

# Methods in ENZYMOLOGY

Volume 386
Imaging in Biological Research,
Part B

Edited by

P. Michael Conn

# Methods in Enzymology

# Volume 386 IMAGING IN BIOLOGICAL RESEARCH Part B

# **METHODS IN ENZYMOLOGY**

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### Methods in Enzymology

Volume 386

# Imaging in Biological Research

Part B

### **EDITED BY**

P. Michael Conn

OREGON NATIONAL PRIMATE RESEARCH CENTER
OREGON HEALTH AND SCIENCE UNIVERSITY
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### **Preface**

As these volumes were being completed, American Paul C. Lauterbur and Briton Sir Peter Mansfield won the 2003 Nobel Prize for medicine for discoveries leading to the development of MRI.

The Washington Post story on October 6, 2003 announced the accolade, noting: "Magnetic resonance imaging, or MRI, has become a routine method for medical diagnosis and treatment. It is used to examine almost all organs without need for surgery, but is especially valuable for detailed examination of the brain and spinal cord." Unfortunately, the article overlooked the growing usefulness of this technique in basic research.

MRI, along with other imaging methods, has made it possible to glance inside the living system. For patients, this may obviate the need for surgery; for researchers, it becomes a noninvasive method that enables the model systems to continue "doing what they do" without being disturbed. The value and potential of these techniques is enormous, and that is why these once clinical methods are finding their way to the laboratory.

Authors have been selected based on research contributions in the area about which they have written and based on their ability to describe their methodological contributions in a clear and reproducible way. They have been encouraged to make use of graphics and comparisons to other methods, and to provide tricks and approaches that make it possible to adapt methods to other systems.

The editor wants to express appreciation to the contributors for providing their contributions in a timely fashion, to the senior editors for guidance, and to the staff at Academic Press for helpful input.

P. MICHAEL CONN

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