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FIRST AID FOR THE®

USMLE STEP 1 2015

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First Aid for the® USMLE Step 1 2015: A Student-to-Student Guide

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Notice

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Dedication

To the contributors to this and past editions, who took time to share their knowledge, insight, and humor for the benefit of students.

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Twenty-Fifth Anniversary Foreword

Our exam experiences remain vivid in our minds to this day as we reflect on 25 years of *First Aid*. In 1989, our big idea was to cobble together a "quick and dirty" study guide so that we would never again have to deal with the USMLE Step 1. We passed, but in a Faustian twist, we now relive the exam yearly while preparing each new edition.

Like all students before us, we noticed that certain topics tended to appear frequently on examinations. So we compulsively bought and rated review books and pored through a mind-numbing number of "recall" questions, distilling each into short facts. We had a love-hate relationship with mnemonics. They went against our purist desires for conceptual knowledge, but remained the best way to absorb the vocabulary and near-random associations that unlocked questions and eponyms.

To pull it all together, we used a then—"state-of-the-art" computer database (Paradox/MS DOS 4) that fortuitously limited our entries to 256 characters. That single constraint mandated brevity, while the three-column layout created structure—and this was the blueprint upon which *First Aid* was founded.

The printed, three-column database was first distributed in 1989 at the University of California, San Francisco. The next year, the official first edition was self-published under the title *High-Yield Basic Science Boards Review:* A *Student-to-Student Guide.* The following year, our new publisher dismissed the *High-Yield* title as too confusing and came up with *First Aid for the Boards.* We thought the name was a bit cheesy, but it proved memorable. Interestingly, our "High-Yield" name resurfaced years later as the title of a competing board review series.

We lived in San Francisco and Los Angeles during medical school and residency. It was before the Web, and before med students could afford cell phones and laptops, so we relied on AOL e-mail and bulky desktops. One of us would drive down to the other person's place for multiple weekends of frenetic revisions fueled by triple-Swiss white chocolate lattes from the Coffee Bean & Tea Leaf, with R.E.M. and the Nusrat Fateh Ali Khan playing in the background. Everything was marked up on 11- by 17-inch "tearsheets," and at the end of the marathon weekend we would converge at the local 24-hour Kinko's followed by the FedEx box near LAX (10 years before these two great institutions merged). These days we work with our online collaborative platform A.nnotate, GoToMeeting, and ubiquitous broadband Internet, and sadly, we rarely get to see each other.

What hasn't changed, however, is the collaborative nature of the book. Thousands of authors, editors, and contributors have enriched our lives and made this book possible. Most helped for a year or two and moved on, but a few, like Ted Hon, Chirag Amin, and Andi Fellows, made lasting contributions. Like the very first edition, the team is always led by student authors who live and breathe (and fear) the exam, not professors years away from that reality.

We're proud of the precedent that *First Aid* set for the many excellent student-to-student publications that followed. More importantly, *First Aid* itself owes its success to the global community of medical students and international medical graduates (IMGs) who each year contribute ideas, suggestions, and new content. In the early days, we

used book coupons and tear-out business reply mail forms. These days, we get more than 20,000 comments and suggestions each year via our blog FirstAidTeam.com and A.nnotate.

At the end of the day, we don't take any of this for granted. There are big changes in store for the USMLE, and a bigger job ahead of us to try to keep *First Aid* indispensable to students and IMGs. We want and need your participation in the *First Aid* community. (See How to Contribute, p. xix.) With your help, we hope editing *First Aid* for the next 25 years will be just as fun and rewarding as the past 25 years have been.

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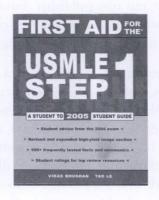
First Aid for the USMLE Step 1 Through the Years

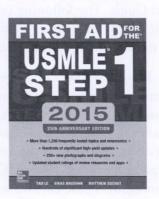












Preface

With the 25th anniversary edition of *First Aid for the USMLE Step 1*, we continue our commitment to providing students with the most useful and up-to-date preparation guide for the USMLE Step 1. This edition represents an outstanding revision in many ways, including:

- Dozens of entirely new facts and hundreds of major fact updates culled from more than 20,000 comments and suggestions.
- Extensive text revisions, new mnemonics, clarifications, and corrections curated by a team of 25 student authors who excelled on their Step 1 examinations and verified by a team of expert faculty and nationally recognized USMLE instructors.
- Updated with more than 250 new full-color images to help visualize various disorders, descriptive findings, and basic science concepts. Labeled and captioned photographs have been selected to aid retention by engaging visual memory in a manner complementary to mnemonics.
- Updated with dozens of new and revised diagrams. We continue to expand our collaboration with USMLE-Rx (MedIQ Learning, LLC) to develop and enhance illustrations with improved information design to help students integrate pathophysiology, therapeutics, and diseases into memorable frameworks for annotation and personalization.
- A revised exam preparation guide with updated data from the NBME and NRMP. The guide also features new high-yield techniques for efficient and effective test preparation.
- An updated summary guide to student-recommended USMLE Step 1 review resources, including mobile apps for iOS and Android. The full resource guide with detailed descriptions can be found at our blog, www.firstaidteam.com.
- Real-time Step 1 updates and corrections can also be found exclusively on our blog.

We invite students and faculty to share their thoughts and ideas to help us continually improve First Aid for the USMLE Step 1 through our blog and collaborative editorial platform. (See How to Contribute, p. xix.)

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General Acknowledgments

This year, we were fortunate to receive the input of thousands of medical students and graduates who provided new material, clarifications, and potential corrections through our Web site and our collaborative editing platform. This has been a tremendous help in clarifying difficult concepts, correcting errata from the previous edition, and minimizing new errata during the revision of the current edition. This reflects our long-standing vision of a true, student-to-student publication. We have done our best to thank each person individually below, but we recognize that errors and omissions are likely. Therefore, we will post an updated list of acknowledgements at our Web site, www.firstaidteam. com/. We will gladly make corrections if they are brought to our attention.

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