

# Center for Dermal Research

## Innovations in Dermatological Sciences Conference 2023



**Dr. Michael Roberts**  
**Plenary Speaker**

Michael (Mike) Roberts BPharm, MSc, PhD, DSc, MBA, Dip Tert Ed, FACP, FAHMS is Emeritus Professor in Clinical Pharmacology & Therapeutics at the University of Queensland and Emeritus Professor of Therapeutics & Pharmaceutical Science at the University of South Australia. He has more than 800 articles, 11 books and 75 book chapters in drug delivery (especially in topical and transdermal formulations), physiologically, population and clinically based pharmacokinetics and clinical toxicology. An overarching theme has been a mechanistic understanding of the role of dosing, solute chemical structure, and human physiology in determining a drug or poison biopharmaceutics, disposition, response, kinetics and safety. This work (ORCID <https://orcid.org/0000-0003-3894-5301>) is recognized by more than 36,000 citations, a H-Index of 96 (Google Scholar), as a Clarivate Highly Cited Researcher in 2021 and 2022 (based the world's top 1% by citations for Pharmacology and Toxicology in the Web of Science TM), by \$41.7m in competitive grant funding, 63 PhD graduates and by the Michael Rand Medal of for outstanding contribution to the disciplines of clinical and experimental pharmacology for the Australasian Society of Clinical and Experimental Pharmacologists and Toxicologists as well as the co-inaugural medal of Australasian Pharmaceutical Science Association.

Professionally, Mike worked for 20 years as a pharmacy academic before being funded as a Senior Principal Research Fellow by the Australian National Health & Medical Research Council for almost 30 years. During that time, he has served on the Australian Therapeutics Goods Administration Pharmaceutical Subcommittee and Population Pharmacokinetics Working Group evaluating industry submissions, serves on Food Standards of Australia and New Zealand's Scientific Nanotechnology Advisory Group consulted for the cosmetic and pharmaceutical industry, chaired a WHO committee on Dermal absorption and chemical risk assessment and acted as an independent expert in a number of patent cases, including for the US Federal Trade Commission. He also co-chaired the Gordon Research Conference on Barrier Function of Mammalian Skin at Salve Regina, USA in 2007 and has been a long serving member of Scientific Advisory Committee for the European biennial conference on Perspectives in Percutaneous Penetration. He has led/co-led a number of collaborative US FDA grants on topical drug delivery.

## **“Percutaneous absorption of sunscreens and other consumer products”**

### Abstract

Making topical consumer products as an undergraduate pharmacist now more than some 50 years ago nurtured a curiosity about their efficacy, safety and consumer acceptance that is still a passion for me today. In this plenary lecture, I will give a number of case studies of work largely based on our experiences showing that these aspects can be quantified locally and systemically by in vitro and in vivo pharmacokinetic, pharmacodynamic and sensorial studies. These case studies will include a number of sunscreen and other consumer products that have been/are now widely used along with a number of products we have been studying in collaborative studies with the FDA. I will also use the outcomes to summarize some topical product design principles that I have been found to be useful in meeting various consumer topical product needs.