



Prof Carsten Ehrhardt

Dr. Carsten Ehrhardt is Professor in Pharmaceutics and Biopharmaceutics at the School of Pharmacy and Pharmaceutical Sciences, Trinity College Dublin. In addition, he is holding the position of Adjunct Associate Professor in the School of Pharmacy, University of Southern California. He was elected Fellow of Trinity College Dublin in 2013. Carsten has obtained his Ph.D. degree in Biopharmaceutics from Saarland University in 2003. His research is focused on lung drug disposition, pulmonary epithelial transport and molecular origins of airways disease. He has edited 1 book and (co-)authored 91 peer-reviewed publications, 12 book chapters and more than 240 abstracts and conference proceedings. Carsten has given over 120 invited oral presentations at research institutions, international conferences and workshops. He is a member of Gesellschaft für Wehrmedizin und Wehrpharmazie (VdSO), Deutsche Pharmazeutische Gesellschaft (DPhG), American Association of Pharmaceutical Scientists (AAPS), International Society for Aerosols in Medicine (ISAM), American Physiological Society (APS) and Japanese Society for the Study of Xenobiotics (JSSX). Carsten is the proud recipient of honours and awards from DPhG, APS and Galenus Foundation. He is Section Editor of European Journal of Pharmaceutical Sciences and he actively serves on the Editorial Boards of the American Journal of Physiology - Lung Cellular and Molecular Physiology, Journal of Aerosol Medicine and Pulmonary Drug Delivery, Journal of Pharmaceutical Sciences and European Journal of Pharmaceutics and Biopharmaceutics.

Carsten Ehrhardt established an international reputation in my area of expertise, "Inhalation Drug Delivery and Pulmonary Biopharmaceutics". The aim of this field of scientific endeavour is to describe the behaviour of drug and biological molecules following their administration to the lung as inhaled aerosols. The field has become increasingly important over the last 20 years as the incidence of lung-related diseases and the morbidity due to these conditions is increasing a more than 5% per year. Assoc. Prof. Ehrhardt's research is primarily preclinical using both cell and animal models, which allows a wide array of discovery and development works. In this context, his laboratory has been credited with pioneering work on the development of primary cultures of human alveolar epithelial cells. The technical expertise of my laboratory ranges from pharmaceutics to pharmacokinetics, pharmacology, physiology, cell & molecular biology to pathology and immunocytochemistry. Recently, we started multidisciplinary, translational investigations into the role that drug transporters play in the pathogenesis of tobacco-related chronic obstructive pulmonary disease (COPD). The unique combination of cell physiological basis and pharmaceutical application has led to numerous research collaborations, nationally and internationally, as well as to a continuous stream of visitors to my laboratory.