

人体管道铸型彩色图鉴

Color Atlas of Human Duct Cast Specimens

名誉主编 (Honorary Editor in Chief)

钟世镇 (Zhong Shizhen)

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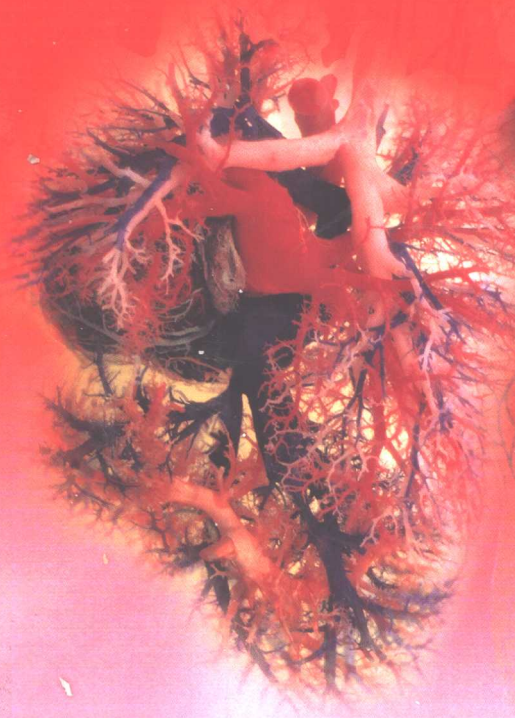
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解剖圖鑑對外科醫生來
說就像軍事家對軍事地圖
一樣重要。

陳中偉題
(中國科學院院士)

The atlas of human duct cast specimens is to the surgeons what
military atlas is to military scientists.

By Chen Zhongwei
(Academician of Chinese Academy of Science)

序

见书生情，感触颇多，《人体管道铸型彩色图鉴》主编人邀我作序时，促使我回忆起与解剖学技术结下的偶然机缘。那是在十年动乱时期，我和一些被认为不能再登上教坛的异己分子，只能到解剖学技术组去劳动。可见，作为教学科研辅助系列的技术学，长期以来被视为不登大雅之堂的雕虫小技，被怀有偏见者所轻视。“时人莫小池中水，浅处无妨有卧龙”，想不到在技术组劳动学到的技艺，帮助我指导培育了新一代的解剖学实验技术队伍。“弟子不必不如师，师不必贤于弟子”，曾经受过我指导的弟子，已经是“新竹高于老竹枝”，“雏凤清于老凤声”。这一批冰寒于水，青胜于蓝的技术骨干，不仅善于精雕细刻，还能条分缕析地将实践成果，升华到著书立说。为此，我十分荣幸地先后为此学科新秀们担任主编出版的4部专著作序。这4部专著是《人体铸型标本的设计和制作》、《人体解剖学标本彩色图谱》、《解剖学技术》(第二版)和《人体管道铸型彩色图鉴》。

“看似寻常最奇崛，成如容易却艰辛”。“人体解剖”一词常为人们望名生畏，但在能工巧匠们的神工鬼斧下，能化腐朽为神奇，创作了大批色彩斑斓、璀璨奇妙的艺术精品。我室王兴海等“人体解剖标本制作法的研究和应用”成果，1989年曾获国家科技进步三等奖；李忠华等“外科实用管道铸型标本制作法的研究和应用”成果，2000年又获国家科技进步二等奖。“第一军医大学人体标本陈列馆”已成为我国医学界对外交流的一扇“科学加艺术”的学术橱窗。

科学发展史表明，技术往往超前于基础研究，成为理论取得突破的先导。我所从事的“临床应用解剖学研究”，首先还是得益于有高超解剖技术的支持。本书的内容，都是选自标本陈列馆中最富表现力的管道铸型作品，将能为外科学的术式设计和手术处理提供新的、有价值的形态学依据。

