

1. Record Nr.	UNINA9910785836603321
Titolo	Wolff's law and connective tissue regulation [[electronic resource] ] : modern interdisciplinary comments on Wolff's law of connective tissue regulation and rational understanding of common clinical problems / / editor, Gunter Regling
Pubbl/distr/stampa	Berlin ; ; New York, : W. de Gruyter, 1992
ISBN	3-11-087567-5
Edizione	[Reprint 2010]
Descrizione fisica	1 online resource (356 p.)
Altri autori (Persone)	ReglingGunter <1948->
Disciplina	612.7/5
Soggetti	Bone remodeling Bones - Pathophysiology Connective tissues - Pathophysiology
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.
Nota di contenuto	Front matter -- I. Historical Background -- Julius Wolff and the Law of Bone Remodelling / Zippel, H. -- A Noteworthy Meeting of the Society for Nature Research in Zurich Two Important Precursors of Julius Wolff: Carl Culmann and Hermann von Meyer / Rüttimann, B. -- Julius Wolff and Friedrich Pauwels. Wolff's Concept of a Causal Therapy of Orthopaedic Diseases Using Biological Adaptation Phenomena and Its Realization by Friedrich Pauwels / Löer, F. / Weigmann, R. -- Wolff's Law / Maquet, Paul -- II. Theory of Biological Sciences -- Biological Explanation and Principle of Causality / Löther, R. -- Adaptation and Compensation as Biological Principles of Medical Thinking and Action / Hecht, A. -- Feedback Control Processes in Medicine and Technology - a Comparison / Thomas, F. -- III. Biomechanical Considerations -- Computer Aided Simulation of the Functional Bone Adaptation - a Method to Check a Theory / Kummer, B. -- The Bone as a Compression Member in a Cable Tensioning Device: The Example of the Hip / Moser., M. / Hein, W. -- Stress-Shape Relationship during Treatment of a Congenital Dislocation of the Hip / Maquet, P. -- Computer Simulation of Bone Remodelling in Dentistry and Orthopaedics / Tsutsumi, S. // Yamamuro, T. -- Computerized Reconstruction for the Study of the Three-dimensional Architecture of Trabecular Bone /

Merolli, A. / Tranquilli Leali, P. / Gabbi, C. / -- IV. Electrophysiological Aspects -- Wolffs Law and Its Biophysical Implications / Bassett, C. A. L. -- How Do Cells Respond to the Mechanical Environment? / Jones, D. B. -- Control of Embryonic Chick Bone Growth by Resonant Electromagnetic Fields / Smith, S. D. / McLcod, B. R. / Liboff, A. R. -- Electrostimulation in Biology, Utilities and Side Effects / Berg, H. / Bauer, E. -- An integrative Concept for an Electrophysiological Signal System in the Connective Tissue Matrix. The Native Collagen Fibrils as Biosensor and Signal-Conducting Structure Between Nerve and Cell as Well as in the Intercellular Matrix, and a Discussion of the Underlying Mechanism / Regling, G. / Rückmann, H.-I. -- V. Blood Supply and Metabolism -- Intraosseous Pressure of the Human Patella / Graf, J. / Christophers, R. / Niethard, F. U. -- The Mechanoreceptor Hypothesis for Remodeling of Bone and the Influence of Fluorid Therapy for Osteoporosis on It / Abendroth, K. -- Metaphyseal Stress Shielding and Transarticular Load Transfer - a Biomechanical Concept of Osteopenia / Schleberger, R. / Bernsmann, K. / Schneider, E. M. -- Bone Remodelling in Disuse Osteoporosis / Willert, H.-G. / Enderle, A. -- Selenite, Nitrate, and Mercury and their Influence on Regulation Principles in Connective Tissue / Wilsdorf, G. -- The Biological Role of Oxygen Radicals, Lipid Peroxidation, and Antioxidative Therapy in Connective Tissue Regulation / Regling, G. / Hager, A. / Wilsdorf, G. -- VI. Special Clinical Problems -- Model Investigations on the Loading of Bone in the Area of Hip-Joint Prostheses, and New Prosthesis Designs in Consideration of Wolff's Law / Schreiber, A. / Jacob, H. A. C. / Huggler, A. H. -- Modes of Adaptation in Noncemented Total Hip Endoprosthesis / Rossak, K. -- Cementless Implantation of the Stem of Different Types of Standard Hip Endoprosthesis / Krakovits, G. E. -- Bone Adaptation to Dynamic Osteosynthetic Implants / Labitzke, R. -- Complex Biophysical-Chemical Therapies for Squamous Cell Carcinoma / Randoll, U. G. / Pangan, R. M. / Dehmlow, R. -- VII. Soft Tissue Regulation, Arthrosis, and Arthritis -- Superficial Zone of Articular Cartilage after Immobilization and Running Training: Is Proteoglycan Depletion the Clue to the Pathogenesis of Osteoarthrosis? / Helminen, H. J. / Kiviranta, I. / Säämänen, A.-M. / Jurvelin, J. / Paukkonen, K. / Parkkinen, J. / Lammi, M. / Arokoski, J. / Lapveteläinen, T. / Hyttinen, M. / Tammi, M. -- Feedback Mechanism in the Synovial System / Dettmer, N. -- Oxygen-Multistep Therapy in Degenerative Diseases of The locomotor System / Ardenne, M. von -- Intra-articular Measurement of Resting Synovial pO<sub>2</sub> (Oxygen Partial Pressure of Synovial Fluid) - a New Point of Intersection for Clinical Research in the Areas of Arthrosis and Pain / Regling, G. / Jessen, N. / Meister, S. / Berg, R. -- Immunologic and Immunogenic Background in the Understanding of the Pathogenesis of Lyme Disease / Dostál, C. -- A Biological Examination of Inflammatory Rheumatic Diseases: The Example of Spondylitis Ankylopoietica (Bekhterev's Disease) / Regling,, G. / Tunn, P.-U -- List of First Authors

---

Sommario/riassunto

Wolff's Law and Connective Tissue Regulation: Modern Interdisciplinary Comments on Wolff's Law of Connective Tissue Regulation and Rational Understa.

---