Stahl’s Illustrated
Chronic Pain and Fibromyalgia

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These books are designed to be fun. All concepts are illustrated by full-color images. The text can be used as a supplement to figures, images, and tables. The visual learner will find that this book makes psychopharmacology concepts easy to master, while the non-visual learner may enjoy a shortened text version of complex psychopharmacology concepts. Each chapter builds upon previous chapters, synthesizing information from basic biology and diagnostics to building treatment plans and dealing with complications and comorbidities.

Novices may want to approach this Pocketbook by first looking through all the graphics, gaining a feel for the visual vocabulary on which our psychopharmacology concepts rely. After this once-over glance, we suggest going back through the book to incorporate the images with text from figure legends. Learning from visual concepts and textual supplements should reinforce one another, providing you with solid conceptual understanding at each step along the way.

Readers more familiar with these topics should find that going back and forth between images and text provides an interaction with which to vividly conceptualize complex psychopharmacology. You may find yourself using this book frequently to refresh your psychopharmacological knowledge. And you will hopefully refer your colleagues to this desk reference.

This Pocketbook is intended as a conceptual overview of different topics; we provide you with a visual-based language to incorporate the rules of psychopharmacology at the sacrifice of discussing the exceptions to these rules. A Suggested Readings section at the end of this Pocketbook gives you a good start for more in-depth learning about particular concepts presented here.

When you come across an abbreviation or figure you don’t understand, you can refer to the Visual Vocabulary in the front and Abbreviations legend in the back. After referring to these several times you will begin to develop proficiency in the visual vocabulary of psychopharmacology. Stahl’s Essential Psychopharmacology, 3rd Edition, and Stahl’s Essential Psychopharmacology: The Prescriber’s Guide, 3rd Edition, can be helpful supplementary tools for more in-depth information on particular topics in this Pocketbook. Now you can also search topics in psychopharmacology on the Neuroscience Education Institute’s website (www.neiglobal.com) for lectures, courses, slides, and related articles.

Whether you are a novice or an experienced psychopharmacologist, hopefully this book will lead you to think critically about the complexities involved in psychiatric disorders and their treatments.

Best wishes for your educational journey into the fascinating field of psychopharmacology!

Stephen M. Stahl
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Overview
This minibook presents the symptoms, circuits, and pharmacology relevant to neuropathic pain disorders. It is divided into six chapters for easy browsing. Chapter 1 discusses the biopsychosocial impact of pain and the present state of pain care. Chapter 2 presents the basic neurobiology of pain, including major biological players of pain processing, pain pathways, categorical types of painful experiences, and the processes thought to take place during the development of neuropathic pain disorders. Chapter 3 presents a realistic view of pain patients and provides recommendations of first steps for diagnosis and management of patients presenting with chronic pain. Chapter 4 introduces specific pain disorders, including pain as a symptom of another disorder or as a comorbidity, and provides tips for accurately recognizing and diagnosing these disorders at an early stage. Chapter 5 compares the mechanism of opiates to the mechanisms of non-opiate psychotropic drugs that are also effective in treating many types of pain disorders; this chapter also provides tips and pearls on dosing and prescribing such drugs. Chapter 6 synthesizes knowledge from the previous five chapters to discuss individualized treatment plans, including perspectives to remember when interacting with the patient as well as legal issues involved in treating pain.

Target Audience
This CME activity has been developed for psychiatrists, primary care physicians, and other non-pain specialists who see patients suffering from chronic pain. There are no prerequisites for this activity. Physicians in all specialties who are interested in psychopharmacology, as well as nurses, psychologists, and pharmacists, are welcome for advanced study.

Statement of Need
The following unmet needs regarding pain disorders were revealed following a vigorous assessment of activity feedback, expert faculty assessment, literature review, and through new medical knowledge:

- Understanding the neurobiology of pain pathways will serve to further enhance recognition and treatment of neuropathic pain disorders.
- Managing neuropathic pain can be difficult, but current and emerging treatment options continue to evolve, resulting in greater relief for patients.
- Neuropathic pain disorders are associated with several comorbidities, most often among the mood and anxiety spectrum; clinicians should utilize understanding of comorbid conditions to determine diagnosis and presence of pain perception.
To help fill these unmet needs, quality improvement efforts need to focus on understanding of the neurobiology of psychiatric disease states and the pharmacology of available, new, and in-development medications.

**Learning Objectives**
After completing this activity, participants should be better able to fulfill the following learning objectives:

- Describe the hypothetical neurobiology of neuropathic pain disorders
- Recognize how pain affects patients, families, friends, and society as a whole
- Distinguish between a variety of neuropathic pain disorders and their common comorbidities and concomitant symptoms
- Understand the pharmacology of several classes of pain treatments
- Identify mechanisms as well as therapeutic benefits and nuances of drugs commonly prescribed for neuropathic pain disorders
- Develop an understanding of the best treatment practices and maintenance methods for optimizing patient outcome in neuropathic pain disorders

**Accreditation and Credit Designation Statements**
The Neuroscience Education Institute is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

The Neuroscience Education Institute designates this educational activity for a maximum of 3.0 AMA PRA Category 1 Credits™. Physicians should only claim credit commensurate with the extent of their participation in the activity.

Nurses in most states may claim full credit for activities approved for AMA PRA Category 1 Credits™ (for up to half of their recertification credit requirements). This activity is designated for 3.0 AMA PRA Category 1 Credits.

Also available will be a certificate of participation for completing this activity.

**Activity Instructions**
This CME activity is in the form of a printed monograph and incorporates instructional design to enhance your retention of the information and pharmacological concepts that are being presented. You are advised to go through the figures in this activity from beginning to end, followed by the text, and then complete the posttest and activity evaluation. The estimated time for completion of this activity is 3.0 hours.
Instructions for CME Credit
To receive your certificate of CME credit or participation, please complete the posttest (you must score at least 70% to receive credit) and activity evaluation found at the end of the monograph and mail or fax them to the address/number provided. Once received, your posttest will be graded and a certificate sent if a score of 70% or more was attained. Alternatively, you may complete the posttest and activity evaluation online and immediately print your certificate. There is a fee for the posttest (waived for NEI members).

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These materials have been peer-reviewed to ensure the scientific accuracy and medical relevance of information presented and its independence from commercial bias. The Neuroscience Education Institute takes responsibility for the content, quality, and scientific integrity of this CME activity.

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### Stahl’s Illustrated Visual Vocabulary Legend

<table>
<thead>
<tr>
<th>Action Potential</th>
<th>Opiate</th>
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<tbody>
<tr>
<td>Cardiac Impairment</td>
<td>Pregnancy</td>
</tr>
<tr>
<td>Children and Adolescents</td>
<td>Renal Impairment</td>
</tr>
<tr>
<td>Drug Interactions</td>
<td>Serotonin</td>
</tr>
<tr>
<td>Electrical Activity</td>
<td>SNRI (serotonin norepinephrine reuptake inhibitor)</td>
</tr>
<tr>
<td>Glutamate</td>
<td>Tips and Pearls</td>
</tr>
<tr>
<td>Hepatic Impairment</td>
<td>VSCC (voltage-sensitive calcium channel)</td>
</tr>
<tr>
<td>Life-threatening or Dangerous Side Effects</td>
<td>VSSC (voltage-sensitive sodium channel)</td>
</tr>
<tr>
<td>Norepinephrine</td>
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</tbody>
</table>
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Objectives

- Describe the hypothetical neurobiology of neuropathic pain disorders
- Recognize how pain affects patients, families, friends, and society as a whole
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