

THE FIRST MAJOR REFERENCE AT THE INTERFACE OF CHEMISTRY, BIOLOGY, AND MEDICINE

Chemical biology is a rapidly developing field that uses the principles, tools, and language of chemistry to answer important questions in the life sciences. It has enabled researchers to gather critical information about the molecular biology of the cell and is the fundamental science of drug discovery, playing a key role in the development of novel agents for the prevention, diagnosis, and treatment of disease.

Now students and researchers across the range of disciplines that use chemical biology techniques have a single resource that encapsulates what is known in the field. It is an excellent place to begin any chemical biology investigation. Major topics addressed in the encyclopedia include:

- Applications of chemical biology
- Biomolecules within the cell
- Chemical views of biology
- Chemistry of biological processes and systems
- Synthetic molecules as tools for chemical biology
- Technologies and techniques in chemical biology

Some 300 articles range from pure basic research to areas that have immediate applications in fields such as drug discovery, sensor technology, and catalysis. Novices in the field can turn to articles that introduce them to the basics, whereas experienced researchers have access to articles exploring the cutting edge of the science. Each article ends with a list of references to facilitate further investigation.

With contributions from leading researchers and pioneers in the field, the *Wiley Encyclopedia of Chemical Biology* builds on Wiley's unparalleled reputation for helping students and researchers understand the crucial role of chemistry and chemical techniques in the life sciences.

TADHG P. BEGLEY is Professor of Chemistry and Chemical Biology at Cornell University. He is a leading figure in the chemical biology community, and the recipient of a number of awards for teaching and research, including the Merck Faculty Development Award and the Camille and Henry Dreyfus Teacher-Scholar Award.

*Cover Images: DNA Structure, ©Doug Struthers/Stone/Getty Images
Inset 1: Photodisc/Getty Images
Inset 2: ©Science VU/Dr. Sidney Fox/Visuals Unlimited
Inset 3: ©Dr. Arthur Leisk/Photo Researchers, Inc.*

Subscribe to our free Chemistry eNewsletter at
wiley.com/enewsletters

Visit wiley.com/chemistry

 **WILEY**
wiley.com

ISBN 978-0-471-75477-0 (4-Volume Set)

