

CELLULAR SIGNAL PROCESSING SECOND EDITION

An Introduction to the Molecular Mechanisms of Signal Transduction

The second edition of *Cellular Signal Processing* expands coverage of prokaryotes and features new developments in systems biology, epigenetics, redox signaling, and small, non-coding RNA signaling. Intended for use in signal transduction courses for advanced students working in biology, biochemistry, bioinformatics, medicine, and pharmacology, this textbook offers a unifying view of cell signaling based on the concept that protein interactions act as sophisticated data processing networks that govern intracellular and extracellular communication. The book is organized by three key topics central to signal transduction: the protein network, its energy supply, and its evolution. It covers all important aspects of cell signaling—including new coverage of intrinsically disordered proteins, inflammasomes, regulated necrosis, autophagy, and optogenetics—and also highlights the clinical aspects of cell signaling in health and disease.

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 **Garland Science**
Taylor & Francis Group
www.garlandscience.com

ISBN 978-0-8153-4534-3



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