Regeneration of Bones and Joints

Doctoral Program of Applied Medical Science
N790
Medical University of Vienna (MUW)
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Bone and Joint Regeneration

Doctoral Program of Applied Medical Science N790
Medical University of Vienna (MUW)

1. Program Coordinator

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Program Office
Mrs. Brigitte Hirschegger, Department for Oral Surgery
Mail to: brigitte.hirschegger@meduniwien.ac.at

2. Introduction

2.1. Program Mission

The Doctor of Applied Medical Science degree in Bone and Joint Regeneration is a program of the Medical University of Vienna, also offered through the Ludwig Boltzmann Institute (LBI) of Osteology and the LBI of Experimental and Clinical Traumatology. The primary objective of this program is to train students to become leaders in academic research and industry. The program follows a translational and multidisciplinary approach to survey musculoskeletal and oral disorders, to detect their causes and to develop strategies for diagnosis and therapy. The program is closely related to the organizational development plan of the MUW highlighting musculoskeletal disorders as a research focus. In addition, the doctoral program is a conglomerate of several disciplines, including dentistry.

2.2. Program Objective

The primary objective of the Doctor of Applied Medical Science program in Bone and Joint Regeneration is to prepare students to become advanced research scientists in the field of musculoskeletal and oral sciences. The program is designed for outstanding students who have completed their medical training and for those students with a background in basic science and engineering. The multidisciplinary program will prepare postgraduate students for faculty positions in the academia and industry. To achieve this goal, the curriculum includes introductory lectures and seminars, lectures in musculoskeletal and oral health, an ongoing series of journal clubs and seminars, and practical course according to the specialization of each student.
2.3. Program Structure

Once a dissertation advisor is selected by the student, the applicants must complete a research plan indicating the Specific Aims, Background and Significance, Preliminary Studies (optional), Research Design and Methods, Time Table, and References. The end result of this effort is expected to be a dissertation which is original and valuable for the field, desirably resulting in a publication in a peer-reviewed journal.

2.4. Program Staff

*Dissertation advisors* are principal investigators who are qualified to lead and mentor doctoral candidates. Dissertation advisors must have an active research program in musculoskeletal and/or oral sciences and the experience in mentoring doctoral students. Principal investigators have a strong record of gaining research funding. The dissertation advisor is responsible for guiding and encouraging the candidate’s design and execution of an original, high quality, doctoral-level research project.

*Lecturers and instructors* are members who participate in seminars and journal clubs. They are also involved in teaching research methods, however, without narrowing scientific freedom of the candidate.

2.5. Participating clinics, clinical institutes and centers of the MUW

- University Clinic for Blood Group Serology and Transfusion Medicine (TRANSF)
- University Clinic for Dentistry (BGZMK)
- University Clinic for Internal Medicine III (RHEUMA)
- University Clinic for Orthopedics (ORTHO)
- University Clinic for Physical Medicine and Rehabilitation (PMR)
- University Clinic for Radiology (RADIO)
- University Clinic for Trauma Surgery (TRAUMA)
- Centre for Physiology and Pathophysiology Institute for Pathophysiology (PATHOPHYSIO)

2.6. Participating Institutes of the Ludwig Boltzmann Gesellschaft

- Ludwig Boltzmann Institute for Experimental and Clinical Traumatology (LBI TRAUMA)
- Ludwig Boltzmann Institute of Osteology (LBI OSTEO)
3. Courses, lectures, and literature

3.1. Basic course

The Basic Course is held every other year and has two parts, one in the winter and one in the summer semester. (4 semester hours = 60 lecture hours)

a. Basic principles

Anatomy and biochemistry of bone and cartilage (Gruber)
Development and histology of bone and cartilage (Plenk)
Cell biology of osteoblasts, chondrocytes and osteoclasts (Pietschmann)
Bone and mineral metabolism (Pietschmann)
Peripheral nerves in the joint (Schmidhammer)
Sensomotorik (Ebenbichler)
Biomechanics of the spine (Kerschan-Schindl)
Stem cells (Fischer)

b. Prevention, diagnosis and treatment

Osteo- and chondropathies (Pietschmann)
MRT of the joints and in cartilage tissue engineering (Trattnig)
Bone and joint defects in traumatology (Marlovits/Albrecht)
Orthopaedic treatment of osteoporosis (Holzer)
Preclinical models of inflammatory joint disease (Redlich)
Immunological aspects of inflammatory joint disease (Steiner)

