

Vortragseinladung

Mittwoch, den 18.09.2018, 16 ct

Thema: "Stopping the Rise of Myopia in Asia"

Ort: Universität Regensburg, PT 4.0.31

Referent: Prof. Lothar Spillmann, University Hospital, Neurozentrum, Freiburg



This talk discusses the rapid rise of myopia among school-age children in East and Southeast Asia during the last 60 years. It describes the history, epidemiology, and presumed causes of myopia and its rise in Taiwan, China, and Singapore, but also in Europe and the United States.

The recent myopia boom is attributed primarily to the educational pressure in those countries, which prompts children to read for long hours, often under poor lighting and on computer screens. This severely limits the time spent outdoors and reduces exposure to sunlight and distance vision. As a consequence, the eyes grow longer, thereby focusing the optical image in front of the retina and leading to myopia. Yet, there is hope. Increasing time spent outdoors may prevent or delay the onset of the disease. This is because of light-induced retinal dopamine, which blocks the abnormal growth of the eyeball. In Taiwanese schools, it has been found that after only 1 year the incidence of new myopia cases was reduced to half when children were sent onto the schoolyard for a total of 2 hours daily. Once myopia has set in, administering low-dose atropine and orthokeratology (reshaping of the cornea) have proven successful in slowing myopia progression. Also, specially designed multifocal spectacles and soft contact lenses have recently been tested with great promise. Treatment, however, must be initiated early as the disease progresses once it has started, thereby enhancing the risk for severe visual impairment and ultimately blindness.