

1. Record Nr.	UNINA9910787498003321
Autore	Hall Brian K (Brian Keith), <1941->
Titolo	Bones and cartilage : developmental and evolutionary skeletal biology / / Brian K. Hall
Pubbl/distr/stampa	London, [England] : , : Academic Press, , 2015 ©2015
ISBN	0-12-416685-7
Edizione	[Second edition.]
Descrizione fisica	1 online resource (911 p.)
Disciplina	573.76
Soggetti	Bones Bones - Phsyiology Bones - Growth
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Front Cover; Bones and Cartilage; Copyright Page; Contents; Preface; Organisational Changes; Conceptual Changes; Epigraphs; I. Vertebrate Skeletal Tissues; 1 Vertebrate Skeletal Tissues; Bone; Cartilage; Dentine; Enamel; Intermediate Tissues; Cementum; Enameloid; Chondroid and Chondroid Bone; Cartilage into Bone: Direct and Indirect Ossification; Notes; 2 Bone; Discovery of the Basic Structure of Bone; Cellular Bone; Osteocytes; Sclerostin; Osteocyte Connections, Function and Maintenance; Intramembranous and Endochondral Bone; Embryonic Origins Subperiosteal Ossification and Suppression of the Cartilage PhaseMetabolic Differences Between Bone Types; Morphogenetic Differences Between Bones; Osteones; Growth; Regional Remodelling; Ageing; Ageing at the Cellular Level; Ageing at Cellular and Tissue Levels; Ageing at the Organ Level; Ageing of the Skeletal System; Osteones Over Time; Acellular Bone; Caisson Disease and Abnormal Acellular Bone in Mammals; Acellular Bone in Teleost Fishes; Development; Mechanical Properties; Resorption; Repair of Fractures; Ca2+ Regulation; Aspidine; Bone in Sharks and Rays (Cartilaginous Fishes); Notes 3 Vertebrate CartilagesTypes; Chondrones; Cartilage Growth; Cartilage Canals; Secondary Centres of Ossification; Elastic Cartilage; Elastic

Fibres; The Cells; Elastic Cartilage, Adipocytes and Intermediate Tissues; Shark Cartilage; Development and Mineralisation; Tesseræ; Growth; Inhibition of Vascular Invasion; Lampreys; Mucocartilage; Lamprin; Mineralisation; Hagfish; Acellular Cartilage in a Freshwater Stingray; Notes; II. Origins and Types of Skeletal Tissues; 4 Invertebrate Cartilages, Notochordal Cartilage and Cartilage Origins; Chondroid and Cartilage  
 Odontophore Cartilage in Caenogastropods Branchial (Gill Book)  
 Cartilage in the Horseshoe Crab, *Limulus polyphemus*; Cranial Cartilages in Squid, Cuttlefish and Octopuses; Composition of the Extracellular Matrix; Glycosaminoglycans; Collagens; Tentacular Cartilage in Polychaete Annelids; Lophophore Cartilage in an Articulate Brachiopod, *Terebratalia transversa*; Mineralisation of Invertebrate Cartilages; Cartilage Origins; Hemichordates; Notochordal Cartilage; Notes; 5 Intermediate Tissues; Scleroblasts; Modulation and Intermediate Tissues; Cartilage from Fibrous Tissue and Metaplasia  
 Metaplasia of Epithelial Cells to Chondroblasts or Osteoblasts  
 Chondroid; Chondroid in Teleosts; Chondroid in Mammals; Chondroid Bone; Chondroid Bone in Teleosts; Trematode Infections and Biomechanical Stress; Kype Tissues in Migrating Atlantic Salmon, *Salmo salar*; Chondroid Bone and Pharyngeal Jaws; Chondroid Bone in Mammals; Tissues Intermediate Between Bone and Dentine; Dentine; Cementum; Enameloid: a Tissue Intermediate Between Dentine and Enamel; Notes; 6 Lessons from Fossils; Fossilised Skeletal Tissues; All Four Skeletal Tissues Are Ancient  
 A Family of Skeletal Tissues in Fossil Agnatha

---

Sommario/riassunto

*Bones and Cartilage* provides the most in-depth review and synthesis assembled on the topic, across all vertebrates. It examines the function, development and evolution of bone and cartilage as tissues, organs and skeletal systems. It describes how bone and cartilage develop in embryos and are maintained in adults, how bone is repaired when we break a leg, or regenerates when a newt grows a new limb, or a lizard a new tail. The second edition of *Bones and Cartilage* includes the most recent knowledge of molecular, cellular, developmental and evolutionary processes, which are i

---