

住院医师规范化培训推荐用书

模拟医学

The Comprehensive Textbook of
Healthcare Simulation

主编 Adam I. Levine
Samuel DeMaria Jr.
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Alan J. Sim

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人民卫生出版社

Translation from the English language edition:
The Comprehensive Textbook of Healthcare Simulation by Adam I.
Levine et al.

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图书在版编目 (CIP) 数据

模拟医学 / (美) 亚当斯 · I · 莱文 (Adam I. Levine) 主编;
吕建平主译. —北京: 人民卫生出版社, 2017

住院医师规范化培训推荐用书

ISBN 978-7-117-25258-4

I. ①模… II. ①亚…②吕… III. ①医学教育 - 教学模型 -
职业培训 - 教材 IV. ①R-4

中国版本图书馆 CIP 数据核字 (2017) 第 237550 号

人卫智网	www.ipmph.com	医学教育、学术、考试、健康, 购书智慧智能综合服务平台
人卫官网	www.pmph.com	人卫官方资讯发布平台

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图字: 01-2017-6547

模 拟 医 学

(住院医师规范化培训推荐用书)

主 译: 吕建平

出版发行: 人民卫生出版社 (中继线 010-59780011)

地 址: 北京市朝阳区潘家园南里 19 号

邮 编: 100021

E - mail: pmph@pmph.com

购书热线: 010-59787592 010-59787584 010-65264830

印 刷: 北京画中画印刷有限公司

经 销: 新华书店

开 本: 889 × 1194 1/16 印张: 41

字 数: 1241 千字

版 次: 2017 年 10 月第 1 版 2017 年 10 月第 1 版第 1 次印刷

标准书号: ISBN 978-7-117-25258-4/R · 25259

定 价: 128.00 元

打击盗版举报电话: 010-59787491 E-mail: WQ@pmph.com

(凡属印装质量问题请与本社市场营销中心联系退换)

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内容简介

模拟医学代表着医学教育改革的发展方向。本书原著作者来自美国、英国、加拿大、澳大利亚和以色列等世界各大知名的模拟医学中心,许多还是国际模拟医学协会(Society for Simulation in Healthcare, SSH)董事会的现任或前任成员,代表着模拟医学领域的国际最高水平。翻译团队成员来自美国、中国香港和内地各大医学院校及医疗机构,均有多年丰富的教学实践经验。本书全面系统阐述了模拟医学领域各个方面的技术和问题。全书共有四十九章,分为五大部分:①模拟医学概论,②模拟医学常用方法和技术,③模拟在医学各学科中的应用,④模拟医学专业发展状况,⑤模拟医学项目发展状况。本书重点介绍了模拟医学的发展过程、理论基础、研究进展、常用方法和技术等内容;详细介绍了模拟医学教育在医学领域各个学科中的应用情况、以及模拟医学课程体系的建设,包括教学内容和师资队伍培训等。本书还专门介绍了各种各样的模拟设备(包括高仿真模拟人和虚拟现实模拟器等),也对模拟医学的未来发展趋势进行了展望,指明了将来的研究方向。

本书适于全国各大医学院校老师、各大医疗机构对医学教育感兴趣的医护人员、医学教育相关部门管理者、医学教育产品研发公司的科研人员和对医学教育感兴趣的医学生使用,也可以作为模拟医学教育的培训教材。

Preface 1

When I started in simulation in 1994 there was practically no resources to look toward for advice, recommendations or educational content. We were essentially inventing content and style, both in terms of scenario development and debriefing based on our experience as medical educators. Although I was personally fortunate to have had amazing role models as my chair and program director were remarkable educators, our team at Mount Sinai was truly fortunate to have the guidance and mentorship from Mike Good and the team at the University of Florida who developed the Gainesville Anesthesia Simulator (which would eventually be the basis of the HPS simulator from CAE) and who helped install the very first simulator produced by Loral defense contractors who licensed the technology. Back in the 90s' there were certainly no textbooks and only a handful of publications which simply described individual department's experiences with mannequin based simulation mainly for anesthesia resident training. Although we were convinced this was a remarkable technology and a very powerful tool for clinical education, we admittedly could have never imagined the widespread adoption of this technique in healthcare.

