

# - Medical information - MBST®-MagneticResonanceTreatment

- Professional publications, studies
- Articles in specialized media
- Published scientific lectures and posters
- Specialised book publications
- Expertise

Status: February 2016

### 2016:

### 1) Therapeutic Application of Magnetic Resonance in Osteoporosis

Kullich, W.¹, Lukenda, I.², Stritzinger, B.¹, Overbeck, J.², Krpan, D.², ¹Ludwig Boltzmann Cluster for Rheumatology, Balneology and Rehabilitation, Ludwig Boltzmann Department for Rehabilitation, Saalfelden, Austria, ²Poliklinik K-CENTAR, Zagreb, Croatia, ³Private Consultant Surgeon, Deggendorf, Germany; published in: Ber. nat.-med. Ver. Salzburg, Vol. 18, p. 7-17, Salzburg 2016.

Language: German

#### 2015:

2) Effects of MagneticResonanceTreatment on the dynamics of liver regeneration Inaugural Dissertation for Gaining the 'Doctor Medicinae' from the Medical Faculty of the

Westphalian Wilhelms University of Muenster. Budny, N., University Hospital of Muenster, Department of General and Visceral Surgery, Surgical Research Department, Muenster, Germany; October 2015.

3) Modulation of NF-kB activity by the therapeutic Nuclear Magnetic Resonance (NMR) to explain pain reduction in patients with osteoarthritis

B. Steinecker-Frohnwieser<sup>1</sup>, W. Kullich<sup>1</sup>, A. Mann<sup>2</sup>, B. Stritzinger<sup>1</sup>, H. G. Kress<sup>2</sup>, L. Weigl<sup>2</sup>, <sup>1</sup>Ludwig Boltzmann Cluster for Rheumatology, Balneology and Rehabilitation, LBI for Rehabilitation of Internal Diseases Saalfelden, Austria, <sup>2</sup>Department of Special Anaesthesia and Pain Therapy, Medical University Vienna, Austria; poster presentation at the International Pain Congress of the European Pain Federation EFIC, Vienna, Austria, 2<sup>nd</sup>-5<sup>th</sup> September 2015.

4) Non-pharmacological treatment of osteoporosis with Nuclear Magnetic Resonance Therapy (NMR-Therapy)

Dalibor Krpan<sup>1</sup>, Barbara Stritzinger<sup>2</sup>, Ivan Lukenda<sup>1</sup>, Joakim Overbeck<sup>3,1</sup>, Werner Kullich<sup>2</sup>, <sup>1</sup>Poliklinika K-CENTAR, Zagreb, Croatia, <sup>2</sup>Ludwig Boltzmann Cluster for Rheumatology, Balneology and Rehabilitation, Department for Rehabilitation, Saalfelden, Austria, <sup>3</sup>Private Consultant Surgeon, Deggendorf, Germany; published in: PERIODICUM BIOLOGORUM VOL. 117, No. 1, 161–165, 2015.

5) A new concept of integrated holistic approach in treatment of chronic musculoskeletal diseases The "BAR" method



Prof. Dr. sc. Dalibor Krpan, Polyclinic K-CENTAR, Zagreb, Croatia; published in: PERIODICUM BIOLOGORUM VOL. 117, No 1, 119–124, 2015.

6) Effects of Therapeutic-NMR (MBST-Nuclear Magnetic Resonance) on the Circadian Clock and the Hypoxic Signaling Pathway in Zebrafish Cells

R. Oliva, Master thesis for the acquisition of the academic degree Master of Science (MSc), Faculty of Biology, Department of Ecophysiology, Leopold Franzens University of Innsbruck, Innsbruck, Austria.

#### 2014:

1) Nuclear magnetic resonance treatment (MBST®) of clinical symptoms caused by osteoarthritis: a double-blinded placebo-controlled study in dogs

M.C. Mueller, K. Wittek, B. A. Bockstahler, Department for Small Animals and Horses, Small Animal Surgery, Section for Physical Therapy and Rehabilitation, University of Veterinary Medicine Vienna, Austria; poster presentation at the International Symposium in Animal Musculoskeletal Practice, Coventry, England, 29.-30. November 2014.

