MRI-Essentials.com is based on a brief work intended as a tool for daily musculoskeletal practice which was first published in 2002. Short paragraphs and simple drawings covered the basic facts of musculoskeletal MRI. Positive feedback over the years suggested that many radiologists prefer this concise style over the usual exposition of textbooks. The success of this early effort lead us to extend the concept of short text passages with accompanying drawings into an expanded—yet still concise—text with many images to illustrate the discussion. Maintaining the original concept, the text passages are deliberately very short and focus on the clinically relevant facts.

The Concept
MRI-Essentials.com covers all aspects of musculoskeletal MRI with an emphasis on orthopedics and sports medicine. The text is highly compressed and enhanced by the images. Examples of some complex pathologies are included, but without straying from the subject. Learning in radiology, like all learning, is a combination of knowledge acquired from those around us, knowing the science and personal experience. Presentation and analysis of actual MR images is of fundamental importance to such personal experience beyond the daily exposition of cases. The images included in this book were chosen to provide the opportunity for such analysis, but the most important requirement was that the images are relevant to clinical practice.

The Team
To bring an idea to life, the input, vision and experience of other experts is paramount. I particularly wish to thank Frank Roemer and Ali Guermazi who helped tremendously in driving this project and in gathering a fantastic group of internationally renowned experts who supported this project with all their expertise from the beginning. The combined knowledge of these world-class experts made the many discussions and ongoing refinement of details a most enjoyable experience.

The Readers
MRI-Essentials.com can be studied and read from the beginning to the end to gain a deeper insight into musculoskeletal MR imaging, but it can also be dipped into for information on specific topics. Basic knowledge of MRI is helpful to take full advantage of its content. The structure of the book is as logical as possible to allow easy access to its contents so that it can be of use in daily radiology practice. Finally, any non-radiologists involved in the diagnosis and treatment of orthopedic conditions will profit from this book, as knowledge of MRI is always important for communication and decisions about treatment.

The Goal
Radiologists who deal with musculoskeletal MRI every day need fast access to the information necessary to establish a diagnosis. To meet this goal the text is concise, yet comprehensive, constantly focusing on clinical relevance while integrating anatomy and pathology.
I hope that this book will foster communication between the radiologist and referring physician, will help provide focused and comprehensive reports and, finally and most importantly, will reflect the needs of our patients. If I have only partially reached this goal I am a happy man!

July 2014

Wolfgang Fischer, on behalf of all co-authors
Using the Book

The Structure
Browse the text to familiarize yourself with the organization of the chapters. The chapters are all organized in the same way, making it easy to find specific information. The icons at the edge of each page will guide you to the relevant chapter and the chapter headlines will guide you to a particular section within the chapter. Finally, the titles and illustrations help to find the pages relevant to the question at hand. In addition, keywords are highlighted to further narrow the search.

The Figures
Cross references to figure legends were omitted in parts of the text as the layout of the text and corresponding figures made this unnecessary.

Large exclamation marks emphasize particularly important facts, especially diagnostic pitfalls.

Figures that do not illustrate a specific example of the explained pathology of a distinct paragraph but a differential diagnosis are marked with a red “DDx”. This is intended to avoid misinterpretation as a case example.

Literature
I tried to include recent publications on imaging findings and technical aspects whenever I felt these to be relevant for daily clinical practice. Often it is unclear, however, whether they will become a standard or be abandoned as the field advances. For controversial topics or content that was only discussed briefly in the text, the reference list has more information. Generally, the references are the most recent available for the best overview of current knowledge.

Classifications and grading systems
The reader will recognize that only a few classifications and grading systems are mentioned. In my personal opinion classification is often unnecessary and can be confusing. There are (too) many systems and unpublished modifications that describe the same pathology in different terms. An exact description of a specific imaging finding will have less chance of being misunderstood than, for example, replacing “partial tear” with “grade 2 injury”. For these reasons I have included only classifications that seem to be applied in unequivocal fashion internationally and that usefully summarize relevant imaging content.

The Index
To make the index as self-explanatory as possible, keywords refer only to the page containing the most relevant paragraph for a given keyword. As the figures are always presented together with the text, page numbers for figures are not included in the index.