

## **Abstract: Routes of Exposure–Dermal**

The skin is the largest organ in the body by area, if not by weight, and is of great interest to toxicologists. In this presentation, we will consider the anatomy of the skin and topics such as metabolism, penetration of drugs, and toxicology and pharmacology, including the relationship between dermal drug application and systemic toxicity. The presentation will have a particular focus on drug delivery and aspects of purpose (not all dermally applied drugs are intended to have an effect in the skin), formulation/dosage forms, penetration and kinetics. From a toxicological testing viewpoint, we will consider species selection (including selection of both non-rodent and rodent species in programme design strategies), and relevance to humans; study design and study performance will be discussed.