中国工程院院士
第一军医大学临床解剖学研究所所长 钟世镇



Foreword

When I read this work, Color Atlas of Human Duct Cast Specimens, whose editors had invited me to write this foreword for it, I was greatly touched and could not help revive the scenes in my mind on which I got an accidental connection with the anatomical technology. During the ten years of Culture Revolution in China, some professors and I, the so-called dissidents, were deprived of the teaching right in classroom, and were sent to work in the technological group of the anatomic department. It was obvious that the anatomical technology, an essential auxiliary subject in the anatomic science, was regarded as some insignificant skills by the persons with prejudice. As the Chinese traditional saying goes, 'A dragon might hide in a shallow pond'. I have never realized that the technique I learned then could help me to instruct and organize this experimental technological team. As is known to us all, 'the students are not necessarily inferior to the teacher, while the teacher is not necessarily always superior to the students'. Now I am glad to see that a young phoenix sings more melodiously than an old one as the new bamboo grows higher than the old -- all my students have been superior to me. These prominent students can not only create the outstanding sculptural work with the cadaver materials, but they can also sublimate the experimental and practical results into the systematic theory. Hence, I have felt so honored to write the forewords for 4 books edited by my students, i.e. Designing and Preparation of the Human Cast Specimens, Color Atlas of Human Anatomical Specimens, Anatomical Technology (second edition), and this book Color Atlas of Human Duct Cast Specimens as well.

As the Chinese proverb goes, what seems usual may turn out the most unusual, while what seems easy extremely hard. Human anatomy has ever been a frighten-looking item, but under the industrious works of the authors, the artists with their graver, the decayed materials of cadavers have been sculptured into the marvelous masterpieces. Prof. Wang Xinghai et al of our museum gained a brass medal in the Awards for the National Science & Technology Progress for the Study and Application of Preparation of Human Anatomical Specimens in 1989. Prof. Li Zhonghua et al have once again gained a silver medal in the Awards for the National Science and Technology Progress for the Study and Application of Preparation of the Surgical Practical Duct Human Cast Specimens in 2000. The Human Preparation Museum of the First Military Medical University now has become a 'science and art' gallery for exchange in medicine between China and other countries.

The scientific development history has demonstrated that the technique developments always goes ahead of that of the basic research, and can be the pioneer of the theoretical revolution. Above all, in the field of the clinical applied anatomical research I have pursued for my whole life, I owe my achievements to the excellent anatomical technique. All the photographs in this atlas were taken from a selection of the most impressive specimens exhibited in the museum. I wish it could provide many novel and valuable references for both operative design and surgical management.

Academician of Chinese Academy of Engineering
Director of Clinical Anatomical Institute of First Military Medical University

Zhong Shiguo

前 言

我们接待过众多前来参观“第一军医大学人体标本陈列馆”的国内外专家、学者。他们曾为这些晶莹、五彩缤纷的人体管道铸型标本啧啧称奇。同时,也曾建议把众多精美的标本编著成图册出版,更好地扩大学术影响,发挥社会效益,服务于临床医学。我们申报的“外科实用管道铸型标本制作法的研究和应用”项目,获得一九九九年度军队科技进步二等奖和二〇〇〇年度国家科技进步二等奖。两次获奖给了我们极大的鼓舞,进一步增加了我们对事业的信心。于是我们从近几年积累大量的人体管道铸型图片中,精选能够全面反映全身人体管道的彩图编成图鉴。当我们把这一出版信息通报给广东科技出版社的同仁们时,当即得到了他们的大力支持,表示愿意在《人体解剖学标本彩色图谱》出版之后,再度合作出版《人体管道铸型彩色图鉴》。

铸型标本的特点是较全面地显示器官内管道的立体构筑形式,特别是细小的血管交通吻合情况。这些都是外科,特别是显微外科手术需要的内容。因此,在彩图的摄制设计上,力求突出有临床意义的结构,并加以简要说明。对部分管道,其毗邻关系对临床意义重大,如脊髓和脑垂体的血管等,我们也附加能显示软组织关系的标本。本图鉴共收集了282幅铸型标本实物照片,编排为188幅图。

作为“第一军医大学人体标本陈列馆”的建设者,经过20多年的努力,用我们的智慧创造,获得今天的成果并编撰成书,感到非常自豪和荣幸。在此,饮水思源,我们怀着无比崇敬的心情,衷心感谢我们的老师、人体标本陈列馆的创建者钟世镇院士。是他亲手制作了陈列馆的第一批铸型标本;是他手把手教会我们铸型标本技术,并教育帮助我们树立牢固的事业心。由此才得以建成以管道铸型标本为特色的,具有国际先进水平的标本陈列馆。我们再以主编的名义,代表全体编写人员,感谢钟院士担任本图鉴的名誉主编。本书在整个编撰过程中,他都给予极大的关怀和鼓励,在内容的编排设计上给予具体指导。

