



Special Issue Reprint

Refinements to Animal Models for Biomedical Research

www.mdpi.com/books/reprint/3570

Edited by Gabrielle Musk

ISBN 978-3-0365-0332-5 (Hardback) ISBN 978-3-0365-0333-2 (PDF)

There is some talk about an antibiotic Armageddon, wherein untreatable post-operative infections and similarly untreatable complications after chemotherapy will occur. The now famous "O'Neill Report" suggests that, by 2050, more people could die from resistant bacterial infections than from cancer. We are still learning about all the subtle drivers of antibiotic resistance, realizing that we need a single "whole health" coordinated policy. We ingest what we sometimes feed to animals, yet there does not seem to be any new classes of antibiotics on the horizon. Maybe there is something that has been around forever that could could to our rescue: bacteriophages. Nevertheless, we have to do things differently. We must use antibiotics appropriately and for the correct indication, duration, and dosage with good practice and stewardship. While by no means comprehensive, this book covers many topics regarding antibiotic stewardship. It also addresses older antibiotics, new combinations, and even new agents. Last but not least, this book features two excellent articles on bacteriophages. Refinements to animal models used in research for either human or animal benefit must be an ongoing aim for anyone working in this context, whether it be as an animal carrier, an animal user, a veterinarian, or an official. Unfortunately, the details of refinements are often overlooked in publications describing the research outcomes. This book includes manuscripts published in the Animals Special Issue "Refinements to Animal Models for Biomedical Research". In this contemporary resource, we included 12 peerreviewed papers that cover a range of approaches to the concept of refinement.



Order Your Print Copy You can order print copies at www.mdpi.com/books/reprint/3570



MDPINBOOKS Publishing Open Access Books & Series

MDPI Books offers quality open access book publishing to promote the exchange of ideas and knowledge in a globalized world. MDPI Books encompasses all the benefits of open access – high availability and visibility, as well as wide and rapid dissemination. With MDPI Books, you can complement the digital version of your work with a high quality printed counterpart.



Open Access

Your scholarly work is accessible worldwide without any restrictions. All authors retain the copyright for their work distributed under the terms of the Creative Commons Attribution License.



Author Focus

Authors and editors profit from MDPI's over two decades of experience in open access publishing, our customized personal support throughout the entire publication process, and competitive processing charges as well as unique contributor discounts on book purchases.



High Quality & Rapid Publication

MDPI ensures a thorough review for all published items and provides a fast publication procedure. State-of-the-art research and time-sensitive topics are released with a minimum amount of delay.



ᆔ

High Visibility

Due to our global network and well-known channel partners, we ensure maximum visibility and broad dissemination. Title information of books is sent to international indexing databases and archives, such as the Directory of Open Access Books (DOAB), and the Verzeichnis Lieferbarer Bücher (VLB).

Print on Demand and Multiple Formats

MDPI Books are available for purchase and to read online at any time. Our print-on-demand service offers a sustainable, cost-effective and fast way to publish MDPI Books printed versions.

MDPI AG Grosspeteranlage 5 4052 Basel Switzerland Tel: +41 61 683 77 34 www.mdpi.com/books books@mdpi.com

