

## The Drug Metabolism Group 2.0

Toby J Athersuch<sup>a†</sup>, Muireann Coen<sup>a</sup>, Ian D Wilson<sup>a</sup>

<sup>a</sup>Division of Computational and Systems Medicine, Department of Surgery and Cancer, Faculty of Medicine, Imperial College London, South Kensington, London SW7 2AZ, UK

<sup>†</sup>To whom correspondence should be addressed: toby.athersuch@imperial.ac.uk

### Summary

This supplementary report accompanies the article entitled “*Paracetamol Metabolism, Hepatotoxicity, Biomarkers and Therapeutic Interventions: A Perspective*”, and provides context for its creation, and brings together contributions from expert toxicologists presented at a recent scientific meeting in to reflect on the challenges the use and abuse of paracetamol.

### The DMG

The Drug Metabolism Group (DMG) was founded as a forum for UK scientists to meet and share advances in foreign compound (xenobiotic) metabolism and related areas. Following the establishment of a steering committee consisting of John Caldwell, Alan Boobis and Gerry Cohen the inaugural meeting was held at St Marys Hospital Medical School in London on the 26th of October 1977 (for a meeting report of that first meeting see Caldwell 1977).<sup>1</sup>

From that date the meetings of the DMG formed a regular part of the diaries of both academic and industrial scientists interested in this rapidly growing area of science. These meeting had the great virtues of be topical, open to all and essentially free at the point of use (but with a contribution to support the provision of refreshment’s). With time longer meetings were introduced (the Stowe School Symposia), but for many it was the half day meetings at St Marys that were DMG’s pearl beyond price. However, with time, and the rise of organisations like the International Society for the study of Xenobiotics (ISSX) and the continued growth of the industrially focussed Drug Metabolism Discussion Group (DMDG) there was perhaps less need for the DMG and for perhaps a decade or so in the 21st century the DMG became essentially inactive.

While the need for a forum for academically focussed metabolism studies was perhaps diminished, it never went away. And, because the need still seemed to be there, it was decided to resurrect the popular short meetings of the DMG that had proved to be such a successful way of bringing the community (both academic and industrial) together for focussed meetings on the latest hot topics in xenobiotic metabolism.

### The DMG 2.0

The first meeting of this rebooted DMG was held at Imperial College on Friday the 20th of February 2015, and since then has met twice a year at the same venue. Recently, in recognition of the 60th anniversary of the introduction of paracetamol (acetaminophen, *N*-acetyl-*p*-aminophenol, APAP) onto the UK market, the DMG held a symposium entitled “*60 years of paracetamol: what do we really know?*” The meeting was based on invited presentations covering both the unravelling of the mechanisms of toxicity of this iconic

human hepatotoxin and a discussion of our current state of our knowledge on the topic. In addition, the meeting also included a number of submitted contributions and posters, many of which also had a paracetamol focus. The discussion generated at the meeting led the organizers to collate the contributions of the various invited speakers into the short article (*“Paracetamol Metabolism, Hepatotoxicity, Biomarkers and Therapeutic Interventions: A Perspective”*) that is published in the current issue of Toxicology Research.<sup>2</sup> We believe that this presents a timely commentary on the state of our understanding of the toxicity of paracetamol, the potential of various candidate biomarkers to contribute to patient care and the management of overdose, and the state of our knowledge of the roles of the innate immune system and genetic factors affecting the response of individuals to paracetamol administration. Details of future meetings will be made available on the DMG website.<sup>2</sup>

#### Acknowledgements

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#### References

- 1 J. Caldwell, Inaugural meeting of the Drug Metabolism Group. 1978, *Xenobiotica*, 1978, 8, 61-62.
- 2 T.J. Athersuch, *et al.* 2018, *Toxicol. Res.*, DOI: 10.1039/C7TX00340D.
- 3 [www.thedrugmetabolismgroup.com](http://www.thedrugmetabolismgroup.com)