

Cambridge University Press

978-1-107-64267-6 - Mood Disorders and Antidepressants: Stahl's Essential Psychopharmacology: Fourth Edition

Stephen M. Stahl and Nancy Muntner

Frontmatter

[More information](#)

Mood Disorders and Antidepressants

With the fully revised fourth edition of *Essential Psychopharmacology*, Dr Stahl returns to the essential roots of what it means to become a neurobiologically empowered psychopharmacologist, expertly guided in the selection and combination of treatments for individual patients in practice.

This remains the essential text for all students and professionals in mental health seeking to understand and utilize current therapeutics, and to anticipate the future for novel medications.

This special edition, featuring the extracted chapters on mood disorders and antidepressants, provides a readable digest on these specific issues for experts and novices alike.

Stephen M. Stahl is Adjunct Professor of Psychiatry at the University of California, San Diego and Honorary Visiting Senior Fellow in Psychiatry at the University of Cambridge, UK. He has conducted various research projects awarded by the National Institute of Mental Health, Veterans Affairs, and the pharmaceutical industry. Author of more than 500 articles and chapters, Dr Stahl is also the author of the bestsellers *Stahl's Essential Psychopharmacology* and *The Prescriber's Guide*.

Cambridge University Press

978-1-107-64267-6 - Mood Disorders and Antidepressants: Stahl's Essential Psychopharmacology: Fourth Edition

Stephen M. Stahl and Nancy Muntner

Frontmatter

[More information](#)

Cambridge University Press

978-1-107-64267-6 - Mood Disorders and Antidepressants: Stahl's Essential Psychopharmacology: Fourth Edition

Stephen M. Stahl and Nancy Muntner

Frontmatter

[More information](#)

Mood Disorders and Antidepressants

Stahl's Essential Psychopharmacology

Fourth Edition

Stephen M. Stahl

Adjunct Professor of Psychiatry, University of California at San Diego, California, USA

Honorary Visiting Senior Fellow in Psychiatry, University of Cambridge, Cambridge, UK

With illustrations by

Nancy Muntner



CAMBRIDGE
UNIVERSITY PRESS

Cambridge University Press
978-1-107-64267-6 - Mood Disorders and Antidepressants: Stahl's Essential Psychopharmacology: Fourth Edition
Stephen M. Stahl and Nancy Muntner
Frontmatter
[More information](#)

CAMBRIDGE UNIVERSITY PRESS

University Printing House, Cambridge CB2 8BS, United Kingdom

Published in the United States of America by Cambridge University Press, New York

Cambridge University Press is part of the University of Cambridge.

It furthers the University's mission by disseminating knowledge in the pursuit of education, learning and research at the highest international levels of excellence.

www.cambridge.org

Information on this title: www.cambridge.org/9781107642676

© Stephen M. Stahl, 1996, 2000, 2008, 2013

This publication is in copyright. Subject to statutory exception and to the provisions of relevant collective licensing agreements, no reproduction of any part may take place without the written permission of Cambridge University Press.

First edition published 1996

Second edition published 2000

Third edition published 2008

Fourth edition published 2013

Printed in Spain by Graphos SA, Arte sobre papel

A catalogue record for this publication is available from the British Library

ISBN 978-1-107-64267-6

Cambridge University Press has no responsibility for the persistence or accuracy of URLs for external or third-party internet websites referred to in this publication, and does not guarantee that any content on such websites is, or will remain, accurate or appropriate.

Every effort has been made in preparing this book to provide accurate and up-to-date information which is in accord with accepted standards and practice at the time of publication. Although case histories are drawn from actual cases, every effort has been made to disguise the identities of the individuals involved. Nevertheless, the authors, editors and publishers can make no warranties that the information contained herein is totally free from error, not least because clinical standards are constantly changing through research and regulation. The authors, editors, and publishers therefore disclaim all liability for direct or consequential damages resulting from the use of material contained in this book. Readers are strongly advised to pay careful attention to information provided by the manufacturer of any drugs or equipment that they plan to use.