2) The Influence of Nuclear Magnetic Resonance Therapy (NMRT) and Interleukin IL1-β Stimulation on Cal 78 Chondrosarcoma Cells and C28/I2 Chondrocytes

B. Steinecker-Frohnwieser, Ludwig Boltzmann Institute for Rehabilitation of Internal Diseases, Ludwig Boltzmann Cluster for Rheumatology, Balneology and Rehabilitation, Saalfelden, Austria; scientific lecture at the Scientific Symposium: Microbiome Research / Personalized Medicine, Graz, Austria, 17<sup>th</sup> – 18<sup>th</sup> July 2014.\*

3) MBST - Nuclear Magnetic Resonance Therapy, the new opportunity in the treatment of chronic skeleton diseases and sport injuries

D. Krpan, Policlinica K-Centar, Zagreb, Croatia; lecture at the Russian Slovenian scientific meeting, Terme Olimia, Slovenia, June 2014.

4) New active principle: Therapy with nuclear magnetic resonance

W. Kullich; Ludwig Boltzmann Institute for Rehabilitation of Internal Diseases, Ludwig Boltzmann Cluster for Rheumatology, Balneology and Rehabilitation, Saalfelden, Austria; scientific lecture at the "Special pain therapy" course, Pain diploma of the Austrian Medical Chamber, Leogang, Austria, 19<sup>th</sup> June 2014.\* Language: German

5) The Influence of Nuclear Magnetic Resonance Therapy (NMRT) and Interleukin IL1-β Stimulation on Cal 78 Chondrosarcoma Cells and C28/I2 Chondrocytes

B. Steinecker-Frohnwieser<sup>1</sup>, L. Weigl<sup>2</sup>, G. Weberhofer<sup>2</sup>, W. Kullich<sup>1</sup>, H.G. Kress<sup>2</sup>; <sup>1</sup>Ludwig Boltzmann Institute for Rehabilitation of Internal Diseases, Ludwig Boltzmann Cluster for Rheumatology, Balneology and Rehabilitation, Saalfelden, Austria; <sup>2</sup>Department of Special Anaesthesia and Pain Management, Medical University Vienna, Austria; published in: J Orthopedics Rheumatology, 2014; 1(3):9.

6) Application of Nuclear Magnetic Resonance Therapy as treatment of degenerative diseases of locomotor system

I. Mařík, A. Maříková, R. Myslivec; Ambulantní centrum pro vady pohybového aparátu s.r.o, Prague, Czech Republic; scientific lecture at the 19<sup>th</sup> Kubat's Podiatric day, 08<sup>th</sup> or March 2014, Prague. Language: Czech



7) Top 100 2014: Innovation Aces: Ranga Yogeshwar introduces Germany's innovation elite Bantle, F.; Blath, M.; Borges, H.; Goebel, B.; Hess, D.; Heubeck, R.; Olschner, S.; Pesch, U.; Rauch, S.; Weiand-Schütt, R.; Redline Verlag, Munich 2014, p. 100-103.

### <u>2013:</u>

- 1) Clinical Efficiency of Nuclear Magnetic Resonance Therapy in Osteoarthritis
  - W. Kullich, B. Stritzinger, B. Steinecker, Ludwig Boltzmann Institute for Rehabilibation of Internal Diseases, Ludwig Boltzmann Cluster for Rheumatology, Balneology and Rehabilitation, Saalfelden, Austria; poster presentation at the First LBG Meeting for Health Science, Vienna, Austria, 2<sup>nd</sup> December 2013.\*
- 2) Long-term efficacy of Nuclear Magnetic Resonance Therapy on Osteoarthritis proved by multicentric data of more than 4,500 patients

W. Kullich, B. Stritzinger, B. Steinecker, Ludwig Boltzmann Institute for Rehabilitation of Internal Diseases, Saalfelden; Ludwig Boltzmann Cluster for Rheumatology, Balneology and Rehabilitation, Saalfelden, Austria; Poster presentation at the first LBG meeting for Health Sciences 2013, 2<sup>nd</sup> December 2013, Vienna. Language: German

- 3) Long-term efficacy of Nuclear Magnetic Resonance Therapy on osteoarthritis proven by multicentric data of more than 4,500 patients
  - B. Stritzinger, B. Steinecker, W. Kullich, Ludwig Boltzmann Institute for Rehabilitation of Internal Diseases, Saalfelden; Ludwig Boltzmann Cluster for Rheumatology, Balneology and Rehabilitation, Saalfelden, Austria; published in: Journal für Mineralstoffwechsel 2013; 20(4):159. Language: German
- 4) Intracellular Calcium Is Influenced by Nuclear Magnetic Resonance Therapy (NMRT) in Cal-78 Chondrosarcoma Cells

B. Steinecker-Frohnwieser<sup>1</sup>, L. G. Weigel<sup>2</sup>, H. G. Kress<sup>2</sup>, W. Kullich<sup>1,3</sup>, <sup>1</sup>Ludwig Boltzmann Institute for Rehabilitation of Internal Diseases, Saalfelden; <sup>2</sup>Department of Special Anesthesia and Pain Management, Medical University of Vienna; <sup>3</sup>Ludwig Boltzmann Cluster for Rheumatology, Balneology and Rehabilitation, Saalfelden, Austria; scientific lecture at the annual meeting of the ÖGR 2013; published in: Journal für Mineralstoffwechsel, Volume 20 2013, Number 4, pp. 161-162.

