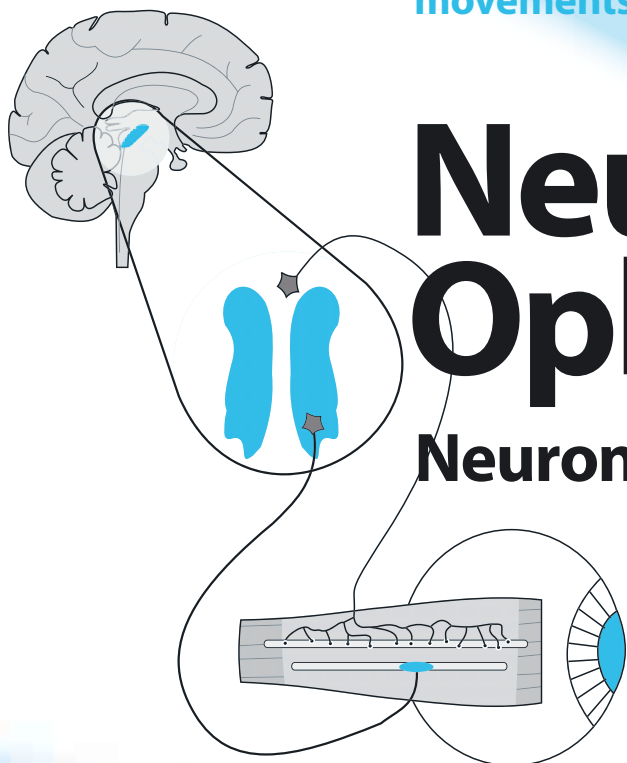


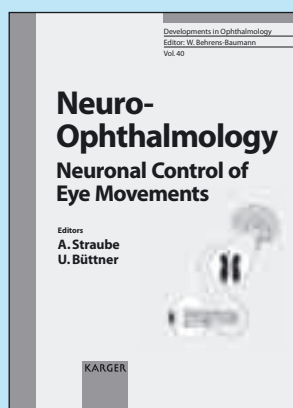
A comprehensive characterization of human eye movements in relation to brain function and dysfunction



Neuro-Ophthalmology

Neuronal Control of Eye Movements

Editors
A. Straube
U. Büttner



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All motor behavior is characterized by sensory inputs causing specific motor reactions. Because humans modify motor reactions voluntarily or through experience, this input-output relation is more complex in humans than in lower vertebrates. Eye movements provide a window on fundamental brain function, not only for topographic diagnosis of dysfunctions but also for the comprehension of normal brain function.

This book highlights basic mechanical properties of eye movements, explains the neuronal basis of the vestibular-ocular reflex, saccadic eye movements, smooth-pursuit eye movements, and vergence eye movements, and deals with their pharmacological manipulation in disorders. Since precise measurement of motor reactions is essential for understanding the oculomotor system, one chapter critically discusses current registration methods, and another one considers the possibilities and limitations of modeling it by control theory methods.

Its comprehensive characterization of eye movements and their relation to brain function makes this publication essential reading to ophthalmologists, neurologists, and clinical neuropsychologists.

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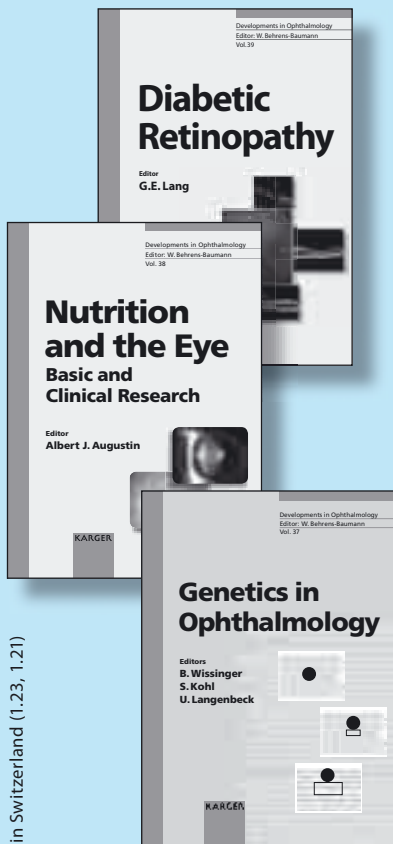
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