Designed to connect research on cell mechanisms with the drug discovery process, Therapeutic Targets: Modulation, Inhibition, and Activation introduces readers to a range of new concepts and novel approaches to drug screening and therapeutic drug targeting to help inform future avenues of drug research.

Highly topical, this accessible edited volume features chapters contributed by respected experts from around the globe.

The book helps postgraduate students and professional scientists working in academia and industry understand the molecular mechanisms of pharmacology, current pharmacological knowledge, and future perspectives in drug discovery, focusing on important biochemical protein targets and drug targeting strategies for specific diseases. Examining the pharmacology of therapeutically undefined targets and their potential applications, it includes chapters on traditional therapeutic targets, including enzymes (phosphodiesterases and proteases), ion channels, and G protein-coupled receptors, as well as more recently identified avenues of exploration, such as lipids, nuclear receptors, gene promoters, and more.

Since different diseases require different targeting techniques, the book also includes dedicated chapters on strategies for investigating Alzheimer’s, diabetes, pain, and inflammation treatments. Concluding with a cross-sectional look at new approaches in drug screening, Therapeutic Targets is an invaluable resource for understanding where the next generation of drugs are likely to emerge.