



Professor Michael J. Cork BSc MB PhD FRCP is head of Sheffield Dermatology Research; in the Dept. of Infection, Immunity & Cardiovascular Disease; Faculty of Medicine, Dentistry & Health; at The University of Sheffield, UK. He is a Consultant Dermatologist to Sheffield Children's Hospital (SCH) NHS Trust and to Sheffield Teaching Hospitals (STH) NHS Trust.

He specializes in treating children and adults with the most severe atopic dermatitis and sees patients from anywhere in the UK. At Sheffield Children's Hospital he leads an integrated atopic dermatitis – allergy – psychiatry service, designed to manage the most complex patients. He leads clinical trials of new treatments for atopic dermatitis at the Clinical Research Facilities at SCH for children and at STH for adults. He is Chief Investigator, in the UK, for many of the trials for new biologics, small molecules and topicals for atopic dermatitis.

With Dr. Simon Danby, they have created a dedicated clinical research facility for skin barrier, biomarker research. Their Skin Barrier Team have developed a research facility that has developed a unique combination of techniques to assess how topical wash products, emollients and topical/systemic pharmaceutical agents affect the integrity of the skin barrier and inflammation in normal and AD skin. These biomarkers are used to assess the safety and efficacy of treatments for atopic dermatitis. These atopic dermatitis biomarkers are also being used in experimental medicine clinical trials to stratify patients according to clinical response and safety parameters. This information can be used to determine how long a treatment should be used for, the optimum dose, the effect on some comorbidities and inform health economic evaluations.

Dr. Cork's research group also has a special interest in the prevention of atopic dermatitis, to include both mechanistic studies and large collaborative clinical trials. A major focus is on how topical wash products, emollients, oils, and water itself, affect the skin barrier and how this leads to the development of atopic dermatitis. This then informs the design of combinations of topical products that will have the optimum effect on the development and maintenance of the skin barrier.