



ROYAL AUSTRALASIAN COLLEGE OF DENTAL SURGEONS
Incorporated

**SUGGESTED
READING LIST
FOR
THE SUBJECTS OF
THE PRIMARY EXAMINATION**

It is not required that all books listed (latest editions available) should be read, rather that candidates may select those which are readily accessible to them.

The CDROM of all subjects course booklets and past examination papers are included in the Orientation Course fee.

Course booklets are available for purchase separately on CDROM.

Updated March 2009

ANATOMY

(Updated by John McGeachie, March 2008)

1. **THE COURSE BOOKLET:** *Lecture Notes in Anatomy*, by John McGeachie published by the Royal Australasian College of Dental Surgeons, 2008.

2. **PRINCIPAL TEXTS.** These cover most of the material in the Orientation Course and requirements for the Primary Examination.

Norton, NS. Netter's Head & Neck Anatomy for Dentistry, 2007, published by Saunders Elsevier. ISBN: 1-929007 88 4

Comment: This text, using Netter's outstanding illustrations, with relevant text written by NS Norton, was published in 2007. Many of the same illustrations as seen in the Atlas (below) are used in this text book.

Sadler, TW. Langman's Medical Embryology, 10th edition, 2006, published by Lippincott, Williams & Wilkins. ISBN: 0-7817-9485-4.

Comment: this is the longstanding and user-friendly book on Embryology. It has been used for decades and the latest edition (above) is excellent for basic embryology.

ALTERNATIVE TEXTS

Lieb Gott, B. The Anatomical Basis of Dentistry, 2nd edition, 2001, published by Mosby. ISBN: 0-323-01013-X.

Comment: This was the previously recommended Principal Text and it is an excellent book on all aspects of anatomy but is brief on neuroanatomy and embryology. Thus some supplementary references are recommended below.

Netter, FH. Atlas of Human Anatomy, 3rd edition, 2003, published by ICoN Learning Systems. ISBN: 1-92900711-6.

Comment: this atlas is very useful for viewing anatomy and neuroanatomy. Now that Norton has published Netter's Head and Neck Anatomy for Dentistry (2007), many of the images in the Atlas are in the text, thus it is not really necessary to have both books.

Note: Netter also publishes Flash Cards of the illustrations for rapid reference. ISBN: 1-929007-08-6.

McMinn, R.M. Hutchins, R.T. & Logan, B.M. A Colour Atlas of Head & Neck Anatomy 2nd edition, 1995, published by Mosby Wolfe. ISBN: 0 7234-1994-9.

Comment: this atlas has excellent photographs of the skull and component bones, together with high quality and well labelled photographs of anatomical dissections. It is well-suited for revision and preparation for the viva, where many anatomical specimens will be used.

Gray's Anatomy: Anatomical Basis of Medicine and Surgery, 39th edition 2005, published by Churchill Livingstone. ISBN: ISBN: 04430 06676 0. (It has a CD-ROM + online access included)

Comment: Gray's is the long established "encyclopaedia" of anatomy and is most useful as a reference book. Some candidates prefer to use this traditional, comprehensive and up-to-date book from which to study all aspects of Anatomy, because it includes all the embryology and neuroanatomy as well, although in more detail than required in some areas.

Sinnatamby, CS. *Last's Anatomy, Regional and Applied Anatomy*, 10th edition, published by Churchill Livingstone, 1999. ISBN: 0443056110.

Comment: this is also a general book on anatomy of the whole body and is not as applicable to the head and neck as the Principal Texts listed above. Some candidates have this from undergraduate days and it is useful if one is familiar with its content.

ADDITIONAL REFERENCES

NEUROANATOMY

Kiernan, JA. *Barr's - The Human Nervous System - An Anatomical Viewpoint*. 7th edition, published by Lippincott, Williams & Wilkins, 1998. ISBN: 0-397 58431-8.

Comment: Kiernan and Barr have published informative books on neuroanatomy for many years. This latest book is more than adequate for the Orientation Course, and is recommended for those who need to understand more about neuroanatomy. It is well written, and comprehensive.

Goldberg, S. *Clinical Neuroanatomy Made Ridiculously Simple*, 3rd edition, published by MedMaster Medical Books, 2002. ISBN: 0940780-57-7 (Available from the Medical Society Bookshop at Sydney University.)