c. New concepts

Bone tissue engineering (van Griensven)
Cartilage tissue engineering (Marlovits)
Tissue engineering in cartilage, osteoarthritis and meniscus lesions (Dorotka/Chiari)
Mechanisms of bone regeneration (Plenk)
Fracture prevention (Holzer)
Bone substitutes (Plenk)

d. Methods

In vitro & preclinical models for osteoblasts (Fratzl-Zelman)
In vitro & preclinical models for osteoclasts (Pietschmann)
Preclinical models in bone regeneration (van Griensven)
Methods in hard tissue research (Plenk)
Methods for characterization of bone mineral (Roschger)

e) Dental aspects

Structural biology of the tooth and the periodontal tissue (Schedle)
Biocompatibility versus cytotoxicity of dental material (Schedle)
Preclinical models in dentistry (Gruber)
3.2. Thesis Seminars
The Thesis Seminar is held on a regular basis, which is every first and third Tuesday of each month in association with the Journal Club. It provides a forum for students to present and discuss their findings. Aim of the seminars is to improve their skills in presentation and dealing with scientific challenges. The annual “PhD Symposium” of all doctoral student of the MUW, which is held each summer, is a substantial part of the Thesis Seminar. Doctoral student of the program “Bone and joint regeneration” are also invited to participate in the “Christmas Symposium”, which is held each winter, also being part of the Thesis Seminar. The Thesis Seminar including the participation in the Symposia is equivalent to two semester hours.

3.3. Practical Courses
The Practical Courses aim to improve knowledge and skills required for the professional practice within the respective special field. The program provides a wide spectrum of professional skills and methods that are related to basic science, to preclinical and clinical research. Practical Courses follow a personal approach: Students join a principal investigator and participate in the research group for 3-4 weeks as visiting scholars. Each Practical Course is equivalent to two semester hours. Aim is to learn and understand particular methods thereby increasing the scientific value of the own work and to serve as a primer for future collaborations. Participating clinics, clinical institutes and centers of the MUW and the participating institutes of the Ludwig Boltzmann Gesellschaft are the host of the students.

Methods in experimental periodontology     Andrukhov
Methods in stem cell research            Fischer
Methods in experimental dentistry      Gruber
Methods in exp. traumatology from in vitro to in vivo to patient van Griensven
Methods in physical medicine           Kerschan-Schindl & Ebenbichler
Methods in three-dimensional cell culture techniques Marlovits & Albrecht
Methods in evaluation of bone quality   Roschger
Methods in testing of dental material   Schedle
Methods in immunology & rheumatology    Redlich, Steiner & Hayer
Methods in gene expression             Varga
Methods in MRT                          Trattnig
3.4. Journal Clubs

All students participate in the Journal Club on a regular basis, which is every first and third Tuesday of each month. Students and their advisors, other principal investigators, together with L&I review and discuss the most important articles from peer-reviewed scientific journals. To underline the translational and multidisciplinary approach to survey musculoskeletal and oral disorders, students who have completed their medical training and students with a background in basic science and engineering are joined together in this seminar. Moreover, also the chairmen change on a regular basis.

4. Methodology

Tissue culture    All
Western blot      All
ELISA            All
RT-PCR           All
Immunohistochemistry All
FACS; MACS       LBI TRAUMA, TRAUMA, PATHOPHYS, BGZMK; RHEUMA
Transfection     LBI TRAUMA, UNFALL, LBI OSTEO
Microarrays      LBI TRAUMA, LBI OSTEO
RFLP             LBI OSTEO
HPLC             ORALCHIR, LBI TRAUMA, TRAUMA
Preclinical models LBI TRAUMA, on request
Histology – hard tissue AKEFM, ORALCHIR, ORTHO, TRAUMA, LBI OSTEO;
Histology – soft tissue LBI TRAUMA, ORTHO, UNFALL, BGZMK; RHEUMA
Histomorphometrie AKEFM, ORALCHIR, LBI TRAUMA, ORTHO, LBI OSTEO; RHEUMA
Scanning Electron Microscopy ORTHO, LBI OSTEO
Backscatter Imaging LBI OSTEO
Confocal laser microscopy LBI TRAUMA, LBI OSTEO, RHEUMA
μCT               LBI TRAUMA, RADIO
Luminescence in vivo LBI TRAUMA
Fluorescence in vivo LBI TRAUMA
FTIR              LBI OSTEO
MRI               RADIO
Time lapse microscopy BGZMK
Dental material testing BGZMK
5. Personnel and Research topics