- 5) Innovative medical technology Made in Germany
  - A. Muntermann, A. Oelsner, MedTec Medizintechnik GmbH, Wetzlar, Germany; scientific lecture at the Dr. Sulaiman Al Habib Hospital, Riyadh, Saudi Arabia, 26<sup>th</sup> November 2013.\*
- 6) MBST-Nuclear Magnetic Resonance Therapy innovative medical technology made in Germany
  A. Muntermann, A. Oelsner, MedTec Medizintechnik GmbH, Wetzlar, Germany; scientific lecture at the
  National Guard Hospital, Riyadh, Saudi Arabia, 27<sup>th</sup> November 2013.\*
- 7) Innovative medical technology Made in Germany
  - A. Muntermann, A. Oelsner, MedTec Medizintechnik GmbH, Wetzlar, Germany; scientific lecture at the Saad Specialist Hospital, Dammam, Saudi Arabia, 28<sup>th</sup> November 2013.\*
- 8) MBST Nuclear Magnetic Resonance Therapy, the new opportunity in the treatment of chronic skeleton diseases and sport injuries
  - D. Krpan, Policlinica K-Centar, Zagreb, Croatia; lecture at the scientific meeting, Bucharest, Romania, September 2013.



## 9) NUCLEAR MAGNETIC RESONANCE THERAPY. A SHORT ANALYSIS OF THE SCIENTIFIC STUDIES FOCUSED ON THE SPINE

Assoc. Professor Ivo Mařík, Md, PhD Ambulant Centre for defects of Locomotor apparatus, l. l. c., Prague, Czech Republic, M. Schmitz, A. Oelsner, MedTec Medizintechnik GmbH, Wetzlar; scientific lecture at the THE 15TH PRAGUE-LUBLIN-SYDNEY SYMPOSIUM, Children's Rehabilitation Center of Orthopaedics and Traumatology "Ogonyok, St. Petersburg, Russia, 15th – 22nd September 2013.

# 10) Long-term reduction of pain in different types of Osteoarthritis after the treatment with nuclear magnetic resonance

W. Kullich, B. Steinecker, J. Overbeck, Ludwig Boltzmann Cluster for Rheumatology, Balneology, and Rehabilitation, Ludwig Boltzmann Institute for Rehabilitation of Internal Diseases, Saalfelden, Austria; private consultant surgeon, Deggendorf, Germany; published in: Schmerznachrichten 4 / 2013, pp. 20-23. Language: German

### 11) MBST - Nuclear Magnetic Resonance Therapy on Gonarthrosis, Long-Term Effects

W. van Laack, University of Applied Science Aachen, Germany; abstract in the congress catalogue of the "Safety and Security", Innovation Alliance of North-Rhine Westphalia Universities, Brussels, Belgium, 18<sup>th</sup> June 2013.

### 12) MBST - Analysis of the scientific studies and its relevance to the daily application

J. G. Overbeck, Private Consultant, Deggendorf, Germany; scientific lecture at the Park Hotel, New Delhi, India, 7<sup>th</sup> June 2013.

## 13) MBST – Nuclear Magnetic Resonance Therapy, Analysis of the Scientific Studies and its Relevance to the Daily Application

J. G. Overbeck, Private Consultant, Deggendorf, Germany; scientific lecture at the East Delhi Gynae Forum, Delhi, India, 7<sup>th</sup> June 2013.

