

# The Formation of Nerve Connections

**A consideration of neural specificity, modulation and comparable phenomena**

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**1970, viii + 288 pp., 80s. (£4.00)**

This book sets out to examine the mechanisms involved in the formation of nerve connections during neural development and regeneration.

Assuming that knowledge of neural connectivity is essential for an understanding of the working of the nervous system, the author discusses neuromuscular connections, cutaneous sensory innervation, retinotectal projections and certain intracentral connections within the visual system. Treating each topic in detail, his approach is historical, with extensive use of new material.

## **Contents**

Introduction. Neuromuscular connections. Somatic sensory connections. Retinotectal connections. Intracentral connections. Conclusions. References. Author index. Subject index.

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# The Basis of Motor Control

**Ragnar Granit**

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**November 1970, viii + 346 pp., 100s. (£5.00)**

Integrating the activity of muscles, alpha and gamma motoneurons and their leading control systems, this book begins with a presentation of the basic physiological facts pertaining to the triad of muscles, their sense organs, and motoneurons. It goes on to discuss present knowledge of the commands to alpha and gamma motoneurons from specific structures such as the respiratory centres, the motor cortex and the brain stem.

## **Contents**

Muscle. The sensory innervation of muscles and tendons. Physiological properties of passive muscle spindles. Muscle spindles activated by their own motor fibres. The effects of muscle receptors on the motoneurons. The organised discharges of motoneurons. General features of spindle control of posture and movement. Intercostal muscles and diaphragm. The sensorimotor cortex. Brain stem, spinal cord and cerebellum. Eye movements and stepping. Concluding remarks. References and author index. Subject index.

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