



# Imaging in Neuroscience and Development: A Laboratory Manual

*By Rafael Yuste, Arthur Konnerth*

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**Imaging in Neuroscience and Development: A Laboratory Manual** By Rafael Yuste, Arthur Konnerth

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## **Editorial Review**

### **Review**

The book originated at the Cold Spring Harbor summer course on imaging of neuronal structure and function of the nervous system. Course directors Yuste and Konnerth did a great service to the neuroscience community by compiling a manual that contains basic imaging principles as well as a long list of protocols. Though the concepts underlying imaging techniques are familiar to most people using a microscope, the devil is in the details. Why isn't my dye going into solution? How can I prevent my sample from bleaching faster than I can image? What camera do I need? It is in the answers to these sorts of questions where this manual succeeds by providing a practical guide for researchers and students who want to pursue imaging experiments. Nature Neuroscience Directed towards students and researchers whose work involves imaging in neuroscience, developmental biology, and cell biology, this new edition is designed for use at the setup or bench. The emphasis is on the practical techniques and procedures that are used to optically image a variety of preparations. The text is augmented with an extensive section on microscopy principles and instrumentation, which could serve the researcher who works in biological imaging. Since the majority of the chapters are composed of protocols, techniques, and detailed procedures, I think that this book can best be used as a laboratory manual to accompany an undergraduate or graduate course on optical imaging with emphasis on neurobiology and developmental biology. ...the production quality is very good; the figures (many in color) and line drawings are very sharp, and they augment the text. The book includes a comprehensive index as well. Journal of Biomedical Optics The book offers a broad coverage of many of the most important aspects of imaging technologies widely used in the neuroscience and developmental biology practice and that have revolutionized research in many areas of biology. The editors have made sincere efforts to diminish the gap between theoretical knowledge and practical setup of experiments by preparing this manual with wider objectives and indexes with focused application or experiment in mind. Given examples expose the strengths and weaknesses of the method for a given situation, aimed at helping readers choose appropriate protocols and utilize them for their own laboratory conditions... The book comes at an appropriate time since it aims at providing professional technical education by, as editors claim themselves, 'teaching the investigators often tricky art of applying the novel microscopy approaches to problems in cellular and developmental neurobiology'. Many manuals have been written on imaging in neuroscience, but few have applied it across such a wide swathe of field. The book is well produced and errors are minor. I recommend this work as a major contribution for advanced undergraduates, postgraduates, basic neuroscientists and clinicians interested in imaging in neuroscience and developmental or cell biology. Journal of Chemical Neuroanatomy --Cold Spring Harbor

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