Ludwig Boltzmann Institute for Experimental und Clinical Traumatology

The Ludwig Boltzmann Institute for Experimental and Clinical Traumatology (LBI) offers state-of-the-art facilities for tissue engineering including stem cell research. With its full translational approach and an interdisciplinary team including surgeons, life scientists, engineers, etc. It provides an optimal research environment with the special research areas of Neuroregeneration, Soft Tissue Repair, Cartilage and Bone Regeneration as well as a Preclinical Imaging Centre. Our research group has expertise in cord blood processing as well as stem cell biology, biomaterials and tissue engineering including most relevant animal models, from small animal models to large animal models. Our facilities include cell culture laboratories with all associated monitoring capabilities like flow cytometry, molecular biology, microarray, laser-scanning confocal microscopy and biomaterial characterization as well as preclinical in vivo facilities including full (micro-)surgical setup and extensive imaging capabilities. We have a GMP facility available (Red Cross Blood Transfusion Service Linz) for tissue processing, stem cell isolation and tissue engineering to translate research protocols into a clinical setting.

The principal investigators (PI) have the following specific research topics:

Prof. DDr. M. van Griensven (PI)  martijn.van.griensven@lbitrauma.org
  □ Cartilage and bone regeneration including large animal models
  □ Bioreactors
  □ Stem cells

Prof. Dr. Heinz Redl (PI)  office@lbitrauma.org
  □ Fibrin biomatrix and angiogenesis
  □ Bioreactors
  □ Stem cells

Doz. Dr. Robert Schmidhammer (PI)  r.schmidhammer@gmx.at
  □ Peripheral nerve repair and bone healing
  □ Small and large animal models
University Clinic for Trauma Surgery

Doz. Dr. Stefan Marlovits (PI)  stefan.marlovits@meduniwien.ac.at  
Dr. Christian Albrecht (Junior Supervisors)  christian.albrecht@meduniwien.ac.at  
The Center for Joint and Cartilage at the Medical University has focused on the treatment of cartilage defects for several years. The aim of the research team is the development and the optimisation of therapeutic procedures for cartilage defects, in particular the matrix-associated chondrocyte transplantation (MACT). On one hand the field of activity includes in vitro studies of chondrocytes seeded on different scaffolds. Besides the assessment of the differentiation status of chondrocytes in these scaffolds by morphological, molecular biological and biochemical methods the transplants are also tested in different animal models for their clinical applicability. Moreover signal pathways responsible for the differentiation of chondrocytes in 3D culture systems are examined in basic research projects. On the other hand clinical trials with MRI follow ups are performed to investigate the clinical outcome of the MACT technique in patients.

University Clinic for Orthopedics

Dr. Jochen Hofstätter (Junior Supervisors)  jochen.hofstaetter@meduniwien.ac.at  
Dr. Catharina Chiari (Junior Supervisors)  catharina.chiari@meduniwien.ac.at  
The aim of the Tissue Engineering Research Group of the Orthopaedic Surgery is to investigate the regeneration of cartilage and meniscal tissue by biological surgical techniques. The group has expertise in experimental in vitro studies, animal in vivo models, and clinical studies, in particular for procedures as autologous chondrocyte implantation.

Prof. Dr. Gerold Holzer (Lecturer)  gerold.holzer@meduniwien.ac.at  
The Bone Research Group of the Department of Orthopaedics focuses on basic and clinical aspects of osteoporosis and bone tumors to improve diagnosis and treatment. The wide spectrum includes the significance of serum markers for both osteoporosis and malignant bone tumors as well as biomechanical studies of osteoporotic fractures of the proximal femur. The group in also involved in clinical trials on male osteoporosis.
Ludwig Boltzmann Institute of Osteology