同时,也感谢广东科技出版社的鼎力相助,风雨同舟,精诚合作,使本图鉴得以顺利出版。

感谢何开敏小姐,在文字打印方面做了大量工作。

由于部分铸型标本照片是在封装的标本瓶内拍摄的,拍摄角度受到限制,也限于我们的摄制水平,表达不完善和缺陷之处在所难免,恳请广大读者不吝赐正。

主编 李忠华 原 林



Preface

We have met thousands of visitors, domestic or overseas specialists who work in the field of medical science, in the Human Preparation Museum of the First Military Medical University, Guangzhou. Greatly impressed with these crystal and splendid human duct cast specimens, many of them have always been encouraging us to compile and publish the photographs of these specimens so that more people could know our unique achievements in human duct cast specimens, and consequently more influence could be made in creating social benefits and in promoting clinic practice. We have completed the project of the Study and Application of the preparation of the Surgical Practical Duct Cast Specimens and thus gained a silver medal in 1999 Awards for the Military Science & Technology Progress, and a brass medal in 2000 Awards for the National Science & Technology Progress. It gave us lots of inspiration, and correspondingly gave us confidence to publish these pictures. Therefore, we have made a delicate selection from the pictures we took from the cast specimens in recent years and compiled them into the atlas. The prominent and honorable editors of Guangdong Science & Technology Publishing House, who have published our previous book, *Color Atlas of Human Anatomical Specimens*, gave us a friendly support and showed great sincere in publishing this *Color Atlas of human Duct Cast Specimens*, which have deeply moved us.

The most outstanding characteristic lies in the fact that the duct cast specimens have demonstrated the spatial constructions of internal ducts of organs, especially the internal anastomosis of the small blood vessels. Therefore, when editing this atlas, we have done our best to focus on the structures that are important in clinical practice, and give a precise explanation about the contents. Some ducts are greatly significant in clinic to their neighboring tissues, such as the blood vessels of spinal cord and hypophysis. So in this book we have attached some specimens showing the relationships between the surrounding soft tissues. The atlas is a selection of 282 original duct cast photographs, compiled into 188 pictures.

As the builders of the Human Preparation Museum, we are much honored and proud to publish our academic works after two decades of hard work and diligence with our collective wisdom and creativity. We owe this achievement to our teacher, Professor Zhong Shizhen (钟世镇), Academician of Chinese Academy of Engineering, the founder of this museum as well. It is Professor Zhong who made the first cast specimen in our museum and taught us the basic cast skills, which is the fundamental assurance for the establishment of this museum. It is also Professor Zhong who has given us stable faith in fulfilling the marvelous work, which has attained an advanced level in the world. We acknowledge especially our gratitude to Professor Zhong for his inspiration, encouragement and instruction through the whole course of publishing this book.

We also wish to show our thanks to the editors of Guangdong Science & Technology Publishing House. Without their excellent work, we could not have published this book so rapidly.

We also wish to express our gratitude to Ms He Kaimin for her elegant work in typing the manuscript. Unfortunately, because some of the cast specimens are stored in special bottles, the shooting angles for the photographs were restricted while taking them. Besides, there existed some other skill limitations in shooting these pictures. So there must be some shortcomings in this atlas. Anyhow, we would be glad to accept any suggestion concerning this book.

Editors in Chief Li Zhonghua, Yuan Lin

内 容 简 介

本书的彩图为实物标本,全部摄自“第一军医大学人体标本陈列馆”,按人体部位编排,分上肢、下肢、头颈部、脊柱、胸腔脏器、心肺肝联合铸型、腹腔脏器、盆部和盆腔脏器等八章,介绍全身的动、静脉管道铸型彩图282幅。有的彩图既有整体观,又有局部特写,同时对临床应用意义重大的部位,加以简要论述。每幅彩图的文字内容以中英文对照。

本图鉴铸型标本制作精美,是科学和艺术的结晶,为国内外领先水平。可供解剖学工作者、医学生和临床医师,特别是外科医师参考。

Introduction

The photographs in the atlas have been taken originally from the specimens exhibited at the Human Preparation Museum of the First Military Medical University, and compiled in a sequence of human parts, i.e. Upper Limb, Lower Limb, Head & Neck, Spine, Pelvis and Pelvic Organs, Thoracic Organs, Heart, Lung and Liver, and Abdominal Organs. Even concise illustrations in Chinese and English are attached to them, especially those very meaningful in the clinical practice.

The cast specimens appearing in the pictures, manufactured delicately, take the lead in this field and manifest themselves to be the essence of science and technology. The atlas is intended for anatomists, medical students and workers, and surgeons who specially need to know the duct structures of human body.



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