

CURRICULUM VITAE

Professor Michael Philip Eddleston ScD FRCPE FEAPCCT

Professor of Clinical Toxicology,

Pharmacology, Toxicology & Therapeutics, Centre for Cardiovascular Science, University of Edinburgh.

Honorary Consultant in Clinical Toxicology & Pharmacology, Royal Infirmary of Edinburgh, Edinburgh.

Education

ScD	University of Cambridge, November 2014
FEAPCCT	January 2014 (Inaugural Fellow)
FRCPE	November 2010
BM	University of Oxford, Christ Church, July 1998.
PhD	The Scripps Research Institute, La Jolla, USA and University of Cambridge, 1994.
BA	(1st Class with Honours) University of Cambridge, Fitzwilliam College, 1990.

Awards and Honours (selected)

- Lister Research Prize Fellowship, Lister Institute for Preventative Medicine, 2011-2015
- GSK Prize for Research in Clinical Pharmacology, British Pharmacological Society, 2008.
- Best Emerging Medical Researcher in the UK, BUPA Foundation, 2008.
- 35th Croom Lecturer, Royal College of Physicians of Edinburgh, 2008.
- Inaugural IUTOX International Congress of Toxicology Triennial Early Toxicologist Award, 2007.

Research aims

My work aims to improve the treatment of poisoned patients in the UK and internationally by improving the availability and clinical use of effective antidotes. I perform clinical trials in South Asian district hospitals to test antidotes and community-based intervention studies to identify effective public health approaches to pesticide poisoning. I test UK relevant antidotes in minipig models of poisoning in a large animal intensive care facility that I have established in Edinburgh, and in clinical studies in the Royal Infirmary and Edinburgh Clinical Research Facilities.

Grants - current (selected)

- Pathogenesis of neuromuscular synaptic dysfunction and transmission failure in organo-phosphate toxicity 2015-2018. Co-investigator. MRC £654,269.
- Integrated and adaptive responses to toxic emergencies for rapid triage: engineering the roadmap from casualty to patient to survivor 2015-2019. Co-investigator (Leader of Work Program 3, Chief Investigator Edinburgh) EU H2020, € 11,860,723
- Large animal critical-care laboratory with 24/7 specialist anaesthesia support - a UK national resource for translational research 2015-2020. PI. Wellcome Trust, £1,247,533.

Grants - past (selected)

- Prophylactic efficacy of cyanide antidotes to cyanide exposure in minipigs 2011-13. Co-investigator. Dstl, UK, £158,467
- Prevention of deaths from late respiratory failure in organophosphorus pesticide poisoning 2011-2016. Prize winner. Lister Institute of Preventative Medicine, £200,000.
- A community trial to determine whether 'Safe Storage' reduces pesticide self-poisoning in rural Asia 2010-15. PI. Wellcome Trust, ref 090958, £1,021,368.
- Novel therapies for respiratory complications of organophosphorus pesticide poisoning in a minipig model 2010-13. PI. Wellcome Trust, ref 090886, £425,591.
- Pathophysiology and management of organophosphorus pesticide poisoning; 2009-13. Scottish Senior Clinical Research Fellowship. Chief Scientist's Office, Scotland. £390,000.
- Use of an organophosphorus hydrolase for acute organophosphorus poisoning; 2007-9. Co-investigator. National Institutes of Health, USA. US\$437,187.
- Effect of paraquat formulation change on morbidity and mortality; 2004-9. Co-Investigator. Syngenta Corporation. US\$600,000.

- Reducing deaths from pesticide poisoning - establishing a regional toxicology research centre in Sri Lanka; 2004-9. Co-writer and Associate Investigator. Wellcome Trust and National Health & Medical Research Council, Australia, ref 071669. £1,250,000.
- Acute organophosphorus pesticide poisoning in Sri Lanka - management, complications and pharmacogenetics; 2001-7. Intermediate Fellowship. Wellcome Trust, ref 063560. £699,801.

