



# Our Wired Nerves

## The Human Nerve Connectome

**Douglas W. Zochodne**, Division of Neurology, Department of Medicine and the Neuroscience and Mental Health Institute, University of Alberta, Edmonton, Canada

**ISBN:** 978-0-12-821487-9

**VOLUME:**

**EDITION:** 1

**PUB DATE:** July 2020

**FORMAT:** Paperback

**TRIM:** 6w x 9h

**PAGES:** c. 248

**AUDIENCE:** Students studying peripheral neuropathy field, neuroscience, and central nervous system. Clinicians treating patients with peripheral neuropathies

**SHELVING CLASSIFICATIONS:**

Neuroendocrinology, Neuropathology, Neurophysiology

**BISAC CODES:** MFG, MJG, MMF, PSAN

**THEMA CLASSIFICATION:**

THEMAPSAN; THEMAJMM;

THEMAJMR; THEMAMFGM;

THEMAMJG; THEMAMKF;

THEMAMKJ

***A concise reference to the peripheral nervous system, including structure, function and links to neuropathies***

### KEY FEATURES

- Summarizes the structure and function of peripheral nerves
- Reviews disorders of the peripheral nerves
- Examines the problem of neuropathic pain
- Discusses the barriers to nerve regrowth and new strategies to reverse them
- Reviews recent discoveries in nerve research

### DESCRIPTION

The nervous system is a complex, sophisticated system that regulates and coordinates our activities. It is made up of two major divisions: the central nervous system consisting of the brain and spinal cord and the peripheral nervous system. Peripheral nerves are the essential connections between the brain, spinal cord and the body. Without nerves there is no movement or sensation. *Our Wired Nerves: The Human Nerve Connectome*, reviews the essential anatomy and physiology of the peripheral nerve. It introduces the reader to what neuropathies are, how pain arises from damaged nerves and how nerves might be regenerated, including new and exciting ideas over how to coax their regrowth. Written by Dr. Douglas Zochodne, a leading expert in the field, it will surely be an essential guidepost for trainees, researchers and clinicians alike.

### TABLE OF CONTENTS

1. Elegant wiring: Structural Beauty of the Peripheral Nervous System
2. Constantly think physiology: Structure meets function
3. Irreversible events: How nerves are injured
4. Are there nerves? How to test the peripheral nervous system
5. What are neuropathies?
6. Locked in
7. The disrupted connectome and pain
8. Hope and Change: Regrowth of nerves
9. Clinics and biology: Nerve heroes and the Peripheral Nerve Society



\*Prices are subject to change without notice. All Rights Reserved.



LIFE SCIENCES Neuroscience

[www.virtualelsevier.com](http://www.virtualelsevier.com), [www.elsevier.com](http://www.elsevier.com)