



Contributors

Editor

Geoff Sumner-Smith, DVSc (Liv.),
BVSc, MSc, FRCVS,
University Professor Emeritus
Department of Clinical Studies
University of Guelph
CDN-Guelph, Ont. N1G 2W1

Executive editor

Gustave E. Fackelman, Prof., DVM,
Dr. med. vet.
PO Box 10
USA-Rockwood, ME 04478

Authors

Dennis R. Carter, PhD
Professor and Biomedical Engineer
Rehabilitation Research and
Development Center
Veteran's Affairs Palo Alto HCS
3801 Miranda Ave.
USA-Palo Alto, CA 94304-1200

Joanne R. Cockshutt, MSc, DVM,
Dip ACVS
Associate Professor (Retired)
Department of Clinical Studies
University of Guelph
CDN-Guelph, Ont. N1G 2W1

Howard Dobson, BVMS, DVSc,
Cert. EO. Dip ACVRS
Associate Professor, Department of
Clinical Studies
Chief Radiologist Veterinary
Teaching Hospital
University of Guelph
CDN-Guelph, Ont. N1G 2W1

Stina Ekman, DVM, PhD, Dip ECVF
Associate Professor
Swedish University of Agricultural
Sciences
Department of Pathology
PO Box 7028
S-750 07 Uppsala

John R. Field, MSc, BVSc, DVSc,
PhD
Associate Professor of Surgery
(Orthopedics)
Department of Surgery
Flinders University
AUS-Adelaide, SA 5041

Lawrence Friedman, MVBCh,
FFRAD (D) SA, FRCPC, FACR
Clinical Associate Professor
Department of Radiology
Guelph General Hospital
115 Delhi Street
CDN-Guelph, Ont. N1E 4J4

Harold M. Frost, BA, MD, DrSc
Department of Orthopedic Surgery
Southern Colorado Clinic
2002 Lake Ave.
USA-Pueblo, CA 81004

John E.F. Houlton, MA, VetMB,
DVR, DSAO, MRCVS, DipECVS
Consultant Cambridge University
Empshill Robins Lane
Lolworth
GB-Cambridge, CB3 8HN

Lance E. Lanyon, BVSc, PhD DSc,
MRCVS
Principal, The Royal Veterinary
College
Royal College Street
GB-London, NW1 0TU

Johannes Müller, MD (deceased)

Sydney Nade, DSc, MD, MB, BS,
BSc (Med), FRCS, FRACS, MRCP
(UK) FAOrthA
Department of Surgery
The University of Sydney
PO Box R168
Royal Exchange
AUS-Sydney, NSW 1225

Sten-Erik Olsson, Prof. (deceased)

Matthew J. Peard, BvetMed, PhD,
CertSAO, MRCVS
Department of Small Animal
Medicine and Surgery
The Royal Veterinary College
Hawkshead Lane
North Mymms
GB-Hatfield Herts, AL9 7TA

Berton A. Rahn, Prof. Dr. med.,
Dr. med. dent.
AO Research Institute
Clavadelerstrasse
CH-7270 Davos Platz

Joseph Schatzker, MD, BSc,
FRCS(C)
Professor of Orthopedic Surgery
University of Toronto
Sunnybrook Health Science Centre
2075 Bayview Avenue, Suite A315
CDN-Toronto, Ont. M4N 3M5

Robert K. Schenk, Prof. Dr. med.
Department of Oral Surgery
Freiburgstrasse 7
CH-3010 Bern

Dan M. Spengler, MD
Professor and Chairman
Department of Orthopaedics and
Rehabilitation
Vanderbilt University Medical
Center
USA-Nashville, TN 37232

Alastair J.S. Summerlee, BSc,
BVSc, PhD, MRCVS, Prof.
Department of Biomedical Sciences
Ontario Veterinary College
University of Guelph
CDN-Guelph, Ont. N1G 2W1

Geoff Sumner-Smith, DVSc (Liv.),
BVSc, MSc, FRCVS,
University Professor Emeritus
Department of Clinical Studies
University of Guelph
CDN-Guelph, Ont. N1G 2W1

Brigitte von Rechenberg, PD Dr.
med. vet., Dipl. ECVS
Musculoskeletal Research Unit
Dept. of Veterinary Surgery
University of Zürich
Winterthurerstrasse 260
CH-8057 Zürich

Hans Willenegger, Prof. (deceased)

James W. Wilson, DVM, MS,
DipACVS
PO Box 51523
USA-Livonia, MI 48151

James Wilson-MacDonald, FRCS
The John Radcliffe Hospital
Headlay Way
GB-Oxford, OX3 9DU



Dedication

Stephan M. Perren
Prof. Dr. med. Dr. sci. (h.c.)

Stephan Perren has significantly affected the lives of many who have worked in fields associated with the study of orthopedics. His influence on research, in many parts of the world, has been significant and to the benefit of all concerned. His advice has, and still is, given with the convictions of an honest scientist and always with the utmost courtesy and charm.

This edition of *Bone* is affectionately dedicated to Stephan Perren, a gentleman in orthopedics.

Geoff Sumner-Smith
2001

Foreword

Having been an Honorary Member of the Veterinary Orthopaedic Society (North America) for over a decade, I continue to be greatly impressed by the importance of the relevance of basic knowledge and clinical practice in animals on the one hand and in humans on the other hand. This relevance is especially true with respect to disorders and injuries of the musculoskeletal system including orthopedics, fractures, joint injuries, rheumatology, metabolic bone disease, and dentistry.

