

# Contents

<b>Presentation of Field “History of Science”</b> . . . . .	xi
Jean-Claude DUPONT	
<b>Medicine and the Life Sciences in the Ancient World: An Introduction.</b> . . . . .	xiii
Lorenzo PERILLI	
<b>Chapter 1. Egyptian Medicine.</b> . . . . .	1
Paola COSMACINI and Christian ORSENIGO	
1.1. Medical thought and the <i>Weltanschauung</i> of the Egyptian man . . . . .	1
1.2. The observed body . . . . .	2
1.3. Healers . . . . .	6
1.4. Written sources . . . . .	8
1.5. Diseases: a general assessment . . . . .	14
1.6. The field of trauma . . . . .	21
1.7. Healing remedies . . . . .	23
1.8. References . . . . .	27
<b>Chapter 2. A Retrospective History of Babylonian Medicine</b> . . . . .	39
Markham J. GELLER	
2.1. Syriac Book of Medicine (3rd century CE) . . . . .	39
2.2. The Babylonian Talmud . . . . .	42

2.3. Theory in Greek medicine . . . . .	43
2.4. Theory in Akkadian medicine . . . . .	44
2.5. Anatomy . . . . .	47
2.6. Diagnostic. . . . .	48
2.7. References . . . . .	51
<b>Chapter 3. Medicine and Healing in Early China . . . . .</b>	<b>53</b>
Dolly YANG	
3.1. Introduction. . . . .	53
3.2. Medicine during the late Warring States, Qin and Han dynasties . . . .	54
3.3. Notions of microcosm-macrocosm . . . . .	56
3.4. Formation of canonical texts. . . . .	57
3.5. Classical theory . . . . .	61
3.5.1. Theory of qi . . . . .	61
3.5.2. Theory of yin–yang. . . . .	61
3.5.3. Theory of the four seasons. . . . .	62
3.5.4. Theory of the five agents . . . . .	63
3.5.5. Theory of viscera and their manifestations . . . . .	65
3.5.6. Theory of channels and collaterals . . . . .	67
3.6. Diagnosis . . . . .	69
3.7. Therapy . . . . .	71
3.8. Pharmacopoeia. . . . .	73
3.9. Conclusion . . . . .	74
3.10. References. . . . .	76
<b>Chapter 4. India’s Early Medical History: Buddhism and the Beginnings of Ayurveda. . . . .</b>	<b>81</b>
Kenneth G. ZYSK	
4.1. Introduction. . . . .	81
4.2. Four phases of Indian medicine . . . . .	82
4.2.1. I. Vedic medicine (c. 1200–500 BCE). . . . .	82
4.2.2. II. “Classical” Ayurveda (c. 200 BCE–10th century CE) . . . . .	82
4.2.3. III. “Syncretic” Indian medicine (11th century–20th century). . .	83
4.2.4. IV. “New Age Ayurveda” (20th century–21st century). . . . .	83
4.3. Vedic medicine. . . . .	83
4.4. Ayurveda . . . . .	83
4.5. Historic transition . . . . .	85

4.6. Buddhism's contributions to Early Indian medicine . . . . .	86
4.6.1. Buddhist pharmaceuticals . . . . .	87
4.6.2. Buddhist therapeutics. . . . .	87
4.6.3. The case-by-case methodology of early Buddhist medicine . . . . .	88
4.7. The Buddha's case histories . . . . .	88
4.7.1. An example from Buddha's cases . . . . .	89
4.7.2. Jīvaka's case histories . . . . .	90
4.7.3. An example of Jīvaka's cases . . . . .	90
4.8. Medicine in Later Buddhism. . . . .	92
4.8.1. Buddhist medical institutions . . . . .	92
4.9. Buddhist medical texts . . . . .	93
4.10. Discussion and conclusions . . . . .	94
4.10.1. Pharmacopeia . . . . .	95
4.10.2. Theory. . . . .	95
4.10.3. Nosology based on pathogenic agents . . . . .	95
4.11. Summary . . . . .	96
4.12. Appendix . . . . .	97
4.13. Sources and recommended reading . . . . .	98
<b>Chapter 5. Greek Medicine: A Brief Historical Outline . . . . .</b>	<b>99</b>
Lorenzo PERILLI	
5.1. Historical outline . . . . .	99
5.1.1. Hippocrates and the beginning of Western medicine . . . . .	99
5.1.2. The paradigm of rationality . . . . .	101
5.1.3. Beyond Hippocrates: from Southern Italy to Alexandria. . . . .	103
5.1.4. Hellenistic medical schools and their controversies. . . . .	106
5.1.5. Awaiting Galen: Rufus and Soranus . . . . .	108
5.1.6. Galen: intellectual, philosopher, prince of physicians. . . . .	109
5.1.7. Galen's aftermath: the journey from Rome to China . . . . .	112
5.2. A survey on the medical literature of antiquity . . . . .	115
5.3. References . . . . .	124
<b>Chapter 6. Medicine in Ancient Greece and Rome: Social Structures and Institutions. . . . .</b>	<b>127</b>
Vivian NUTTON	
6.1. Pre-classical Greece. . . . .	127
6.2. Greek medicine and the Ancient Near East . . . . .	129
6.3. Classical Greece . . . . .	129