Over the next two decades the expansion of simulation in healthcare was really quite remarkable. As the technologies developed so too did the resources to utilize these tools and techniques. Societies of simulation experts evolved, journals dedicated to simulation-based research and content were published, careers and jobs emerged to support the industry and the utilization of the tools and a widespread adoption of the use of simulators in healthcare for education, evaluation, safety initiatives, healthcare improvements, research tools and therapeutic interventions took place across disciplines. Despite this exponential rise in utilization, healthcare simulation was still a technique that many in healthcare were either unfamiliar with or unconvinced of its merit. At the time I described healthcare simulation as a "best kept secret". Even though there were some simulation textbooks already in print, my colleagues and I were convinced the landscape was perfect for the development of a textbook that would provide novices and experts alike with a definitive reference to develop new skills or build on those already attained. We embarked on the project in the spring of 2011 and assembled the world's experts to author what would be "*The Comprehensive Textbook of Healthcare Simulation*". The project was a true labor of love for me, my co-editors, Drs DeMaria, Schwartz, and Sim and all of the authors who devoted their time, effort,

and expertise to the project. Released in the fall of 2013, the book is a multidisciplinary, international reference authored by a who's who in healthcare simulation. Since its release I have been humbled by the number of communications from the books readers letting me know just how valuable the book has been for both their professional and program development.

In recent years China has embarked on its own expedition into healthcare simulation and although there was interest by Yue Dong, MD and others to translate the book into Chinese soon after its release in 2013, it's clear the landscape in China is now perfect for the Chinese version of "*The Comprehensive Textbook of Healthcare Simulation*" to be developed. Published by Science Press of China and translated by lead translator Prof. Lv Jianping, David Li and other members of the Healthcare Simulation under Wu Jieping Medical Foundation, I could not be more proud and humbled by the desire and devotion to bring our book to the Chinese people. It is obvious healthcare simulation in China will have an exponential raise in the short years to come and I am thrilled that the "*The Comprehensive Textbook of Healthcare Simulation*" will provide a valuable reference and road map for all of those involved in the journey.



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序 1

1994 年我刚刚涉足模拟医学领域时,这门学科所能提供给我的教学建议、推荐读物和教学内容还十分匮乏。作为医学教育工作者,我们“白手起家”。无论是在模拟医学的情景构建,还是对基本内容的总结归纳方面,我们开创了模拟医学这一全新领域的内涵和模式。

尽管我荣膺模拟医学学会主席、有幸担当一批杰出教育工作者们的项目主任,但这一殊荣更属于我们的西奈山依坎医学院工作团队。我们有幸获得了 Mike Good 和佛罗里达大学团队的支持及指导,他们开发了 Gainesville 麻醉模拟器(最终演化为 HPS 模拟器),并帮助我们安装了第一台由 Loral 公司授权生产的模拟器。20 世纪 90 年代是一个完全没有教科书的时代,那时我们手头只有少得可怜的、关于简单的麻醉模拟器教学应用的文献资料。尽管当时,我们确信模拟医学将给世界带来一种卓越的技术,并成为临床教学中有力的工具,但我们完全没有预料到这项技术能在世界范围内广泛应用于医学领域。

嗣后的二十年间,模拟医学在医药卫生领域高速发展,举世瞩目。与此同时,模拟医学衍生的模拟技术和模拟工具的应用也日新月异。模拟医学的专家协会得以创建,专注模拟医学研究的期刊也得以出版,同时也出现了更多新的“职业”来支持模拟工具的创新,将这一学科广泛应用在教学、评估、保障医疗安全、提升医疗质量、作为研究工具和医疗干预措施等诸多方面。尽管目前模拟医学的应用呈指数级的增长,我们坦言这仍是一项医疗行业还不熟悉,也存有争议的学科。这应验了那时我曾说过的:模拟医学是一个“雪藏最好的秘密”。因此,尽管已有一些相关教材已经出版,我和我的同事们仍然确信,在这一领域依然期待着有一本能够让新手和专家充分了解,并基于模拟医学发展的现状和进展,引领他们开拓创新的综合教材。于是,我们于 2011 年春季启动这一项目,召集全世界的专家来编写这本《模拟医学》。这对于我和 DeMaria、Schwartz 以及 Sim 几位主编,还有所有投入了他们时间、精力和专业知识的作者们而言,我们所做的一项真正热爱的工作。2013 年秋,这本多学科、由国际模拟医学专家为其背书的教材终得付梓。自此,我虚心拜读了大量读者来信,字里行间让我深知这本书对于他们的专业和教学发展是何其的重要!

在中国,近年来也开始对模拟医学的发展积极探索,在 2013 年本书出版时,Yue Dong 博士等人就对本书产生了极大的兴趣,并希望将其翻译成中文。显然,《模拟医学》中文版翻译工作是众望所归。致此,我极为荣幸而又诚恳地将这部由吕建平教授、

李力和其他来自吴阶平医学基金会模拟医学部成员主译的中文教材推荐给中国读者。可以预期,在不远的将来,中国的模拟医学将会迎来爆炸式发展。尽管道路荆棘,《模拟医学》甘当诸位探索道路上的垫脚石,我以此教程能为这一历程提供有价值的参考而倍感激动。



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