### 14) Magnetic resonance therapy

J. G. Overbeck, Private Consultant, Deggendorf; scientific lecture at the 32<sup>nd</sup> Annual Conference of North Zone Chapter of The Indian Orthopaedic Association, Srinagar, Indian, 1<sup>st</sup> June 2013.\*

# 15) Therapy with Magnetic Resonance – Sustainable Improvement of Osteoarthritis Pain (Multicentric Observational Study on 4.518 patients)

W. Kullich, B. Steinecker, Ludwig Boltzmann Institute for Rehabilitation of Internal Diseases, Saalfelden, Austria, Ludwig Boltzmann Cluster for Rheumatology, Balneology and Rehabilitation, Saalfelden, Austria; published in: "Dream and Reality. Pain Therapy in the Conflict between Ethics and Economy", ÖSG lectures, Leykam book publisher, 2013:43-44. Language: German

# 16) Therapy with Magnetic Resonance – Sustainable Improvement of Osteoarthritis Pain (Multicentric Observational Study on 4.518 patients)

W. Kullich, B. Steinecker, Ludwig Boltzmann Institute for Rehabilitation of Internal Diseases, Saalfelden, Austria, Ludwig Boltzmann Cluster for Rheumatology, Balneology and Rehabilitation; scientific poster presentation at the 21<sup>st</sup> Scientific Conference of the Austrian Pain Society, winner of the 1<sup>st</sup> prize for the poster presentation, Klagenfurth, Austria, 9<sup>th</sup> – 11<sup>th</sup> May 2013. Language: German

# 17) Multicentric data from more than 4.500 patients with degenerative rheumatic diseases proof sustainable effect of Magnetic Resonance Therapy

W. Kullich, Ludwig Boltzmann Institute for Rehabilitation of Internal Diseases, Ludwig Boltzmann Cluster for Rheumatology, Balneology and Rehabilitation, Saalfelden, Austria; scientific poster presentation at the 61<sup>st</sup> Annual Conference of the South German Orthopaedists and Orthopaedic Surgeons, 1<sup>st</sup> – 4<sup>th</sup> May 2013, Baden-Baden, Germany, poster no. p32. Language: German



# 18) Multicentric data from more than 4.500 patients with degenerative rheumatic diseases proof sustainable effect of Magnetic Resonance Therapy

W. Kullich, Ludwig Boltzmann Institute for Rehabilitation of Internal Diseases, Ludwig Boltzmann Cluster for Rheumatology, Balneology and Rehabilitation, Saalfelden, Austria; published in the Special Edition of the Journal für Orthopädie und unfallchirurgische Praxis (abstracts VSOU), Deutscher Ärzteverlag, 2013:305-306. Language: German

### 19) Intracellular Calcium is influenced by the Nuclear Magnetic Resonance Therapy in Cal-78 chondrosarcoma cells

B. Steinecker-Frohnwieser<sup>1</sup>, L. Weigl<sup>2</sup>, W. Kullich<sup>1</sup>; <sup>1</sup>Ludwig Boltzmann Institute for Rehabilitation of Internal Diseases, Ludwig Boltzmann Cluster for Rheumatology, Balneology and Rehabilitation, Saalfelden, Austria; <sup>2</sup>Department of Special Anesthesia and Pain Management, Medical University of Vienna, Austria; published in: Bone – Abstracts (ECTS 2013, Lisbon), 2013; 1:248.

### 20) Intracellular Calcium is influenced by the Nuclear Magnetic Resonance Therapy in Cal-78 chondrosarcoma cells

B. Steinecker-Frohnwieser<sup>1</sup>, L. Weigl<sup>2</sup>, W. Kullich<sup>1</sup>; <sup>1</sup>Ludwig Boltzmann Institute for Rehabilitation of Internal Diseases, Ludwig Boltzmann Cluster for Rheumatology, Balneology and Rehabilitation, Saalfelden, Austria; <sup>2</sup>Department of Special Anesthesia and Pain Management, Medical University of Vienna, Austria; scientific lecture at the ECTS 2013, Lisbon, 18<sup>th</sup>-21<sup>st</sup> May 2013.\*

### 21) Functional ability of skeleton and how we can improve it by MBST

D. Krpan, Policlinica K-Centar, Zagreb, Croatia; Croatian national congress of osteoporosis, Opatia, Croatia, April 2013.\* Language: Croatian

# 22) (N)MRT – Nuclear Magnetic Resonance Therapy, Analysis of the Scientific Studies and its Relevance to Sport Injuries and its Ramifications

J. G. Overbeck, Private Consultant, Deggendorf, Germany; scientific lecture at the Connective Tissues in Sports Medicine, University of Ulm, Germany, 12<sup>th</sup> – 14<sup>th</sup> April 2013.\*

# 23) One-year-survey with multicenter data of more than 4,500 patients with degenerative rheumatic diseases treated with therapeutic nuclear magnetic resonance

W. Kullich, J. Overbeck, H.U. Spiegel, Ludwig Boltzmann Cluster for Rheumatology, Balneology, and Rehabilitation, Ludwig Boltzmann Institute for Rehabilitation of Internal Diseases, Saalfelden, Austria; private consultant surgeon, Deggendorf, Germany; Department Surgery Research, Clinic and Polyclinic for Primary Surgery and Visceral Surgery, University Hospital Muenster, Muenster, Germany; published in: Journal of Back and Musculoskeletal Rehabilitation 26 (2013) 93-104; DOI 10.3233/BMR 2012-00362, IOS Press.

