# DESCRIPTION

Discussing recent findings, up-to-date research, and novel strategies, the book integrates perspectives from pharmacology, toxicology, and biochemistry to illustrate the potential of lysosomes in drug discovery and development.

- Explores basic principles and properties of lysosomes that allow them to act as regulators of cell metabolism, therapeutic targets, and sites for activation of drug conjugates
- Discusses the role of lysosomes in metabolism, drug targeting, apoptosis, cancer, aging, inflammation, autophagy, metabolism, toxicity, and membrane repair
- Introduces new pathways in therapeutic development and new mechanisms in drug development

# ABOUT THE AUTHOR

**Frederick R. Maxfield, PhD**, is Professor and Chair of the Department of Biochemistry at Weill Cornell Medical College. He has used digital imaging microscopy to characterize pH changes in endocytic organelles, to measure the kinetics of transport of molecules among organelles, and to identify new endocytic organelles such as the endocytic recycling compartment. Dr. Maxfield has published extensively on trafficking of lipids and cholesterol.
James M. Willard, PhD, has been a member of the Phospholipidosis Working Group at the Center for Drug Evaluation and Research (CDER) of the Food and Drug Administration since 2005 and Co-Chair of the group since 2011.

Shuyan Lu, MSc, has been an Investigative Toxicologist of Drug Research and Development at Pfizer for over 10 years. She studies the role of lysosomal pathways and physical chemical properties of compounds in drug-induced toxicity.

To purchase this product, please visit https://www.wiley.com/en-us/9781118978313