle C, Wilson B and **Tremblay** LA. 2009. Identification and characterisation of freshwater algae isolated from a pollution gradient using rbcL sequences and toxicity testing. Archives of Environmental Contamination and Toxicology. 57:504-514.

Hack LA, **Tremblay** LA, Wratten SD, Forrester G., Keesing V. 2008. Toxicity of estuarine sediments using a full life-cycle bioassay with the marine copepod *Robertsonia propinqua*. Ecotoxicology and Environmental Safety. 70:469-474.

Tan BLL, Hawker DW, Müller JF, **Tremblay LA**, Chapman HF. 2008. Stir bar sorptive extraction and trace analysis of selected endocrine disruptors in water, biosolids and sludge samples by thermal desorption with gas chromatography-mass spectrometry. Water Research. 42:404-412.

Van den Heuvel MR, Michel C, Stevens MI, Clarke AC, Stölting KN, Hicks BJ, **Tremblay LA**. 2007. Monitoring the effects of pulp and paper effluent is restricted in genetically distinct populations of common bully (*Gobiomorphus cotidianus*). Environmental Science & Technology. 41:2602-2608.

Leusch FDL, Chapman HF, Van den Heuvel MR, Tan BLL, Gooneratne SR and **Tremblay LA**. 2006. Bioassay-derived androgenic and estrogenic activity in municipal sewage in Australia and New Zealand. Ecotoxicology and Environmental Safety. 65:403-411.