#### 2012:

# 1) MBST - Nuclear Magnetic Resonance Therapy, the new opportunity in the treatment of chronic skeleton diseases and sport injuries

D. Krpan, Policlinica K-Centar, Zagreb, Croatia; lecture on the symposium "The best practices in the health evaluation of elite athletes – post Olympic analyses", Belgrade, Serbia, October 2012.

### 2) Guide to naturopathic treatment for the doctors practice

Published by: André-Michael Beer, Martin Adler, Munich 2012, p. 296. Language: German



# 1) Analysis of the Long-term Effect of the MBST Nuclear Magnetic Resonance Therapy on Gonarthrosis

W. van Laack, G. Froning, Institute for Bioengineering (IfB), Laborator of Biomechanics, FH Aachen, Campus Juelich, Orthopedic Practice and Center for ambulant arthroscopic surgery, Herzogenrath, Germany; published in: Orthopaedic Practice 47, 11, 2011, pp. 536-543.

# 2) Impact of Magnetic Resonance Therapy on Sickness Absence of Patients with Nerve Root Irritation Following a Lumbar Disc Problem

G. Salomonowitz, H. Salfinger, J. Hahne, M. Friedrich, Technology of Radiology, University of applied Sciences-Campus Vienna, Austria; Orthopaedic Pain Therapy, Orthopaedic Hospital Speising, Vienna, Austria; CEOPS, Orthopaedic Spital Speising, Vienna, Austria; published in: Z Orthop Unfall 2011; 149(5): 575-581. (DOI: 10.1055/s-0031-1280121).

#### 3) MBST – The new treatment of osteoarthritis and osteoporosis

D. Krpan, Policlinica K-Centar, Zagreb, Croatia; lecture at the ISCEM 2011 and the 5<sup>th</sup> Croatian congress of endocrinology with international participation, Pula, Croatia, October 2011.\* Language: Croatian

### 4) 30 years of Boltzmann Institute and 30<sup>th</sup> conference for rheumatism in Saalfelden

W. Kullich, Ludwig-Boltzmann Cluster for Rheumatology, Balneology and Rehabilitation, Institute for Rehabilitation of Internal Diseases, Saalfelden, Austria; published in: Jatros Orthopädie, 5/2011, p. 68. Language: German

### 5) Therapeutic use of Nuclear Magnetic Resonance in different forms of osteoarthritis

W. Kullich, Ludwig Boltzmann Institute for Rehabilitation of Internal Diseases, Ludwig Boltzmann Cluster for Rheumatology, Balneology and Rehabilitation, Saalfelden, Austria; scientific lecture at the 30<sup>th</sup> Rheumatologic Advanced Training Conference, Saalfelden, Austria, 17<sup>th</sup>-18<sup>th</sup> June 2011.\* Language: German

#### 6) Intracellular Ca<sup>2+</sup>-Regulation as potential contact point of the NMRT

L. Weigl, Ludwig Boltzmann Institute for Rehabilitation of Internal Diseases, Ludwig Boltzmann Cluster for Rheumatology, Balneology and Rehabilitation, Saalfelden, Austria; scientific lecture at the 30<sup>th</sup> Rheumatologic Advanced Training Conference, Saalfelden, Austria, 17<sup>th</sup>-18<sup>th</sup> June 2011.\* Language: German

#### 7) Influence of Nuclear Magnetic Resonance on osteoarthritis-related factors

B. Steinecker-Frohnwieser, Ludwig Boltzmann Institute for Rehabilitation of Internal Diseases, Ludwig Boltzmann Cluster for Rheumatology, Balneology and Rehabilitation, Saalfelden, Austria; scientific lecture at the 30<sup>th</sup> Rheumatologic Advanced Training Conference, Saalfelden, Austria, 17<sup>th</sup>-18<sup>th</sup> June 2011.\* Language: German

### 8) MBST - NUCLEAR MAGNETIC RESONANCE THERAPY THE NEW POSSIBILITY OF OSTEOARTHRITIS AND OSTEOPOROSIS TREATMENT

Prof. Dr. SC. Dalibor Krpan, Policlinica K-Centar, Zagreb; published in: Balneoclimatologia, Dijagnostica I Leĉenje Osteoporoze, May 2011, Vol. 35, pp. 61-66.

