

Robert Trengove

Separation Science & Metabolomics Laboratory; Murdoch University

Robert Trengove graduated from the University of Adelaide with a PhD in Physical Chemistry (under the supervision of Peter Dunlop) in 1984 and took up a Postdoc in Chemical Engineering & Chemical Technology at Imperial College (1984-6) with Sir William Wakeham. He was awarded one of the inaugural National Research Fellowships in Physics with Terry Edwards (1987-9) at Murdoch University in collaboration with Woodside Offshore Petroleum, and was a NERDDC Research Fellow from 1990-1991. During this period he established a Gas Condensate PVT Laboratory at Murdoch.

In 1992, he was appointed as a Lecturer in Chemistry at the University of Western Australia, and he started research in separation science, SFE, SFC and mass spectrometry and collaborated with Hewlett Packard's Chemical Analysis Division.

In 2000 Rob joined Murdoch University's Engineering School to manage the Australian and New Zealand GC, HPLC, GCMS, LCMS, MS interpretation, ICPMS and Preparative HPLC and LC/MS customer education program for Hewlett Packard (now Agilent Technologies) and covered Southeast Asia, India and China as well. He remained active in basic research, including Smoke Germination of Australian Native Plants, which resulted in a Science publication in 2004. Rob began collaborating with Richard Oliver and Peter Solomon on fungal metabolomics in 2003, and together they published the first Australian fungal metabolomics papers in 2006. This collaboration resulted in the establishment of a Metabolomics Australia Node at Murdoch University.

Over the last 6 years, Rob has transitioned from a teaching/research role (Forensic Toxicology & Pharmaceutical Chemistry) to a research only position within the Division of R&D. During this period he initiated collaboration on pesticide residues with Cooperative Bulk Handling (CBH) to screen grains exported from WA for and his laboratory has recently achieved ISO/EC 17025 accreditation.

The diversity of research projects in his laboratory ranges from human health and disease, including Alzheimer's disease, cancer, diabetes, kidney disease, neurodegenerative disorders and stroke, exercise science drug analysis, animal research, fungal pathogen, grain defensome, human lactation, food safety, the nexus of exposure and health, to Oil and Gas Engineering and he currently has 30 group members including 22 students. The equipment in his laboratory includes GCs, HPLCs, semi-preparative HPLC, GCMS, LCMS, GC-QQQ-MS, GCxGC-TOF-MS, LC-QQQ-MS, LC-QTOF-MS and Imaging Mass Spectrometry. GC-QTOF-MS soon.

Rob is a member of the Compound Identification Task Group and the Data Quality Task Group of the Metabolomics Society.