Cambridge University Press

978-1-107-64267-6 - Mood Disorders and Antidepressants: Stahl's Essential Psychopharmacology: Fourth Edition

Stephen M. Stahl and Nancy Muntner

Frontmatter

[More information](#)

Contents

Preface vii

6 **Mood Disorders** 1

7 **Antidepressants** 48

Index 134

This book comprises chapters taken from *Stahl's Essential Psychopharmacology, Fourth Edition* (2013)
For further information: www.cambridge.org/9781107025981

Cambridge University Press

978-1-107-64267-6 - Mood Disorders and Antidepressants: Stahl's Essential Psychopharmacology: Fourth Edition

Stephen M. Stahl and Nancy Muntner

Frontmatter

[More information](#)

In memory of Daniel X. Freedman, mentor, colleague, and scientific father.

To Cindy, Jennifer and Victoria

Preface

For this Mood and Antidepressants edition from the new fourth edition of *Stahl's Essential Psychopharmacology* you will notice there is a new look and feel. With a new layout, displayed over two columns, and an increased page size we have eliminated redundancies across chapters, been able to add significant new material and yet decrease the overall size of the book.

Highlights of what has been added or changed since the third edition of the textbook and the coverage of mood and antidepressants include:

- The **mood chapter** has expanded coverage of
 - stress
 - neurocircuitry
 - genetics
- The **antidepressant chapter** has:
 - new discussion and illustrations on circadian rhythms
 - discussion of the roles of neurotransmitter receptors in the mechanisms of actions of some antidepressants
 - melatonin receptors
 - 5HT1A receptors
 - 5HT2C receptors
 - 5HT3 receptors
 - 5HT7 receptors
 - NMDA glutamate receptors
 - inclusion of several new antidepressants
 - agomelatine/Valdoxan
 - vilazodone/Viibryd
 - vortioxetine (LuAA21004)
 - ketamine (rapid onset for treatment resistance)

One of the major themes emphasized in this new fourth edition is the notion of **symptom endophenotypes**, or dimensions of psychopathology that cut across numerous syndromes. This is the future of

psychiatry, namely the matching of symptom endophenotypes to hypothetically malfunctioning brain circuits, regulated by genes, the environment and neurotransmitters. Hypothetically, inefficiency of information processing in these brain circuits creates symptom expression in various psychiatric disorders that can be changed with psychopharmacologic agents. Even the new DSM 5 [1] recognizes this concept and calls it Research Domain Criteria (or RDoC). Each chapter in this fourth edition discusses “symptoms and circuits” and how to exploit domains of psychopathology both to become a neurobiologically empowered psychopharmacologist, and to select and combine treatments for individual patients in psychopharmacology practice.

What has not changed in this new fourth edition is the **didactic style** of the first three editions: namely, this text attempts to present the fundamentals of psychopharmacology in **simplified and readily readable form**. We emphasize current formulations of disease mechanisms and also drug mechanisms. As in previous editions, the text is not extensively referenced to original papers, but rather to textbooks and reviews and a few selected original papers, with only a limited reading list for each chapter, but preparing the reader to consult more sophisticated textbooks as well as the professional literature.

The organization of information continues to apply the principles of **programmed learning** for the reader, namely repetition and interaction, which has been shown to enhance retention. Therefore, it is suggested that novices first approach this text by going through it from beginning to end by reviewing only the color graphics and the legends for these graphics. Virtually everything covered in the text is also covered in the graphics and icons. Once having gone through all the color graphics in these chapters, it is recommended that the reader then go back to the beginning of the book, and read the entire text, reviewing the graphics at the same time. After the

Cambridge University Press

978-1-107-64267-6 - Mood Disorders and Antidepressants: Stahl's Essential Psychopharmacology: Fourth Edition

Stephen M. Stahl and Nancy Muntner

Frontmatter

[More information](#)

Preface

text has been read, the entire book can be rapidly reviewed again merely by referring to the various color graphics in the book. This mechanism of using the materials will create a certain amount of programmed learning by incorporating the elements of repetition, as well as interaction with visual learning through graphics. Hopefully, the visual concepts learned via graphics will reinforce abstract concepts learned from the written text, especially for those of you who are primarily “visual learners,” (i.e., those who retain information better from visualizing concepts than from reading about them). For those of you who are already familiar with psychopharmacology, this book should provide easy reading from beginning to end. Going back and forth between the text and the graphics should provide interaction. Following review of the complete text, it should be simple to review the entire book by going through the graphics once again.

