

Christian Picard

Managing Scientist | Chemical Regulation & Food Safety
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Professional Profile

Mr. Picard has approximately 14 years of experience at a global contract research organization (CRO). He has broad experience in ecotoxicology and has served as study director on numerous studies with a primary focus on sediment, pollinator, and non-target terrestrial plant testing. Mr. Picard held leadership roles in his tenure at the global CRO including that of the technical leader for the terrestrial ecotoxicology group. He is knowledgeable with regulatory guidelines (e.g. USEPA, OECD, PMRA and JMAFF) as well as all associated Good Laboratory Practice Standards. He has directed and managed studies in support of product registrations for the pesticide (conventional and biopesticides), pharmaceutical, and industrial chemical sectors.

Mr. Picard has worked with multiple task forces and working groups that include members of industry (e.g., registrants), regulatory authorities, and the academic communities. These groups were instrumental in streamlining and validating testing guidelines such as those for chronic sediment testing in the US. He has also been heavily involved in improving various honeybee laboratory testing methods including revising the methods to assess the effects of biopesticides. Mr. Picard is an active member of the Society of Environmental Toxicology and Chemistry and participates in several interest groups (Plant, Sediment and Pharmaceutical Interest Groups) within the organization.

Mr. Picard's current responsibilities include evaluating ecotoxicology data, placing and monitoring studies and conducting ecological risk assessments in accordance with EPA regulations.

Academic Credentials & Professional Honors

M.Sc., Biology, University of Akron, 2004

B.Sc., Zoology, University of Rhode Island, 1999

Prior Experience

Senior Research Biologist, Smithers, 2010-2020

Biologist II, Smithers, 2008-2010

Biologist I, Smithers, 2007-2008

Research Assistant II, Marine Biological Laboratory, 2004-2007

Professional Affiliations

Society of Environmental Toxicology and Chemistry (SETAC)

Publications

Watson-Leung TL, Picard C. Sediment ecotoxicology—Current research on laboratory methods: An introduction. *Environmental Toxicology and Chemistry*. 2016; 35(10): 2405-2406.

Drake DC, Peterson BJ, Galvan KA, Deegan LA, Hopkinson C, Johnson JM, Koop-Jakobsen K, Lemay LE, Picard C. Salt marsh ecosystem biogeochemical responses to nutrient enrichment: a paired N-15 tracer study. *Ecology*. 2009; 90(9): 2535-2546.

Deegan LA, Bowen JL, Drake D, Fleeger JW, Friedrichs CT, Galvan KA, Hobbie JE, Hopkinson C, Johnson DS, Johnson JM, Lemay LE, Miller E, Peterson BJ, Picard C, Sheldon S, Sutherland M, Vallino J, Warren RS. Susceptibility of salt marshes to nutrient enrichment and predator removal. *Ecological Applications*. 2007; 17(5): S42-S63.

Picard C, Fraser LH, Steer D. The interacting effects of temperature and plant community type on nutrient removal in wetland microcosms. *Bioresource Technology* 2005; 96:1039-1047.

Fraser LH, Carty S, Picard C, Steer D. Phytoremediation: wetland plants and their relative efficiency at treating agricultural runoff. In: S.G. Pandalai (ed.), *Recent Research Developments in Crop Sciences*, Volume 1, Research Signpost, Kerala, India. 2004; 379-391.

Presentations

Picard C, Kirkwood A, Schwalbe J. Historical Sensitivity of Common Plant Species Used In Non-Target Terrestrial Plant Testing. Poster presentation. Society of Environmental Toxicology and Chemistry Europe Annual Meeting. Virtual Meeting, 2020.

Kirkwood K, Schwalbe J, Picard C, Marchessault N, Biever R. The Evaluation of Seedling Density on Endpoint Sensitivity in OECD Vegetative Vigor Plant Guideline Testing. Poster presentation. Society of Environmental Toxicology and Chemistry North America Annual Meeting. Toronto, ON, 2019.

Picard C, Patnaude M, Rathjen K. An Examination of Historical Control Data and Endpoint Sensitivity for Tier I Honeybee Laboratory Studies. Poster presentation. Society of Environmental Toxicology and Chemistry North America Annual Meeting. Sacramento, CA, 2018.

Marchessault N, Picard C, Laughlin K, Biever R. The Evaluation of Multiple Milkweed Species: Feasibility of Use in Standard Plant Toxicity Test Designs and Sensitivity to a Common Herbicide. Poster presentation. Society of Environmental Toxicology and Chemistry North America Annual Meeting. Orlando, FL, 2016.

Kirkwood A, Picard C, Marchessault N, Hoberg J, Biever R. The Evaluation of Three Milkweed Species for Use in Standard Seedling Emergence and Vegetative Vigor Testing Guidelines. Poster presentation. Society of Environmental Toxicology and Chemistry North America Annual Meeting. Salt Lake City, UT, 2015.

Picard C, Bradley M. A Synopsis of Chronic Sediment Toxicity Data for Benthic Organisms and Agrochemical Products. Poster presentation. Society of Environmental Toxicology and Chemistry North America Annual Meeting. Vancouver, BC, 2014.

Picard C, Bradley M, Giddings J. An Evaluation of the 28-Day Chronic Sediment Test Method with *Leptocheirus plumulosus* to Assess the Toxicity of Pesticides for Registration Purposes. Poster

presentation. Society of Environmental Toxicology and Chemistry North America Annual Meeting. Long Beach, CA, 2012.

Picard C, McLaughlin S, Malekani K, Bradley M, McKnight C, Letourneau M, Tamulis N. Evaluation of a Method for Conducting OECD Testing for Transformation of a Material in an Aquatic Sediment System and Toxicity to a Benthic Organism. Poster presentation. Society of Environmental Toxicology and Chemistry North America Annual Meeting. Boston, MA, 2011.

Picard C, Peterson BJ, Hopkinson CH, Deegan LA. Nitrate and phosphate exchange in an experimentally fertilized tidal creek. Poster presentation, The Biennial Conference of the Estuarine Research Federation. Norfolk, VA, 2005.

Project Experience

Acted as the ecotoxicology lead for a new pesticide active ingredient registration in both US and Canada (NAFTA Joint Review submission).

Authored white paper related to observations of remaining diet in larval honeybee acute studies and regurgitation in adult honeybee studies with regards to study acceptability.

Worked with both regulators and registrants to improve non-guideline test methods with benthic marine amphipods.

Acted as study director and program manager on large sediment testing program consisting of several complex acute and chronic studies. Assessed toxicity of highly adsorptive materials using several sediment types with varying organic carbon contents.

Provided technical oversight for multiple types of studies including sediment, non-target plant, pollinator, aquatic plant, non-target arthropod, and fit for purpose studies to address specific regulatory issues.

Led staff of scientists in designing efficient laboratory diet trials for inclusion of low solubility materials into honeybee diets. Worked both internally and with industry groups in validating alternative methods of suspending materials in adult bee sucrose diets.

Assisted in addressing deficiencies in studies to be used for pesticide risk assessment purposes.

Monitored several ecotoxicity studies at CRO to support registration of a biopesticide.

Peer Reviewer

Environmental Toxicology and Chemistry (ET&C)