The LBI of Osteology (LBIO) is the scientific core center within a multidisciplinary clinical network located at the Hanusch Hospital and the Unfallkrankenhaus Meidling targeting diagnosis and treatment of bone and joint diseases. Its mission is to achieve the highest level of scientific excellence through basic and clinical research in osteology, as well as the training of young scientists and clinicians. The primary goal is the improvement of patient care. Towards this goal, the study of bone is undertaken at all hierarchical levels through a multidisciplinary approach by a worldwide unique combination of techniques. The aim is the elucidation of the mechanisms underlying the basic function of bone, and musculoskeletal diseases, leading to the discovery and development of effective strategies for diagnosis, prevention, and treatment. The gained knowledge provides benchmarks against which current therapies are evaluated, and provides the basis for the design of new, targeted ones. To achieve this goal, LBIO basic scientists and clinicians work together with national and international collaborators form academia and industry. The existing combination of instrumental capabilities allows analyses to be performed from a clinical, cell & molecular biology, physical chemical, and material science perspective. (www.osteologie.at)

The principal investigators have the following specific research topics:

Dr. Franz Varga (PI) franz.varga@osteologie.at
Dr. Nadja Fratzl-Zelman (Lecturer) nadja.fratzl-zelman@osteologie.at
- Osteoblasts
- Regulation of gene expression
- Extracellular matrix
- Behavior of cells on biomaterials

Doz. Dr. Paul Roschger (PI) paul.roschger@osteologie.at

At the LBIO, as leader of the Bone-Structure-Biomechanics-Mineral Group we study bone on its material level, which comprises a nano composite of hydroxyapatite crystals and collagen type I molecules. The approach is multidisciplinary combining several modern physical techniques that were developed in long term collaboration with Prof. Dr. Fratzl (Director of the Biomaterial Dept. at the Max Planck Institute of Colloids and Interfaces, Potsdam, Germany). We have succeeded to measure the mineral content of bone matrix at a micron scale. The mineral content is crucial for mechanical properties like stiffness, toughness and strength of the bone material. For this purpose we developed a quantitative backscattered electron imaging (qBEI) method to determine the bone mineralization density distribution (BMDD). The BMDD was found to be fingerprints of the mineralization and the remodelling processes in bone. Thus BMDD measurements became also a powerful clinical tool for analysis of effects of bone diseases and treatment on bone material quality. In combination with confocal laser scanning microscopy the dynamics of bone mineralization can be determined. Polarized light microscopy makes the lamellar arrangement of collagen fibrils in trabecular and osteonal bone compartments visible which plays a pivotal role in the resistance to crack propagation and thus in
bone strength. Fourier transform infrared micro-spectroscopy and Raman micro-spectroscopy are applied to characterize the chemical bonds in the collagen/mineral composite and the orientation of specific bonds within bone matrix. Especially, the collagen cross-link status as well as the inter-fibrillar matrix (“glue”) modifies the mechanical properties of the composite. Scanning small angle x-ray scattering (sSAXS) is used to determine important bone composite parameters like mineral particle thickness, orientation, arrangement and inter particle distance. The application of the nanoindentation technique on the atomic force microscope enables mechanical testing experiments with a spatial resolution of about 3 microns reflecting bone deformation mechanism at the material level of mineralized fibrils. Parameters such as E-modulus and hardness are evaluated from each indentation experiment which are then correlated with other composite parameters obtained by qBEI and/or sSAXS. In near future, a Scanning acoustic microscopy will be installed. This technique uses high-frequency acoustic waves to generate visual images of both the surface topography and the underlying structure of materials by detecting reflected echoes. This will make the evaluation of the local (1 µm spatial resolution) E-modulus variation of the bone material possible. Using SAM, a non-destructive mechanical visualization of a subsurface region of the bone sample will be possible.

University Clinic for Physical Medicine and Rehabilitation
Prof. Dr. Gerold Ebenbichler (PI)  gerold.ebenbichler@meduniwien.ac.at
Prof. Dr. K. Kerschan-Schindl (PI)  katharina.kerschan-schindl@meduniwien.ac.at
The investigators have in a co-operation with other institutions studied how the sensorimotor system adapts to disturbances caused by injury, disease, psychological disorders, or when muscles are fatigued. It is well known that all these disturbances may induce/ perpetuate a vicious circle within the sensorimotoric system with altered sensory input, altered automatic and voluntary central processing of motor commands, and impaired neuromuscular activation as well as muscular adaptation. In co-operation with other institutions we have developed and demonstrated the validity of new promising electromyography and posturography based techniques that allow monitoring and objectively measuring neuromuscular function when the muscles are activated in a static or dynamic mode, voluntarily or reflexively, respectively. These techniques are intended to provide further insight into the physiology and pathophysiology of movement and serve as basis for the further development of muscle functional diagnostics that will be invaluable for a more accurate intervention setting and/or rehabilitation planning.
University Clinic for Dentistry

