Live Cell Imaging

A Laboratory Manual

Recent advances in imaging technology, combined with gene and protein manipulation methods, are revealing striking features of cellular architecture and numerous dynamic biological processes at work in living cells and organisms.

This manual presents a comprehensive guide to the technical aspects of live cell imaging, including specific examples of the technologies' application to single cells in culture, to individual tissues, and to whole animals. The techniques are illustrated with representative images in each chapter and through movies on the accompanying DVD.

This book is an essential resource for research groups in molecular cell biology and developmental biology. Although presented primarily as a laboratory manual, it includes introductory and background material suitable for use as a textbook in advanced courses.