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Christian Picard

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Professional Profile

Mr. Picard has approximately 17 years of combined experience at a global contract research organization (CRO) and as a consultant. He has broad experience in ecotoxicology and, while at the CRO, served as study director on numerous aquatic and terrestrial studies with a primary focus on sediment, pollinator, and non-target terrestrial plant testing. Mr. Picard's current responsibilities include evaluating ecotoxicology data, drafting waivers and bridging arguments, conducting data gap analyses as well as reduced risk assessments. Additional responsibilities include conducting exposure modelling and risk assessment in accordance with EPA guidance. Mr. Picard is also proficient in strategically designing, placing and monitoring studies that will withstand regulatory scrutiny and facilitate registration.

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.

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, Hobble 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

Ecotoxicology lead for new conventional pesticide active ingredient registrations in both US and Canada (NAFTA Joint Review submission) as well as Latin American countries (Brazil). Registrations included both terrestrial and aquatic crop uses as well as non-crop uses (turf).

Conducted data gaps analyses for conventional pesticides related to label expansion or to support registration in other geographies.

Conducted reduced risk assessments on conventional pesticides for both terrestrial and aquatic crop use patterns as well as non-crop uses (turf).

Designed complex registration strategy and provided ecotoxicology support for submission of an isomer of a registered stereoisomeric pesticide as per the EPA's Interim Policy for Evaluation of Stereoisomeric Pesticides.

Represented registrants in meetings with EPA regarding complex FIFRA ecotoxicological, ecological risk assessment, and endangered species related issues.

Conducted endocrine disruptor data gap analyses and assessments for several biocides as per ECHA/EFSA guidance.

Provided ecotoxicology support for submission of several pesticides considered as emerging technologies including RNA-based pesticides.

Assisted in addressing endangered species concerns for a biopesticide by putting into context the available ecotoxicity data on non-target arthropods with regards to the potential for exposure using standard EPA terrestrial models.

Aided in strategically designing, placing and monitoring ecotoxicity studies, often with difficult to test compounds. Assessed studies with potential solvent interferences and collaborated with testing laboratories to develop appropriate non-solvent delivery strategies.

Peer Reviews

Environmental Toxicology and Chemistry (ET&C)