

Exponent® Engineering & Scientific Consulting

Emily Richmond, M.Sc., CBiol, MRSB, ERT

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Professional Profile

Ms. Richmond is an experienced senior regulatory toxicologist having worked in industry for nearly 20 years. In her current role, she co-heads the European Toxicology team and provides support for registrations in Europe and a range of other countries, across plant protection products, biocides, industrial chemicals, foods, consumer products and occupational health.

She prepares technical evaluations and provide scientific and regulatory advice in the field of mammalian toxicology and its implications for human hazard and risk assessments. She manages and provides technical specialist expertise including study monitoring for a wide range of projects, preparing the necessary regulatory documentation and presents the scientific and regulatory positions at the relevant regulatory meetings on behalf of her clients. Ms. Richmond is in regular attendance as an expert stakeholder representative at the European Chemical Agencies (ECHA) Risk Assessment Committee (RAC). She has extensive experience of, and expertise in endocrine disruption (ED) assessments, conducting many EU ED evaluations and providing clients with Mode of Action (MoA) support to examine human relevancy of endocrine adversity and activity. Based on this expertise, she is also an invited member of the ECHA Partner Expert Group working, revising the EU classification guidance to include endocrine disruptor hazard criteria for classification in Europe.

Ms. Richmond is also a specialist in the field of developmental and reproductive toxicology, in addition to endocrine disruption, having developed deep technical knowledge through 14 years of experience as a Study Director across a wide range of mammalian in vivo toxicity studies at a contract research organization (CRO). During the latter years of her time at the CRO, she became Principal Developmental, Reproduction and Juvenile Toxicologist, developing testing methods and supporting validations for OECD test guideline studies and also designing testing strategies for a diverse range of substances, including pharmaceuticals, biologicals, agrochemicals, biocides, industrial chemicals and food flavourings. This combined technical and regulatory background has given Ms. Richmond a unique skill set for resolving complex techno-regulatory problems that frequently arise in these areas. She uses these skills to support extensive study monitoring for our clients, in particular for complex DART studies such as the Extended One Generation Reproduction Toxicity Study (EOGRTs) and bespoke Mode of Action studies.

Ms. Richmond is a strong advocate for the Refinement, Replacement and Reduction of Animal use and has been involved in a number of initiatives to improve and develop new technical aspects of juvenile and reproductive toxicity testing, contributing to a number of publications in this field.

Ms. Richmond is a UK and EU registered toxicologist and chartered biologist. She is also past chairperson for the UK Industrial Reproduction Toxicology Discussion Group (IRDG), a Council member for the European Teratology Society (ETS) and a member of the Society of Toxicologists and the Society for Birth Defects Research and Prevention (BDRP), formerly called the Teratology Society. She is also a member of the Health and Environmental Sciences Institute Developmental and Reproductive Toxicology

committee (HESI-DART) and an active participant of the Extended One Generation Reproductive Toxicity Study (EOGRTS) Working Group. She is also a member of the European Centre for Ecotoxicology and Toxicology of Chemicals (ECETOC) in vivo developmental neurotoxicity task force. She lectures on Reproduction Toxicology for the M.Sc. Toxicology course at the University of Birmingham, UK and is the Working Group lead and lecturer for the European Teratology Society DART training course.

Academic Credentials & Professional Honors

M.Sc., Toxicology, University of Birmingham, UK, 2005

B.Sc., Biological Sciences, University of Birmingham, UK, 2004

Academic Appointments

Lecturer on Reproduction Toxicology for the M.Sc. Toxicology course at the University of Birmingham, UK

Lecturer on the ETS Developmental and Reproductive Toxicology Training Course

Prior Experience

Principal Juvenile and Reproduction Toxicologist, Sequani Limited, 2015-2018

Senior Study Director/Toxicologist, Sequani Limited, 2005-2015

Professional Affiliations

Chartered Member, Royal Society of Biology

European Register of Toxicologists

UK Register of Toxicologists

UK Industrial Reproduction Toxicology Discussion Group

European Teratology Society

US Teratology Society

Society of Toxicology

Publications

McInnes, Elizabeth & Petterino, Claudio & Downes, Noel & Britton, Lorraine & Youngs, Louise & Richmond, Emily & Blackwell, Malcolm. (2022). Comparison of day 21 vaginal exfoliative cytology lavage and vaginal histology in the evaluation of oestrous cycle stages in group-housed CD-1 mice. Comparative Clinical Pathology – Volume 31, Issue 5, 779-785

Richmond E and Parsons, P (2019) New Guidance for the Identification of Endocrine Disruptors in the EU for Agrochemicals (Regulation EC No 1107/2009) and Biocides (EU No 528/2012). Reproductive Toxicology, Volume 88, 11

Rasmussen AD, Richmond E, Wegener KM, Downes N and Mullins P (2015). Vigabatrin induced CNS changes in Juvenile Rats: Induction, progression and recovery of myelin related changes. Neurotoxicity, Jan 46.137-144

Richmond E and Clode S (2014). Reduction and Refinement of Rodent Juvenile Toxicity Studies – the simple approach to cross-fostering. Reproductive Toxicology, Volume 48, 27

Dainty T, Richmond E and Davies I (2012). Dried Blood Spot Bioanalysis: An Evaluation of Techniques and Opportunities for Reduction and Refinement in Mouse and Juvenile Rat Toxicokinetic Studies: International Journal of Toxicology – Volume 31, Issue 1. pp 4 - 13

Richmond E, Dainty T and Davies I (2011). The dried blood spot analysis revolution and its application to reproduction toxicity testing of pharmaceuticals. Reproduction toxicology, Volume 32, Issue 2, 172