

GAVIN P. BELL
Scientist

Professional Profile

Fields of Experience

Risk Assessment, Inhalation Toxicology, Exposure Modeling, Risk Communication

Education/Certifications

B.S., Reed College, 2011, Mathematics. Thesis: *Associated Primes of a Modified Mayr-Meyer Ideal with $n=1$*

Current and Previous Positions

Staff Scientist, Intertox, Inc., Seattle, WA (2018-present)

Technical Assistant, Intertox, Inc., Seattle, WA (2011-2018)

Selected Project Experience

Experienced in conducting toxicological and human health risk assessments for exposure to chemical and biological agents in air, water, and soil. Chemicals evaluated included metals and other inorganic substances, polychlorinated biphenyls, alcohol, pesticides, solvents, organophosphates, fuels, and emissions from combustion processes.

- Conducted physiologically-based pharmacokinetic modeling of ethanol metabolism and intoxication in support of litigation.
- Conducted toxicological assessments of human exposure to the combustion of jet engine oil and hydraulic fluid in commercial aircraft cabin air in support of ongoing litigation. Chemicals evaluated were a group of organophosphates that included tricresyl phosphate and tributyl phosphate.
- Conducted toxicological assessments of human exposure to chemicals present in or off-gassed from airline uniform garments in the context of numerous workers' compensation claims. Routes of exposure assessed were dermal and inhalation.
- Conducted a toxicological assessment of human exposure to carbon monoxide due to infiltration of an airplane cabin by truck engine exhaust in the context of a workers' compensation claim.
- Assisted in the design and implementation of a testing protocol for above and below wing airline crew uniforms, and evaluated laboratory data in support of a human health risk assessment. Developed human dermal and inhalation exposure models based on testing data.
- Developed and implemented a sampling and analytical plan to gather data for an acute toxicological screening of human exposure to

- combustion products emitted from a 3D laser printer in conjunction with a variety of materials, including woods and plastics. Additionally, assessed filter efficiency in the capture of compounds of interest.
- Developed and conducted multipathway probabilistic risk assessments for human health (adult and child) exposures to polychlorinated biphenyls according to a U.S. EPA prescribed model in support of ongoing litigation. Exposure pathways included ingestion of drinking water, soil, and locally caught fish and dermal uptake of water and soil.
 - Evaluated potential human and environmental health risks associated with roadside herbicide use in Washington State. Prepared a technical risk assessment document.

Publications

Corey L.M., **Bell G.P.**, and Pleus R.C. 2017. Exposure of the US Population to Nitrate, Thiocyanate, Perchlorate, and Iodine Based on NHANES 2005-2014. *Bull Environ Contam Toxicol*.