Dr George Johnson
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George obtained his PhD degree in Swansea 2006, under supervision of Professor Jim Parry, and since then has developed a great interest in the statistical approaches and underlying mechanisms that support points of departure (PoD) for genetic toxicity. This expertise has lead George to being a Steering Member of the International Life Science Institute—Health and Environmental Science Institute (ILSI-HESI) Genetic Toxicology Technical Committee (GTTC), as well as being co-Chair of the GTTC 'Quantitative Workgroup' and 'Mode of Action Workgroup'. His work includes improving the quantitative use of genetic toxicity data for human-health risk-assessment (Johnson et al., 2014, EMM), and he links this to his great interest in replacing, reducing and refining (3Rs) the use of animals in research.

His current projects include a joint GTTC, RIVM, Swansea, Health Canada collaboration that is funded through Health Canada's chemical management programme (Prof. Paul White as PI) as well as collaborations on the effect of background mutation frequencies on PoDs with US-FDA-NCTR (Cao et al., 2014, EMM); assessing genetic toxicity profiles of drug candidates with the Drugs for Neglected Disease Initiative; *in-vitro* to *in-vivo* correlations with the National Institute for Public Health and the Environment (RIMV, Netherlands) and Astra Zeneca; the International Workshop on Genetic Toxicology Quantitative Workgroup 2013; developing and testing high-throughput high-content flow cytometry based genetic toxicology assays with GSK, Gentronix, Litron, and Hoffman-La-Roche; developing a multiplex *in vitro* system for detection of carcinogens with the National Centre for 3Rs of animal testing (NC3R) and GE Healthcare; along with being involved in numerous projects with the In Vitro Toxicology Group in Swansea University.

George has experience in teaching Genetic Toxicology at BSc, MSc, PhD and CPD levels, and he has also run workshops on this topic at international conferences, along with running one on the assessment of genetic toxicity data sets at the European Chemicals Agency (ECHA). Recent accolades include becoming a Fellow of the Higher Education Academy (FHEA), a UK Registered Toxicologist (UKRT) and he won the UK and European Environmental Mutagen Society (UKEMS and EEMGS) Young Scientist Awards in 2012 and 2014 respectively.

Selected Publications

1. Doak, S.H., Jenkins. G.J.S., **Johnson. G.E.,** Quick. E., Parry. E.M., J.M. Parry (2007) Mechanistic Influences for Mut. Induction Curves after Exposure to DNA Reactive Carcs. *Cancer Res.* **67**: 1-8.
2. **Johnson GE,** *et al.,* 2013. Derivation of PoD estimates in genetic toxicology studies and their potential application in risk assessment. *Environ Mol Mutagen.* 55: 609-623 – *Editor's Choice*
3. Cao X, *et al.,* 2013. Quantitative Dose-Response Analysis of Ethyl Methanesulfonate Genotoxicity in Adult gpt-delta Transgenic Mice. *Environ Mol Mutagen*. 55: 385-399 – *Editor's Choice*
4. MacGregor, J.T, *at al.,* **Johnson, G.E.** (2014) IWGT Report on Quantitative Approaches to Genotox Risk Assess I. Meth & metrics defining expos-resp relationships & PoDs. *Mut. Res. - Gene Tox*, **783:** 55-65
5. **Johnson, G.E.,** *et al.,* (2015) New Approaches to Advance the use of Genetic Toxicology Analyses for Human Health Risk Assess. *Toxic Res*. **4:** 667-676
6. Soeteman-Hernandez L, Fellows M, **Johnson GE,** and Slob W. (2015) Carcinogenic potency estimation from the in vitro micronucleus test in TK6 cells: A pilot study. *Tox. Sci*. *DOI:* 10.1093/toxsci/kfv189
7. Wills J, Long A, **Johnson GE,** *et al.,* (2016) Empirical Analysis of BMD Metrics in Genetic Toxicology Part II: In Vivo Potency Comparisons to Enhance the Utility of Experimental Animals for Genetic Toxicity Assessment. *Mutagenesis*, **31**.
8. Wills JW, **Johnson GE** *et al.,* (2016) Empirical analysis of BMD metrics in gene tox part I: in vitro analyses to provide potency rankings and support MOA. *Mutage*, **31**.
9. Soeteman-Hernandez LG, **Johnson GE,** and Slob W (2016) Estimating the carcinogenic potency of chemicals from the in vivo micronucleus test. *Mutagenesis*. **31**