

BOOK REVIEW

BONES Inside and Out

By Roy A. Meals, MD

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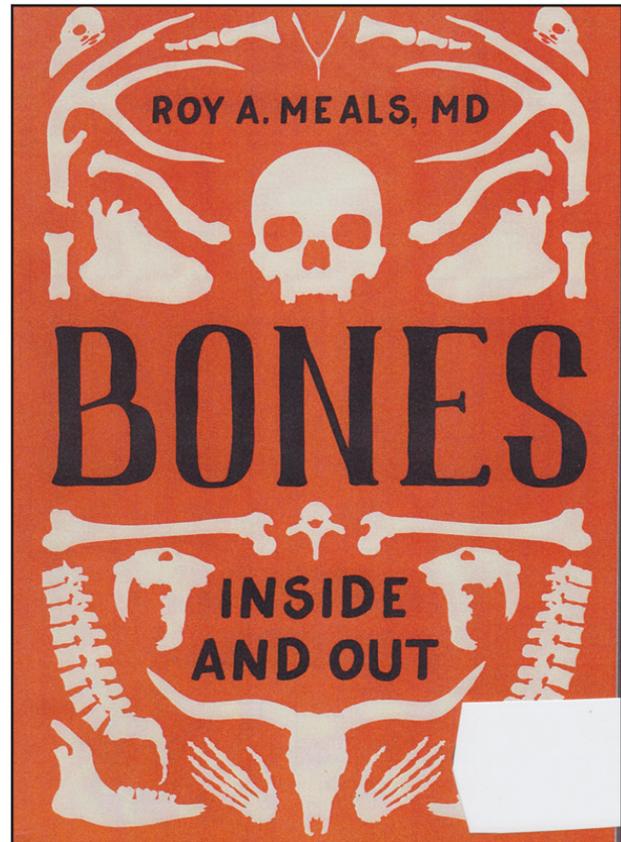
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6 by 9 inches, 140 illustrations, 304 pages

This fascinating book comprehensively discusses bones from a medical, scientific, and a cultural viewpoint. "Inside", which is the first portion of the book, refers to bones within the body: while "out" refers to bones no longer in the body, including post mortem bones, including cultural uses and historical uses of such bones. Dr. Meals is a senior orthopaedist and specifically a hand surgeon.

The author nominates bone as a remarkable material, which he defends in humans and other creatures. Fractures and repeated trauma is explained. He discusses the not-yet-bone growth plates. (Although in the hand and wrist image from Dr. Plotkin, he not only shows the non-bony growth plates, but also the pseudoepiphyseal lucency across the proximal second metacarpal which actually does not contain growth cartilage.) In discussing metabolic bone disease, he states that osteoporosis cannot be determined from conventional radiographs, which may be true for adults, but is not correct for children. In children, osteoporosis is recognized by the difference between the well mineralized zone of provisional calcification of cartilage compared to the demineralized bone next to that layer. This leaves a well demarcated thin dense line of the zone of provisional cartilage. His extensive discussion of fractures is illuminating, Bone failing including disease, bone surgery through the ages, and the stories of six giants of orthopaedics are useful chapters, as are "orthopaedic innovations" and imaging including cross sectional imaging.



The second half of the book deals with bone no longer in live individuals or animals. It is a fascinating collection of descriptions of bone collections, bone art, bones used as tools, and other roles of bones thru the ages. The many illustrations (none in color) are a delight, at least for those not faint of heart. Dr Meals is both an entertaining and an educational guide to this vast array of material. This journal has featured many articles through the years which encompass specific instances of such material.

The author, in summary, offers a wonderful sweep of the nature of bones, both within the living and then in culture and science beyond the living. The book contains nicely explained technical material along with philosophical thoughts. Health care workers and interested lay persons should indeed consider reading Dr. Meals' comprehensive book.

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