### 9) Nuclear magnetic resonance affects osteoarthritis pain

W. Kullich, Ludwig Boltzmann Cluster for Rheumatology, Balneology and Rehabilitation, Institute for Rehabilitation of Internal Diseases, Saalfelden; scientific poster presentation at the 19th annual conference of the Austrian Pain Society, 26<sup>th</sup>-28<sup>th</sup> May 2011. Language: German



# 10) MBST – Nuclear Magentic Resonance Therapy. The new possibility of osteoarthritis and osteoporosis treatment

D. Krpan, Policlinica K-Centar, Zagreb, Croatia; lecture at the international symposium of osteoporosis, Niška Banja, Serbien, May 2011.\* Language: Croatian

#### 11) MBST - Treatment of chronic skeleton diseases

D. Krpan, Policlinica K-Centar, Zagreb, Croatia; lecture on the symposium "The new methods in the treatment of degenerative diseases", Ljubljana, Slowenia, April 2011.\* Language: Croatian

# 12) Next Generation of Medical Technology: Therapeutic Effect of NMR-Therapy against Osteoarthritis proven

W. Kullich, LBI for Rehabilitation, Saalfelden, Austria; published in: Arab Health Magazine, No. 1, January 2011, p. 60-62.



- 1) Modulation of VEGF and Cytokines by Therapeutic Nuclear Magnetic Resonance
  B. Steinecker-Frohnwieser, L. Weigl, N. Fagerer, W. Kullich, H. G. Kress, Ludwig Boltzmann Institute,
  Department of Special Anaesthesia and Pain Therapy, Medical University of Vienna, Austria; published in: Journal für Mineralstoffwechsel 2010; 17 (4), p. 155.
- 2) MBST The new concept of the treatment of chronic skeleton diseases
  D. Krpan, Policlinica K-Centar, Zagreb, Croatia; lecture on the orthopedic days in Maribor, Slovenia, December 2010.\* Language: Croatian
- 3) Modulation of VEGF and cytokines by the Therapeutic Nuclear Magnetic Resonance (Poster)
  B. Steinecker-Frohnwieser, L. Weigl, N. Fagerer, G. Weberhofer, W. Kullich, H.G. Kress, LBI for
  Rehabilitation, Saalfelden, Austria, Department of Special Anaesthesia and Pain Therapy, Medical
  University of Vienna, Austria; scientific lecture, Austrian Society of Rheumatology and Rehabilitation,
  Vienna, 25<sup>th</sup> 27<sup>th</sup> Nov. 2010.
- **4)** Breakthrough in Orthopaedics: Causal Solution to Osteo-Arthritis and Osteoporosis
  Arab Health 2010, Dubai; published in: Arab Health Magazine, Issue five, November 2010, pp. 28-29.
- **5)** World wide interest in new technology from Germany
  Arab Health 2010, Dubai; published in: Arab Health Magazine, Issue One, March 2010, p. 54.
- 6) Medical Progress in the treatment of arthritis
  W. Kullich, Ludwig Boltzmann Institute, Saalfelden, Austria; published in: Arab Health Magazine, Show Issue, January 2010, p. 40.