Selected journal articles (total citations Dec 2016: 7,435, h-index 42 [Scopus])

1. Lamb T, Selvarajah LR, Mohamed F, Jayamanne S, Gawarammana I, Mostafa A, Buckley NA, Roberts MS, Eddleston M. High lethality and minimal variation after acute self-poisoning with carbamate insecticides in Sri Lanka - implications for global suicide prevention. *Clinical Toxicology* 2016, 54: 624-31.
2. Hulse EJ, Davies J, Simpson AJ, Sciuto A, Eddleston M. Respiratory complications of OP nerve agent and insecticide poisoning - implications for respiratory and critical care. *American Journal of Respiratory & Critical Care Medicine* 2014, 190, 1342-1354.
3. Bateman N, Dear JW, Thanacoody HKR, Thomas SHL, Eddleston M, et al. Reducing adverse effects from intravenous acetylcysteine treatment of paracetamol poisoning: an RCT. *Lancet* 2014, 383: 697-704.
4. Eddleston M. Applied clinical pharmacology and public health in rural Asia - preventing deaths from organophosphorus pesticide and yellow oleander poisoning. *British Journal of Clinical Pharmacology* 2013, 75:1175-1188
5. Eddleston M, Street JM, Self I, Thompson A, King T, et al. A role for solvents in the toxicity of agricultural organophosphorus pesticides. *Toxicology* 2012, 294: 94-103.
6. Dawson AH*, Eddleston M*, Fahim M, Senarathna L, Gawarammana I, Bowe S, Manuweera G, Buckley NA. A prospective cohort study of the acute human lethal toxicity of agricultural pesticides - implications for improving regulation and reducing global suicide. *PLoS Medicine* 2010, 7:e1000357 (* co-first author).
7. Eddleston M, Eyer P, Worek F, Juzszczak E, Alder N, et al. Pralidoxime in acute organophosphorus insecticide poisoning - a randomised controlled trial. *PLoS Medicine* 2009, 6: e1000104.
8. Eddleston M, Gunnell D, von Meyer L, Eyer P. Relationship between blood alcohol concentration on admission and outcome in dimethoate organophosphorus self-poisoning. *British Journal of Clinical Pharmacology* 2009, 68: 916-9.
9. Wilks MF, Fernando R, Ariyananda PL, Eddleston M, Berry DJ, et al. Improvement in survival after paraquat ingestion following introduction of a new formulation in Sri Lanka. *PLOS Medicine* 2008, 5: e49.
10. Eddleston M, Buckley NA, Senarathna L, Mohammed F, Dissanayake W, et al. Multiple dose activated charcoal in acute self-poisoning - a randomised controlled trial. *Lancet* 2008, 371: 579-586.
11. Eddleston M, Buckley NA, Eyer P, Dawson AH. Medical management of acute organophosphorus pesticide poisoning. *Lancet* 2008, 371: 597-607.
12. Eddleston M, Eyer P, Worek F, Mohamed F, Senarathna L, et al. Differences between organophosphorus insecticides in human self-poisoning - a prospective cohort study. *Lancet* 2005, 366: 1452-59.
13. Eddleston M, Senarathna L, Mohammed F, Buckley N, Juzszczak E, et al. Deaths due to absence of an affordable antitoxin for plant poisoning. *Lancet* 2003, 362:1041-1044.
14. Eddleston M, Karalliedde L, Buckley N, Fernando R, Hutchinson G, et al. Pesticide poisoning in the developing world - a minimum pesticide list. *Lancet* 2002, 360:1163-1167.
15. Eddleston M. Patterns and problems of deliberate self-poisoning in the developing world. *Quarterly Journal of Medicine* 2000, 93:715-731.
16. Eddleston M, Rajapakse S, Rajakanthan K, Jayalath S, Sjostrom L, et al. Anti-digoxin Fab fragments in cardiotoxicity induced by ingestion of yellow oleander: a randomised controlled trial. *Lancet* 2000, 355:967-972.
17. Eddleston M, Sheriff MHR, Hawton K. Deliberate self-harm in Sri Lanka - an overlooked tragedy in the developing world. *British Medical Journal* 1998, 317:133-135.
18. Eddleston M, Mucke L. Molecular profile of reactive astrocytes - implications for their role in neurologic disease. *Neuroscience* 1993, 54:15-36.