



# INSTITUTE FOR OPHTHALMIC RESEARCH

## FORSCHUNGSGESELLSCHAFT FÜR AUGENHEILKUNDE

# OPHTHALMIC RESEARCH SYMPOSIUM

## “The blurry line between genes and environment in causing myopia”

### Professor Jeremy Guggenheim

Director of Research, School of Optometry and Vision Sciences,  
University of Cardiff, UK

For many decades, there has been debate over the relative roles of “nature vs. nurture”. This lecture will present recent findings on the genetic contribution to myopia, and the role of environmental risk factors – with a special focus on education. In searching for interactions between genes and the environment, the distinction between these different causes can become blurry. Nevertheless, evidence of widespread gene-environment interactions is emerging, and attempts to use genetic information to predict children at risk of developing myopia are beginning to show promise.

**07 March 2019 – 5pm  
Building 600, HNO-Lecture Hall, Level 2, Room 2.311  
Elfriede-Aulhorn-Straße 5**



My research is aimed at discovering the causes of short-sightedness (myopia). Approximately 1 in 3 people in the United Kingdom suffer from myopia, and the condition increases the risk of a number of serious eye disorders. I have contributed to collaborative efforts with researchers from across the world, leading to the discovery of more than a hundred genetic variants that increase susceptibility to myopia. Nobody yet knows how most of these genetic variants play a role in myopia development, nor how best they can be used to target and improve treatment.

**Research to See**  
Forschung zum Sehen

Kindly hosted by  
Prof Frank Schaeffel and Dr Marita Feldkaemper