### 2009:

- 1) NFAT Modulation in Bone and Cartilage Cells by Therapeutic Nuclear Magnetic Resonance W. Kullich, L. Weigl, B. Steinecker, H.G. Kress; Ludwig Boltzmann Institute of Rehabilitation, Cluster for Rheumatology, Balneology and Rehabilitation, Saalfelden, Austria; Medical University Vienna, Clinical Dept. of Special Anesthesia and Pain Management, Vienna, Austria; Ludwig Boltzmann Institute of Rehabilitation, Gröbming External Office, Gröbming, Austria; Medical University Vienna, Clinical Dept. of Special Anesthesia and Pain Management, Vienna, Austria; academic lecture and poster: German Orthopaedics and Trauma Surgery Conference, Berlin, 21st 24th October 2009.
- 2) Influence of NMR Therapy on Metabolism of Osteosarcoma- and Chondrosarcoma Cell Lines
  B. Steinecker-Frohnwieser, L. Weigl, C. Höller, E. Sipos, W. Kullich, H.G. Kress, LBI for Rehabilitation of Internal Diseases, Ludwig Boltzmann Cluster for Rheumatology, Balneology and Rehabilitation, Saalfelden, Department of Special Anesthesia and Pain Management, Medical University Vienna; published in: Bone Official Journal of the International Bone and Mineral Society, no. 44-2, 2009, p. 295.
- 3) Influence of NMR Therapy on Metabolism of Osteosarcoma- and Chondrosarcoma Cell Lines
  B. Steinecker-Frohnwieser, L. Weigl, C. Hölle, E. Sipos, W. Kullich, H.G. Kress, LBI for Rehabilitation of Internal Diseases, Ludwig Boltzmann Cluster for Rheumatology, Balneology and Rehabilitation, Saalfelden, Department of Special Anesthesia and Pain Management, Medical University Vienna, Austria; academic presentation at the 36<sup>th</sup> European Symposium on Calcified Tissues, ECTS Congress, Vienna, Austria, 23<sup>rd</sup> 27<sup>th</sup> May, 2009.



- **4)** From diagnostic equipment to therapeutic application W. Schwägerl; published in: Ärzte Woche, 7.5.2009, p. 22.
- 5) Does MBST\* NMR Treatment Have any Influence on Post-Traumatic Gonarthrosis in Rabbits?
  Inaugural Dissertation for Gaining the 'Doctor Medicinae' from the Medical Faculty of the Westphalian Wilhelms University of Muenster. A 6-week experimental trial from the University Clinic of Muenster, Clinic and Outpatients' Dept. for Trauma, Hand and Reconstructive Surgery; director: Prof. Michael J. Raschke MD; presented by Thomas Brockamp, April 2009. Language: German
- 6) Influence of NMR Therapy on Ca2+ Signalling and Gene Expression in Osteosarcoma and Chondrosarcoma Cell Lines

Lukas G. Weigl, Bibiane Steinecker-Frohnwieser, Carmen Hoeller, Elisabeth Sipos, Hans Georg Kress, Werner Kullich, Department of Special Anaesthesia and Pain Management, Medical University Vienna, Ludwig Boltzmann Cluster for Rheumatology, Balneology and Rehabilitation, LBI for Rehabilitation of Internal Diseases, Saalfelden, Austria; Regional Biophysics Conference 2009, 10<sup>th</sup> - 14<sup>th</sup> February 2009 Linz, Austria.

- 7) Ameliorates Pain and Improves Function: Magnetic Resonance Treatment on Arthrosis Published in: Medical Tribune. Vol. 44, no. 1/2, 9.1.2009, p. 9. Language: German
- 8) Fit for sport: training, warming-up & healing Author: Prof. Dr. med. Reinhard Weinstabl, Vienna 2009.

#### 2008:

- 1) The Influence of Magnetic Resonance on the NFAT Pathway in Osteosarcoma and Chondrosarcoma
  - B. Steinecker, L. Weigl, W. Kullich, H.G. Kress; scientific lecture at the Austrian Rheumatology Society Conference, Vienna, November 2008; published in: Zeitschrift für Mineralstoffwechsel, November 2008, p. 201. Language: German
- 2) Therapeutic Use of Magnetic Resonance in Arthrosis

W. Kullich, Cluster for Rheumatology, Balneology and Rehabilitation, Saalfelden, Austria; Academic presentation at the German Orthopaedics and Trauma Surgery Congress, Berlin, October 2008. (Link to the text: <a href="http://www.egms.de/en/meetings/dkou2008/08dkou326.shtml">http://www.egms.de/en/meetings/dkou2008/08dkou326.shtml</a>).

3) Arthrosis Treatment with Magnetic Resonance: Procedure Can Stimulate Reparative Processes in the Cartilage and have an Impact on Pain Signal Transduction Cascades

W. Kullich, Ludwig Boltzmann Institute for Rehabilitation of Internal Diseases, Saalfelden, Austria; published in: Orthopädische Nachrichten, congress edition, German Orthopaedics and Trauma Surgery Congress, Berlin, p. 12, 22<sup>nd</sup> - 25<sup>th</sup> October 2008.