Those of us who are privileged to work as orthopedic surgeon-scientists in musculoskeletal research laboratories are extremely grateful to our veterinary colleagues who give us such sagacious advice as we develop animal models of human disorders and injuries and who also provide essential supervision of our animal laboratory facilities.

Now, thanks to the second edition of this splendid book entitled “Bone in Clinical Orthopedics”, we can also be grateful to Professor Geoffrey Sumner-Smith—one of the world’s most distinguished academic orthopedic veterinarians—and his 24 additional contributing authors for providing a bridge between those who treat humans and those who treat animals.

The horizontal double column format of this 496 page comprehensive and comprehensible book makes for easy reading and the 335 illustrations, many in color, are both clear and informative. Unlike a reference book, this textbook in its logical sequence, is intended to be read and savoured by the reader from beginning to end. The targeted readership of this outstanding book includes postgraduate students, in both veterinary and human orthopedics, as a solid scientific basis for understanding the tissues with which they will be working throughout their professional careers.

In the millennium within academic orthopedics, both for animals and for humans, we live in a milieu of increasing specialization and the creation of subspecialists as well. Historically, 50 years ago one individual person, for example a

histologist such as the renowned late Professor Arthur Haru, could have written a credible book on the broad subject of “bone”. By contrast, today the preparation of such a book requires a multitude of specialist and subspecialist authors including embryologists, anatomists, histologists, physiologists, biochemists, pathologists, geneticists, molecular biologists, epidemiologists, diagnostic imagers (radiologists) and clinical orthopedic surgeon-scientists.

The antiquated “one-man-band” of the past has been replaced by a symphonic orchestra of widely varied musical specialists. Of course, every such orchestra must be led by a talented conductor who understands the entire group of the musicians. In his role of conductor, Professor Geoffrey Sumner-Smith, has assembled all of the necessary musculoskeletal specialists who are pivotal in his creating and editing this outstanding book. His intrinsic fine thread of exquisite and elegant English is woven throughout the fabric of the text. He has indeed been fortunate in having Professor Gustave E. Fackelman in the role of “concert master”.

Solomon, one of the greatest teachers of all times, has written: “Give me facts but, above all, give me understanding”. My assessment of this opus magnus is that Professor Sumner-Smith, and his other contributing authors, have given us not only the facts but also the understanding and have thereby done all of us an enormous service.

Indeed, I am confident that this book will become a classic in its field.

Robert Bruce Salter
2001

CC, O ONT, FRSC, MD, MS (Tor), FRCSC, FACS, Hon Dr med (Uppsala), Hon D Sc (Memorial), Hon LL D (Dalhousie), Hon D Litt S (Wycliffe, Toronto), Hon FRCPS (Glasg), Hon FRCS (Edin), Hon FCSSA (S Africa), Hon FRCS (Eng), Hon FRACS (Aust), Hon FRCS (Ire), Hon MCFPC

University Professor of the University of Toronto
Professor of Orthopaedic Surgery, University of Toronto

Preface to the first edition

The intention behind the production of this work is to form a bridge, or more properly a “firm callus”, between the literature available for undergraduate students of orthopedics and those intending to study bone in more depth. Many texts already exist for the undergraduate and also for the student of advanced orthopedic surgery. It is hoped that this book will set the stage for graduate training in orthopedics for surgeons in the medical, dental, and veterinary fields. It is my belief that no one should undertake a detailed study of orthopedics as a subject before familiarizing themselves with much of the material presented herein. Some of it is in outline form, but in other areas the contributor has taken the theme to considerable depth. In some chapters, the material is not of a nature that is often altered by new contributions to the particular subject being described. I hope this type of text permits recent findings to be put before the reader in a succinct form.

It is a matter of particular pleasure and pride to me, as the editor of this text, to be able to present such a galaxy of experts. The fact that each contributor responded, readily and with enthusiasm, to the invitation to contribute convinced both the publishers and me that there is a need for such a text. The reception of the results of the contributions of so many people by you, the reader, will prove us right or wrong.

The production of a multi-authored text is not without its difficulties; naturally there is some overlap of subjects of one chapter with another. I believe this to be a healthy situation and, even though opinions may differ in minor details, it serves to show the serious student of orthopedics that all is not quite so cut and dried as one might have been led to believe from undergraduate teaching.

Geoff Sumner-Smith
1982

Preface to the second edition

It is now nineteen years since the publication of the first edition of this book by Saunders, Philadelphia. Many individuals have requested copies of that text, which, unfortunately, went out of print in 1984. Much of that which I wrote in 1982 is still pertinent to this second edition, and the intent for the material to form a “bridge” between the literature available for undergraduate students of orthopedics and those intending to study bone in depth still stands.

Some of the authors are contributing for the first time, and my initial statement that “I am proud to present such a galaxy of experts” is still valid. The whole text has been enlarged from eleven to fifteen chapters and has been rewritten to reflect current knowledge. Some chapters have been deleted and replaced with fresh material. The original chapter concerned with the hormonal control of bone has been deleted. This has been done after much soul searching. The decision was taken in the light of the explosion of knowledge in that area. Many texts on the subject are currently available to those interested in that material. However, the new edition of “Bone” gives the reader a “taste” of the local factors that affect the life of bone and cartilage cells.

Although many orthopedists are likely to use the text as a reference, one would wish to reiterate that it is initially intended for the new graduate, entering the professions of human, dental, or veterinary orthopedics.

Geoff Sumner-Smith
2001

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