Doz. DI Dr. Reinhard Gruber (PI)  reinhard.gruber@meduniwien.ac.at

The major focus of the Bone Research Group is to design and develop therapeutics based on the understanding of the fundamental biological processes of bone healing across different regional anatomical domains. To accomplish this we use molecular and cellular techniques to investigate the principles of bone regeneration. Preclinical and clinical approaches help us to reveal the therapeutics potential of new strategies. We have specific expertise in culture of osteogenic cells, endothelial cells, and osteoclasts, analysis of transcription and translation, and of functional assays. Moreover, we have a long tradition in hard tissue histology and histomorphometry. Together with our collaborators we work towards this goal using a strong multidisciplinary approach.

Prof. DDr. Andreas Schedle (PI)  andreas.schedle@meduniwien.ac.at

One main research topic of the Dental Material Research Group is the biocompatibility testing of dental materials and the development of preclinical tests for risk evaluation of dental materials. The influence of dental materials on cytotoxicity, cell proliferation, cell differentiation and cell function is investigated. Mechanical testing and evaluation of released substances from dental materials into biological media completes the testing system for dental materials. These preclinical tests can be used for product development and CE-Certification of dental materials, since the central research unit is also an accredited testing laboratory.

Univ. Prof. DDr. Christian Ulm (PI)  christian.ulm@meduniwien.ac.at

Doz. Dr. Oleh Andrukhov (Lecturer)  oleh.andrukhov@meduniwien.ac.at

The Periodontal Research Group is focused for several years on various aspects of periodontal research. Two main research directions of research team can be defined, namely regeneration of periodontal tissue and pathogenesis of periodontitis. The following aspects are especially highlighted: regeneration of hard and soft tissue, wound healing, local and system immune response during periodontitis, relationship between periodontitis and cardiovascular diseases. Our activity includes both clinical and experimental studies. Clinical studies aim to investigate the correlation between clinical parameters of periodontitis with the inflammatory mediator’s content in blood, saliva, and gingival tissue of periodontitis patient. Experimental studies aim to clarify the molecular basis underlying the periodontal regeneration and inflammatory response during periodontitis.
University Clinic for Radiology

Prof. Dr. Siegfried Trattnig (PI) 
siegfried.trattnig@meduniwien.ac.at

Prof. Trattnig and co-worker developed or adapted several MR techniques for cartilage imaging at 3.0 Tesla. They reported the first use of contrast agent in vitro and in vivo for visualization of proteoglycan content in articular cartilage, on the role of apparent diffusion constants in the early degenerative cartilage disease, on the importance of T1rho imaging for cartilage degeneration and multi-parametric imaging of cartilage implants. The MR microscopy project will focus on musculoskeletal imaging with particular emphasis on articular cartilage imaging; it will follow on from and further develop research performed at 3T in our centre. There are a number of significant applications for the results of the MR microscopy project. First and foremost it is anticipated that marked improvements in the in vivo biochemical and biomechanical evaluation of articular cartilage will possible and that it will be possible to perform high resolution anatomical and multi-parametric imaging in a single session which is acceptably short for clinical use. The combination of higher resolution and better ‘functional’ imaging will enhance clinical studies of osteoarthritis such as the osteoarthritis initiative and be beneficial for trials and monitoring therapies such as autologous chondrocyte transplantation. Moreover these techniques can potentially reduce the number of diagnostic and follow-up arthroscopies as well as help tailoring physiotherapies for individual patients according to the scan results.

Centre for Physiology and Pathophysiology Institute for Pathophysiology

Prof. Dr. Peter Pietschmann (PI) 
peter.pietschmann@meduniwien.ac.at

The primary aim of the bone, cartilage and connective tissue research group is to investigate the pathophysiology of important bone and joint diseases, such as osteoporosis or rheumatoid arthritis, in particular with regard to:

- Interactions between the immune and the endocrine system
- Studies on the regulation of the generation of osteoblasts and osteoclasts
- Transgenic and other animal models for the study of bone diseases
- Interactions between bone cells and lymphocytes
- Studies of the pathogenesis of osteoporosis especially in men and elderly subjects
- Pathogenesis of bone erosions and osteoporosis in inflammatory rheumatic diseases
- Interactions between the vitamin D system on the immune system
University Clinic for Internal Medicine III, Department of Rheumatology