- 4) Treatment of Osteoporosis with Magnetic Resonance Therapy
  - T. Handschuh, C. Melzer, Waldkrankenhaus Bad Düben, Specialist Clinic for Orthopaedics, Bad Düben, Germany; published in: Orthodoc, pp. 1-4.
- 5) Improving Function in Cases of Finger Joint Arthrosis through Magnetic Resonance Treatment W. Kullich, M. Ausserwinkler; published in: Jatros Orthopädie, no. 4/2008, p. 29. Language: German
- **Arthrosis and Pain Treatment Using Magnetic Resonance**Published in: Wirtschaftsmagazin für den Orthopäden, June 2008, p. 16. Language: German



- 7) Functional Improvement in Finger Joint Arthrosis by Therapeutic Use of Magnetic Resonance W. Kullich, M. Ausserwinkler, Ludwig Boltzmann Institute for Rehabilitation of Internal Diseases; scientific poster presentation at the 56<sup>th</sup> Annual Convention of the Association of South German Orthopaedists, 1<sup>st</sup> 4<sup>th</sup> May 2008. Winner of a 'Poster Award' from the Association of South German Orthopaedists, Baden-Baden, Germany, 1<sup>st</sup> 4<sup>th</sup> May 2008.
- 8) Results of gene expression surveys under the influence of Nuclear Magnetic Resonance W. Kullich, B. Steinecker, Ludwig Boltzmann Institute for Rehabilitation of Internal Diseases, Ludwig Boltzmann Cluster for Rheumatology, Balneology and Rehabilitation, Saalfelden, Austria; lecture at MedTec Medizintechnik GmbH –presentation of study results, Wetzlar, Germany 10<sup>th</sup> April 2008.\* Language: German
- 9) MBST-Therapy and its influence on the molecular physiology of osteocytes, chondrocytes and PC12 cells
  - B. Steinecker, W. Kullich, L. Weigl, Ludwig Boltzmann Institute for Rehabilitation of Internal Diseases, Ludwig Boltzmann Cluster for Rheumatology, Balneology and Rehabilitation, Saalfelden, Austria; lecture at MedTec Medizintechnik GmbH –presentation of study results, Wetzlar, Germany 10<sup>th</sup> April 2008.\* Language: German
- 10) MBST Magnetic Resonance: Innovation in the Treatment of Ailments of the Locomotor System
  Published in: DOV Magazin, the magazine of the German Orthopaedists Society, issue May/June 2008,
  pp. 4 6. Language: German
- **11)** Functional Improvement in Finger Joint Arthrosis by Therapeutic Use of Magnetic Resonance W. Kullich, M. Außerwinkler, Ludwig Boltzmann Cluster for Rheumatology, Balneology and Rehabilitation, Saalfelden, Alzhofen, Austria; published in: Orthopädische Praxis 44, June 2008, pp. 287-290.

- 1) Magnetic Resonance Therapy and Bone Health
  Joachim Overbeck MD, Deggendorf, Germany; scientific lecture at Kings College Hospital, Bone Health
  Group, London, UK, December 2007.
- 2) Chronic Joint Problems: Magnetic Resonance Pulse Therapeutically Used
  Dr. Peter Valentin MD, Trauma Surgery Centre, Klosterneuburg, Austria; published in: Ärztewoche,
  Austria, 13<sup>th</sup> December 2007, p. 14. Language: German
- **Application of Nuclear Magnetic Resonance on degenerative rheumatic diseases**W. Kullich, Ludwig Boltzmann Institute for Rehabilitation of Internal Diseases, Ludwig Boltzmann Cluster for Rheumatology, Balneology and Rehabilitation, Saalfelden, Austria; lecture at the 5<sup>th</sup> MBST user conference, Wetzlar, Germany, 24<sup>th</sup> November 2007.\* Language: German
- 4) Therapeutic use of Nuclear Magnetic Resonance in gonarthrosis, low back pain and finger polyarthritis
  - W. Kullich, Ludwig Boltzmann Institute for Rehabilitation of Internal Diseases, Ludwig Boltzmann Cluster for Rheumatology, Balneology and Rehabilitation, Saalfelden, Austria; lecture at the "Evaluation and Research in Rehabilitation", Gröbming, Austria, 13<sup>th</sup> September 2007.\* Language: German
- Nuclear Magnetic Resonance in gonarthrosis therapy
   W. Kullich, Ludwig Boltzmann Institute for Rehabilitation of Internal Diseases, Ludwig Boltzmann



Cluster for Rheumatology, Balneology and Rehabilitation, Saalfelden, Austria; lecture at the LBI cluster meeting, Bad Tatzmannsdorf, Austria, 22<sup>nd</sup> June 2007.\* Language: German

- 6) Therapeutic use of Nuclear Magnetic Resonance in finger polyarthritis
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