Table of Contents

1. Anatomy and Histology of Cartilage
   by Andrew Horvai, MD, PhD

2. Clinical aspects: A Rheumatologist's Perspective
   by David Hunter, MBBS, PhD, FRACP

3. Clinical aspects: An Orthopedic Surgeon’s Perspective
   by Sunny Cheung, MD and C. Benjamin Ma, MD

4. Conventional Radiography as an Indirect Measure for Cartilage Pathology
   by Daichi Hayashi, MD, Jeffrey Duryea PhD, Frank W. Roemer, MD, and Ali Guermazi, MD

5. Value of CT Arthrography in the Assessment of Cartilage Pathology
   by Patrick Omoumi, MD, Paolo Simon, MD, Bruno C. Vande Berg, MD, PhD, Frédéric E. Lecouvet, MD, PhD

6. MRI of Cartilage: Standard Techniques
   by Thomas M. Link, MD

7. MRI of Cartilage: Pathological Findings
   by Thomas M. Link, MD

8. Scoring Systems to Semi-quantitatively Grade Cartilage Pathology with MRI
   by Christoph Stehling, MD

   by Hans Liebl, MD and Thomas M. Link, MD

10. Cartilage Segmentation
    by Julio Carballido-Gamio, PhD and Thomas M. Link, MD

11. Quantitative MR Imaging of Cartilage Morphology in Osteoarthritis
    by Felix Eckstein, MD, PhD, Martin Hudelmaier, MD, and Wolfgang Wirth, PhD

12. MR T2 relaxation time measurements
    by Thomas Baum, MD, Thomas M. Link, MD and Bernard J. Dardzinski, PhD

13. MR T1 relaxation time measurements
    by Xiaojuan Li, PhD

14. Cartilage Matrix Assessment: dGEMRIC
    by Martha L. Gray, PhD, and Deborah Burstein, PhD

15. Imaging of Cartilage Repair
    by Goetz H. Welsch, MD, Stephan E. Domayer, MD, Vladimir Juras, PhD, Tallal C. Mamisch, MD, and Siegried Trattnig, MD

16. Cartilage as a Biomarker
    by Thomas M. Link, MD, and Sharmila Majumdar, PhD

17. Frontiers in Molecular Imaging of Cartilage - Future Developments
    by Ravinder Reddy, PhD, Arijit Borthakur, PhD, Walter H.T. Witschey, PhD and J. Bruce Kneeland, MD

18. Future Perspective and Significance of Cartilage Imaging and Quantification
    by Thomas M. Link, MD, and Sharmila Majumdar, PhD