Expansion of *Essential Psychopharmacology* Books

The fourth edition of *Essential Psychopharmacology* is the flagship, but not the entire fleet, as the *Essential Psychopharmacology* series has expanded now to an entire suite of products for the interested reader. For those of you interested in specific prescribing information, there are now three prescriber's guides:

- For psychotropic drugs, *Essential Psychopharmacology: The Prescriber's Guide*
- For neurology drugs, *Essential Neuropharmacology: The Prescriber's Guide*.
- For pain drugs: *Essential Pain Pharmacology: The Prescriber's Guide*

For those interested in how the textbook and prescriber's guides get applied in clinical practice there is a book covering 40 cases from my own clinical practice

- *Case Studies: Stahl's Essential Psychopharmacology*

For those teachers and students wanting to assess objectively their state of expertise, to pursue maintenance of certification credits for board recertification in psychiatry in the US, and for background on instructional design and how to teach there are two books:

- *Stahl's Self Assessment Examination in Psychiatry: Multiple Choice Questions for Clinicians*
- *Best Practices in Medical Teaching*

For those interested in expanded visual coverage of specialty topics in psychopharmacology, there is the *Stahl's Illustrated* series:

- *Antidepressants*
- *Antipsychotics 2nd edition: Treating Psychosis, Mania and Depression*
- *Mood Stabilizers*
- *Anxiety, Stress and PTSD*
- *Attention Deficit Hyperactivity Disorder*
- *Chronic Pain and Fibromyalgia*
- *Substance Abuse and Impulsive Disorders*

Finally, there is an ever-growing edited series of sub-specialty topics:

- *Next Generation Antidepressants*
- *Essential Evidence-Based Psychopharmacology 2nd edition*
- *Essential CNS Drug Development*.

Essential Psychopharmacology Online

Now, you also have the option of accessing all these books plus additional features online by going to *Essential Psychopharmacology Online* at www.stahlonline.org. We are proud to announce the continuing update of this new Website which allows you to search online within the entire *Essential Psychopharmacology* suite of products. With publication of the fourth edition, two new features will become available on the website:

- downloadable slides of all the figures in the book
- narrated, animations of several figures in the textbook, hyperlinked to the online version of the book, playable with a click

In addition, www.stahlonline.org is now linked to:

- our new journal *CNS Spectrums*, www.journals.cambridge.org/CNS, of which I am the new editor-in-chief, and which is now the official journal of the Neuroscience Education Institute (NEI), free online to NEI members. This journal now features readable and illustrated reviews of current topics in psychiatry, mental health, neurology and the neurosciences as well as psychopharmacology
- the NEI website, www.neiglobal.com

Cambridge University Press

978-1-107-64267-6 - Mood Disorders and Antidepressants: Stahl's Essential Psychopharmacology: Fourth Edition

Stephen M. Stahl and Nancy Muntner

Frontmatter

[More information](#)

Preface

- for CME credits for reading the books, the journal and for completing numerous additional programs both online and live
 - for access to the live course and playback encore features from the annual NEI Psychopharmacology Congress
 - for access to the CME accredited NEI Master Psychopharmacology Program, an online fellowship with certification
- plans for expansion to a Cambridge University Health Partners co-accredited online Masterclass and Certificate in Psychopharmacology, based upon live programs held on campus in Cambridge and taught by University of Cambridge faculty,

including myself having joined the faculty there as an Honorary Visiting Senior Fellow

Hopefully the reader can appreciate that this is an incredibly exciting time for the fields of neuroscience and mental health, creating fascinating opportunities for clinicians to utilize current therapeutics and to anticipate future medications that are likely to transform the field of psychopharmacology. Best wishes for your first step on this fascinating journey.

Stephen M. Stahl M.D, Ph.D.

1. Diagnostic and Statistical Manual of the American Psychiatric Association, in its fifth edition, new fifth edition and Research Domain Criteria (RDoC)