6.4. Literacy and a wider interest in medicine . . . . .	132
6.5. Religion and medicine . . . . .	133
6.6. Human healers . . . . .	136
6.7. The Hellenistic world . . . . .	139
6.8. Medicine moves West . . . . .	144
6.9. Medicine in the Roman world . . . . .	148
6.10. Doctors in the Roman Empire . . . . .	153
6.11. Military medicine . . . . .	155
6.12. The career of Galen . . . . .	157
6.13. Medicine in the Late Antiquity . . . . .	159
6.14. Conclusion . . . . .	165
6.15. References. . . . .	167
<b>Chapter 7. Greek Medicine: Semiotics, Physiology, Nosology . . . . .</b>	<b>169</b>
Amneris ROSELLI	
7.1. Texts and tradition. . . . .	169
7.2. The living body . . . . .	170
7.3. Nosology and symptoms . . . . .	174
7.4. Humors . . . . .	178
7.5. Pneuma . . . . .	181
7.6. Permanence and innovation in Hellenistic and imperial medicine . . . . .	183
7.7. References . . . . .	185
<b>Chapter 8. Anatomy and Knowledge of the Human Body: Nerves, Brain, Heart . . . . .</b>	<b>187</b>
Vito LORUSSO	
8.1. Introduction: palpation, dissection and observation . . . . .	187
8.2. The early days of anatomy . . . . .	189
8.3. Anatomy in the <i>Hippocratic Corpus</i> . . . . .	191
8.3.1. Presentation of the material . . . . .	191
8.3.2. Sources, knowledge and limits of Hippocratic physicians . . . . .	192
8.4. Anatomy according to Aristotle . . . . .	194
8.4.1. Writings, context, working methods, data organization . . . . .	194
8.4.2. Heart and brain . . . . .	197
8.5. Anatomy according to Diocles of Carystus and Praxagoras of Cos . . . . .	199
8.6. Anatomy according to the Alexandrians: Herophilus and Erasistratus . . . . .	200

---

8.7. Anatomy in the early imperial era . . . . .	201
8.8. Anatomy according to Galen . . . . .	202
8.8.1. Usefulness of anatomical investigation . . . . .	202
8.8.2. Galen the anatomist: new discoveries and acquisitions . . . . .	204
8.9. Galen's other works . . . . .	206
8.10. Anatomical illustration in manuscripts . . . . .	207
8.11. References. . . . .	208
<b>Chapter 9. Greek Medicine: Therapeutics . . . . .</b>	<b>213</b>
Laurence TOTELIN	
9.1. Introduction. . . . .	213
9.2. Dietetics. . . . .	216
9.3. Pharmacology . . . . .	217
9.4. Surgery . . . . .	221
9.5. References . . . . .	223
<b>Chapter 10. Zoology in the Ancient Greek World and Its Reception in the Islamic and Latin Worlds . . . . .</b>	<b>225</b>
Tommaso ALPINA and Andrea FALCON	
10.1. Zoology before Plato and Aristotle . . . . .	225
10.2. Plato . . . . .	228
10.3. Aristotle . . . . .	230
10.4. The transition from the Late Ancient to the Arabic reception of Aristotle's zoology . . . . .	233
10.5. Medicine and zoology in Avicenna: tradition and innovation . . . . .	234
10.6. The Latin tradition to Dante . . . . .	237
10.7. References. . . . .	239
<b>Chapter 11. Botany in Greece . . . . .</b>	<b>241</b>
Luciana REPICI	
11.1. In the beginning, Aristotle and Theophrastus . . . . .	241
11.2. In the distant past and the near future. . . . .	245
11.3. In Rome . . . . .	250
11.4. The missing link . . . . .	253
11.5. References. . . . .	258

<b>Chapter 12. The Arab World</b> . . . . .	261
Fabian KÄS	
12.1. Sources. . . . .	262
12.2. Physicians . . . . .	264
12.3. Alternative conceptions . . . . .	266
12.4. Historical development . . . . .	267
12.4.1. Translations. . . . .	268
12.4.2. Classical epoch and European reception. . . . .	269
12.4.3. Postclassical medicine . . . . .	270
12.5. Disciplines and literary genres . . . . .	271
12.5.1. Pandects. . . . .	271
12.5.2. Anatomy and nosology . . . . .	272
12.5.3. Dietetics and pharmacology . . . . .	273
12.5.4. Surgery and ophthalmology . . . . .	274
12.5.5. Special groups of patients . . . . .	274
12.6. Conclusion . . . . .	275
12.7. References. . . . .	275
<b>List of Authors</b> . . . . .	279
<b>Index of Names</b> . . . . .	281
<b>Index of Terms</b> . . . . .	287
<b>Summary of Volume 2</b> . . . . .	295
<b>Summary of Volume 3</b> . . . . .	301