

Small Animal Imaging: Basics and Practical Guide

From Springer



Small Animal Imaging: Basics and Practical Guide From Springer

Small animal imaging has been recognized as an important tool in preclinical research. Nevertheless, the results of non-invasive imaging are often disappointing owing to choice of a suboptimal imaging modality and/or shortcomings in study design, experimental setup, and data evaluation. This textbook is a practical guide to the use of non-invasive imaging in preclinical research. Each of the available imaging modalities is discussed in detail, with the assistance of numerous informative illustrations. In addition, many useful hints are provided on the installation of a small animal unit, study planning, animal handling, and the cost-effective performance of small animal imaging. Cross-calibration methods, data postprocessing, and special imaging applications are also considered in depth. This is the first book to cover all the practical basics in small animal imaging, and it will prove an invaluable aid for researchers, students, and technicians.



Small Animal Imaging: Basics and Practical Guide

From Springer

Small Animal Imaging: Basics and Practical Guide From Springer

Small animal imaging has been recognized as an important tool in preclinical research. Nevertheless, the results of non-invasive imaging are often disappointing owing to choice of a suboptimal imaging modality and/or shortcomings in study design, experimental setup, and data evaluation. This textbook is a practical guide to the use of non-invasive imaging in preclinical research. Each of the available imaging modalities is discussed in detail, with the assistance of numerous informative illustrations. In addition, many useful hints are provided on the installation of a small animal unit, study planning, animal handling, and the cost-effective performance of small animal imaging. Cross-calibration methods, data postprocessing, and special imaging applications are also considered in depth. This is the first book to cover all the practical basics in small animal imaging, and it will prove an invaluable aid for researchers, students, and technicians.

Small Animal Imaging: Basics and Practical Guide From Springer Bibliography

• Sales Rank: #4115619 in eBooks

Published on: 2010-11-29Released on: 2010-11-29Format: Kindle eBook



Read Online Small Animal Imaging: Basics and Practical Guide ...pdf

Download and Read Free Online Small Animal Imaging: Basics and Practical Guide From Springer

Editorial Review

Review

From the reviews:

"This text is a guide to implement small animal imaging in routine research. ... this book of significant value to a large series of readers, including both expert nuclear physicians and radiologists and residents involved in diagnostic imaging, for whom it can serve as a reference book in daily work or as cultural background. The publication may also be of great interest for all scientists working in basic and translational research." (Adriano Anzivino and Luigi Mansi, European Journal of Nuclear Medicine and Molecular Imaging, Vol. 39, 2012)

From the Back Cover

Small animal imaging has been recognized as an important tool in preclinical research. Nevertheless, the results of non-invasive imaging are often disappointing owing to choice of a suboptimal imaging modality and/or shortcomings in study design, experimental setup, and data evaluation. This textbook is a practical guide to the use of non-invasive imaging in preclinical research. Each of the available imaging modalities is discussed in detail, with the assistance of numerous informative illustrations. In addition, many useful hints are provided on the installation of a small animal unit, study planning, animal handling, and the cost-effective performance of small animal imaging. Cross-calibration methods, data postprocessing, and special imaging applications are also considered in depth. This is the first book to cover all the practical basics in small animal imaging, and it will prove an invaluable aid for researchers, students, and technicians.