The Division of Rheumatology is active in basic, clinical and translational research in the field of rheumatology. The major focus is on inflammatory and degenerative joint diseases such as rheumatoid arthritis and osteoarthritis. It has a large out-patient clinic, a 28-bed ward, a biometric unit and a well equipped research laboratory. The clinical research focus is on early arthritis, development of instruments for assessment of rheumatic diseases and observational studies. The basic and translational research focuses on the pathways to arthritis in experimental models and man, pathways to joint destruction and autoimmunity. Many of these studies are performed in animal models including TNFα transgenic mice, HLA-DR4 transgenic mice, collagen-induced arthritis and pristane-induced arthritis. The research activities of the past decade have conveyed novel insights into joint destruction by showing the importance of osteoclasts and revealing new aspects of the interplay between joint destruction and repair. Also, we have been able to reveal some of the early events in arthritis and the involvement of Toll-like receptors in cartilage damage. In addition, targets of autoreactivity in experimental and human arthritis have been addressed and the role of T-cells in autoimmune rheumatic diseases has been analyzed. Clinical research has dealt with novel tools for the assessment of rheumatoid arthritis, which have been developed and validated, and ways to predict disease activity and irreversible disability have been established.

Prof. Dr. Günter Steiner (PI)    guenter.steiner@meduniwien.ac.at

Project 1: Molecular and cellular mechanisms in the pathogenesis of pristane-induced arthritis

Among the various experimental models of RA pristane-induced arthritis represents an excellent model to study the initial pathogenic events as well as novel therapeutic approaches. In this model arthritis is induced by intravenous application of the mineral oil pristane leading to the induction of arthritogenic autoimmune responses. In previous studies the nuclear mRNA binding protein hnRNP-A2 has been identified as one of the first autoantigens targeted by autoreactive T- and B-cells of pristane-primed rats. In the course of this project we are elucidating the mechanisms leading to loss of tolerance against hnRNP-A2 and investigate its role in arthritis induction. Furthermore we aim to characterize additional autoantigens of pathogenic relevance. Taken together, these experiments will further our understanding of the molecular and cellular mechanisms leading to destructive joint disease not only in this animal model but also in human disease.

Prof. Dr. Kurt Redlich (PI)    kurt.redlich@meduniwien.ac.at

Dr. Silvia Hayer (Junior Supervisor)   silvia.hayer@meduniwien.ac.at

Project 2: Mechanisms of bone erosion and remodelling in chronic inflammatory arthritis

Our group investigates pathophysiologic mechanisms involved in the generation of local bone erosion as well as inflammatory systemic bone loss by using human tumor necrosis factor transgenic mice (hTNFtg), a well-established animal model of RA. Upon overexpression of human TNF, mice develop spontaneous arthritis presenting characteristic features of RA such as synovial pannus formation, subchondral bone erosion and cartilage damage. To define single target genes affecting inflammatory joint destruction or systemic bone loss, various knock-out mice are intercrossed into the hTNFtg mice.
Moreover, potential new therapeutic targets are investigated in these mice. In addition to vivo analysis, subsequent histological analysis as well as in vitro analyses of particular cells regulating bone remodeling such as osteoclasts and osteoblasts are of major interest.

University Clinic for Blood Group Serology and Transfusion Medicine

Prof. Dr. Michael B. Fischer (PI)    michael.b.fischer@meduniwien.ac.at

Currently our scientific interest focuses on stem cell biology. We established ex vivo maintenance –, activation – and differentiation conditions for hematopoietic stem cells and cord blood as well as for mesenchymal stem cells of different origin such as bone marrow, fat tissue and muscle tissue. In the respective projects we studied mesenchymal precursor cells in synovial surface projections of patients with osteoarthritis. In projects related to regenerative medicine, we investigated the dynamic self organization process of stem cells to create vascular structures within avascular three-dimensional fibrin matrices.
6. Principal Investigators

Curriculum Vitae

Gerold Rudolf Ebenbichler, MD

Adresse: Medical University Vienna, Währingerstrasse 25a, 1090 Vienna

Personal Data
Date of Birth: 01.20.1964
Place of Birth: Steyr
Nationality Austria

Education
2001 Venia docendi for Physical Medicine & Rehabilitation
1991 M.D., University of Innsbruck, Austria

Career History
2006 –2006 Senior Clinical Specialist at Prince Court Medical Centre, Kuala Lumpur, Malaysia
2001 – present Research associate professor, