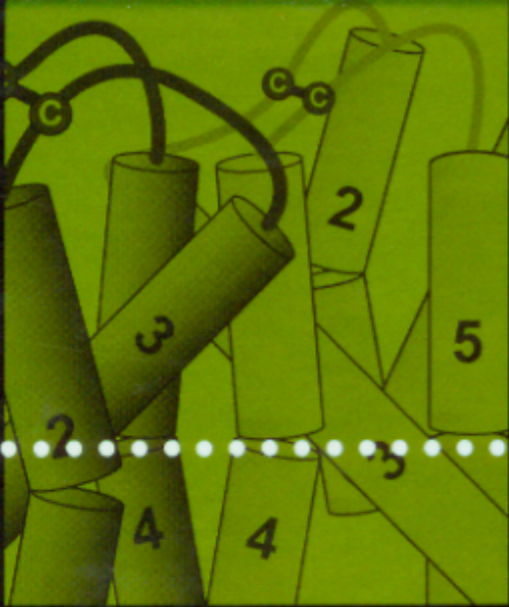




G PROTEIN-COUPLED RECEPTOR-PROTEIN INTERACTIONS

Edited by **Susan R. George and Brian F. O'Dowd**

As the largest family of cell surface receptors, G protein-coupled receptors (GPCRs) mediate the signals from a diverse group of signaling molecules, including those responsible for the senses of smell, taste, and vision in mammals, as well as neurotransmission, hormone action, immune function, and numerous physiological functions in the brain and the periphery. The study of the GPCR signaling complex and signaling pathways has rapidly increased the number of proteins shown to interact with GPCRs. *G Protein-Coupled Receptor-Protein Interactions* offers a comprehensive guide to the variety of methodologies required to analyze receptor-receptor and receptor-protein interactions.

Featuring brief annotated bibliographies, clearly formatted protocols, and useful diagrams and illustrations, this highly accessible text covers a wide range of up-to-the-minute principles and technology, as well as protocols for methods currently applied to the analysis of receptor-protein interactions. Each chapter is written by an acknowledged expert, and each topic is clarified through a critical overview of key concepts.

Topics include:

- Bioluminescent resonance energy transfer
- Fluorescent resonance energy transfer
- Expression cloning
- Photoaffinity labeling
- Reconstitution
- Co-immunoprecipitation
- PDZ mutational analysis
- Confocal microscopy
- Dominant negative effect

Taken together, *G Protein-Coupled Receptor-Protein Interactions* will not only prove invaluable to scientists and academicians researching GPCR signal transduction systems, but will appeal to pharmaceutical industry professionals, since the GPCR family of proteins are targeted by over half of currently used therapeutic agents.

SUSAN R. GEORGE, PhD, MD, FRCP, FACP, is Professor in the Departments of Medicine and Pharmacology at the University of Toronto and a Section Head of Molecular Pharmacology at the Centre for Addiction and Mental Health, Toronto.

BRIAN F. O'DOWD, PhD, is Professor in the Department of Pharmacology at the University of Toronto and a Section Head of Molecular Pharmacology at the Centre for Addiction and Mental Health, Toronto.

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