About the Author

Since 2008 Professor Dr. Fabian Kiessling is leading the Institute of Experimental Molecular Imaging at the Helmholtz Center of Applied Engineering of the RWTH-University in Aachen. Aim of his research is the development of novel diagnostic probes and imaging tools for a disease specific diagnosis and therapy monitoring. In this context, the main focus is on the investigation of angiogenesis related processes. Fabian Kiessling studied Medicine and did his thesis at the University in Heidelberg. Until the end of 2002, he worked as resident in the Department of Radiology at the German Cancer Research Center (DKFZ) in Heidelberg. In 2003 he changed to the Department of Medical Physics in Radiology of the DKFZ as leader of the Molecular Imaging group. In parallel he did his clinical training at different Departments of the University of Heidelberg and received the board certification as Radiologist in 2007. Fabian Kiessling did his habilitation in experimental radiology in 2006. He is author of more than 80 publications, received several research awards, among those the "Emil Salzer Price for Cancer Research" and the "Richtzenhain Price". Shortly after his change to the RWTH-Aachen University he founded the invivoContrast GmbH together with Professor Matthias Bräutigam, which is distributing diagnostic probes for the preclinical market. Prof. Dr. Bernd Pichler is Head of the Laboratory for Preclinical Imaging and Imaging Technology of the Werner Siemens-Foundation at the Department of Radiology, University of Tübingen, Germany. Dr. Pichler studied electrical engineering with a focus on biomedical engineering and cybernetics at the Technical University of Munich. He finished his diploma thesis in 1997 at the Max-Planck-Institute for Physics, Munich and the Department of Nuclear Medicine, Technical University of Munich, in the field of detector development for small animal positron emission tomography. He earned his PhD in physics at the Department of Nuclear Medicine, Technical University of Munich, in 2002 and subsequently worked as Assistant Biomedical Research Engineer (Assistant Research Professor) in the laboratory of Prof. Dr. Simon Cherry at the Department of Biomedical Engineering, University of California, Davis, USA, for two years. Since 2005 he is head of the Laboratory for Preclinical Imaging and Imaging Technology at the Department of Radiology, University of Tübingen, and received the venia legendi (habilitation in experimental radiology) from the Eberhard-Karls-University of Tübingen in 2007. In December 2007, Dr. Pichler accepted the call of the University of Tübingen for a full (W3) professorship in "Preclinical Imaging and Imaging Technology". Since October 2008, Prof. Pichler is also Head of the Radiopharmacy at the Department of Radiology.

Users Review

From reader reviews:

Elvia Wirtz:

Here thing why this specific Small Animal Imaging: Basics and Practical Guide are different and dependable to be yours. First of all studying a book is good however it depends in the content from it which is the content is as delightful as food or not. Small Animal Imaging: Basics and Practical Guide giving you information deeper since different ways, you can find any publication out there but there is no reserve that similar with Small Animal Imaging: Basics and Practical Guide. It gives you thrill examining journey, its open up your personal eyes about the thing in which happened in the world which is perhaps can be happened around you. You can bring everywhere like in recreation area, café, or even in your approach home by train. When you are having difficulties in bringing the imprinted book maybe the form of Small Animal Imaging: Basics and Practical Guide in e-book can be your alternate.

Silvia McElroy:

Hey guys, do you would like to finds a new book to study? May be the book with the headline Small Animal Imaging: Basics and Practical Guide suitable to you? Often the book was written by well known writer in this era. Often the book untitled Small Animal Imaging: Basics and Practical Guideis one of several books that will everyone read now. This specific book was inspired many people in the world. When you read this guide you will enter the new dimension that you ever know previous to. The author explained their idea in the simple way, and so all of people can easily to comprehend the core of this e-book. This book will give you a wide range of information about this world now. So you can see the represented of the world in this book.

Ettie Hardcastle:

The e-book untitled Small Animal Imaging: Basics and Practical Guide is the publication that recommended to you you just read. You can see the quality of the reserve content that will be shown to you actually. The language that publisher use to explained their way of doing something is easily to understand. The copy writer was did a lot of analysis when write the book, therefore the information that they share to your account is absolutely accurate. You also could possibly get the e-book of Small Animal Imaging: Basics and Practical Guide from the publisher to make you a lot more enjoy free time.

John Merritt:

The particular book Small Animal Imaging: Basics and Practical Guide has a lot of knowledge on it. So when you read this book you can get a lot of gain. The book was compiled by the very famous author. Tom makes some research ahead of write this book. This kind of book very easy to read you may get the point easily after looking over this book.

Download and Read Online Small Animal Imaging: Basics and Practical Guide From Springer #HZQK2O4PL65

Read Small Animal Imaging: Basics and Practical Guide From Springer for online ebook

Small Animal Imaging: Basics and Practical Guide From Springer Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Small Animal Imaging: Basics and Practical Guide From Springer books to read online.

Online Small Animal Imaging: Basics and Practical Guide From Springer ebook PDF download

Small Animal Imaging: Basics and Practical Guide From Springer Doc

Small Animal Imaging: Basics and Practical Guide From Springer Mobipocket

Small Animal Imaging: Basics and Practical Guide From Springer EPub