Comment: Dr Goldberg had gone to an enormous amount of trouble to simplify and demystify neuroanatomy. His book is excellent for those who find the topic daunting. The book is brief, inexpensive, and very easy to read. It has humour and simple diagrams.

Final comment on additional references for Neuroanatomy: Any modern text on neuroanatomy will be adequate. Be sure to study the book carefully before purchasing, because many books are too complex and specialised for what is needed in the Orientation Course.

EMBRYOLOGY

Cochard, L. *Netter's Atlas of Human Embryology* published by ICoN Learning Systems, 2003. ISBN: 1929007-01-9.

Comment: Netter is famous for his outstanding illustrations and this book is no exception. The diagrams will certainly help candidates understand the events which occur in embryology: the understanding of which is fundamental for learning meaningful anatomy. It also has graphically illustrated versions of various developmental abnormalities.

Moore, KL. & Persaud, TVN. *Before We Are Born - Essentials of Embryology and Birth Defects*, 7th edition, published by Saunders, 2008, ISBN: 978-4160-3705-7.

Comment: Moore's book is also a long standing text it is quite detailed and comprehensive. Its section on birth defects is most informative.

HISTOLOGY

1. THE COURSE BOOKLET: *Lecture Notes in Histology*, by Marc Tennant published by the Royal Australasian College of Dental Surgeons, 2003.

2. PRINCIPAL TEXT:

Mjor IA, Fejerskov O. *Human Oral Embryology and Histology*. Munksgaard, 1986.

3. ALTERNATIVE TEXTS

Berkovitz BKB, Holland GR and Moxham BJ. *A Colour Atlas and Text of Oral Anatomy, Histology and Embryology*. 3rd ed. Wolfe, 2001.

Ross MH, Romrell LJ and Kaye GI. *Histology: A Text and Atlas*. 3rd ed. Williams and Wilkins, 1995.

Sperber GH and Tobias PV. *Craniofacial Embryology*. 4th ed. Wright, 1989. (out of print)

Schroeder HE *Oral Structural Biology*. Thieme, 1991.

Ten Cate AR *Oral Histology. Development, Structure and Function*. 4th ed, C.V. Mosby, 1994. (or 3rd ed. C.V. Mosby, 1989).

PHYSIOLOGY

(Updated by David Powis, March 2009)

Candidates are advised to use current or recent editions of textbooks of physiology and pharmacology suitable for dental undergraduate students in Australia. Study should be directed towards gaining an understanding of basic principles of Physiology and their application to situations that are relevant to the practice of dentistry.

1. PRINCIPAL TEXT

Miles TS, Nauntofte B, Svensson P. *Clinical Oral Physiology*, Copenhagen, Quintessence, 2004. *McLean Collection*

2. TEXTBOOKS

A *recent* text of general physiology, such as:

Boron WF, Boulpaep EL. *Medical Physiology*, Elsevier/Saunders; 2nd edition (2009)

Rhoades R, Pflanzer R. *Human Physiology*, Thomson/Brooks Cole; 4th edition (2003)

Guyton AC, Hall JE. *Textbook of Medical Physiology*. Elsevier/Saunders; 11th edition (2006)

or *recent* editions of other texts of general physiology.

Recommended text for management of medical emergencies:

Malamed SF. *Medical Emergencies in Dental Offices*. Mosby, St Louis; 6th edition (2007)

3. Other useful reference books

Ferguson DB, Shuttleworth A, Whitaker DK. *Oral Bioscience*. Churchill Livingstone; 1st edition, 2000

(Accessible also from Authors Online at www.racds.org)

Neal MJ. *Medical Pharmacology at a Glance*. Blackwell; 5th edition (2005).

Seymour RA, Meechan JG, Yates MS *Pharmacology and Dental Therapeutics*. Oxford University Press; 3rd edition (1999)

CELL BIOLOGY & BIOCHEMISTRY

(Updated by P Dunkley, March 2008)

A) The effects of diet, exercise and trauma on metabolism

Access to recent textbooks in Nutrition and in Biochemistry such as one of the following is essential:

- Bhagavan, N. V. (2002) Medical Biochemistry, 4th Edition, Harcourt Academic Press.
- Baynes, J.W. and Dominiczak, M. H. (2005) Medical Biochemistry 2nd Edition, Elsevier Mosby.
- Gillham, G., Papachristodoulou, D. K. and Thomas, J. H. (1997) Will's Biochemical Basis of Medicine, 3rd Edition, Butterworth Heinemann.
- Bender, D. A. (2002) Introduction to nutrition and metabolism, 3rd Edition, Taylor and Francis.

In addition many other nutrition and biochemistry text books are adequate for this section and some are listed in sections B and C.

B) The control of metabolism (Endocrine and Signal Transduction Biochemistry)

Access to recent textbooks in endocrinology and biochemistry such as one of the following is essential:

- Devlin, T. M. (2001) Textbook of Biochemistry and Clinical Correlations, 5th Edition, Wiley.
- Mathews, C. K. and Van Holde, K. E. (2000) Biochemistry, 3rd Edition, Benjamin Cummings
- Berg, J. M., Tymoczko, J. L. and Stryer, L. (2006) Biochemistry, 6th Edition, W. H. Freeman and Co.

In addition many other biochemistry text books are adequate for this section and some are listed in section A and C

C) Cell division, growth, differentiation and death (Molecular and Cellular Biology)

Access to recent textbooks in molecular and cellular biology such as one of the following is essential:

- Lodish, L., D Berk, A., Zipursky, S. L., Matsudaira, P., Baltimore, D. and Darnell, J. (2000) Molecular Cell Biology, 4th Edition, W.H. Freeman.
- Alberts, B., Johnson, A., Lewis, J., Raff, M., Roberts, K. and Walter, P. (2002) Molecular Biology of the Cell, 4th Edition, Garland Science

In addition many other cell biology and biochemistry text books are adequate for this section and some are listed in sections A and B.

PATHOLOGY

(Updated by Rakesh Kumar, March 2008)

1. THE COURSE BOOKLET: *Lecture Notes in Pathology*, by Rakesh K. Kumar and Hans Zoellner, published by the Royal Australasian College of Dental Surgeons, 2008.

2. TEXTBOOK:

No single textbook of Pathology provides ideal coverage at appropriate depth for use by candidates.

Perhaps the best available compromise is the text "Basic Pathology" by V. Kumar, R.S. Cotran and S.L. Robbins (8th edition, 2007, Saunders).

Candidates are advised to study Chapters 1-9 inclusive of the book in depth, to gain an overall perspective of processes in Pathology.

However, portions of "Basic Pathology" are beyond the scope of the examination requirements. Additional topics which are to be considered part of the core curriculum include:

Chapter 10: atherosclerosis

Chapter 11: ischaemic heart disease; valvular heart disease including infective endocarditis

Chapter 12: general features of anaemias; neutropenia; lymphomas; leukaemias; bleeding disorders

Chapter 13: asthma; pneumonia and lung abscess; bronchiectasis; tuberculosis; bronchial carcinoma

Chapter 16: jaundice; hepatic failure; viral hepatitis; cirrhosis

Chapter 21: osteoporosis; Paget's disease; neoplasms of bone.

3. ADDITIONAL REFERENCES:

Reference to any available textbook of oral pathology may be helpful, as it is desirable that candidates should have an appreciation of the relevance of these processes to clinical practice. An atlas-style text that might be worth examining is "Essentials of Oral Pathology and Oral Medicine" by R.A. Cawson and E.W. Odell (7th edition, 2002, Churchill Livingstone).

MICROBIOLOGY

1. **THE COURSE BOOKLET:** *Lecture Notes in Microbiology*, by Prof Laurence Walsh published by the Royal Australasian College of Dental Surgeons, 2003.

2. **TEXTBOOKS:**

Candidates should use modern textbooks of microbiology and immunology to supplement the course booklet. The following are recommended:

Samaranayake LP. *Essential microbiology for dentistry*. (2nd ed) Churchill-Livingstone, 2002. ISBN 044306461X or the 1996 version (1st ed) - . ISBN 0443049890

and, either

Seymour GJ, Savage NW, Walsh LJ. *Immunology. An introduction for the Health Sciences*. McGraw-Hill, 1995.

ISBN 0074528106. (This can be obtained from Prof LJ Walsh).

or

Davies H. *Introductory immunology*. Chapman and Hall.1997.

ISBN 0412372401

or

Roitt I. *Essential immunology*. 10th ed. Blackwell Scientific Publications, 2001.

Amended March 2009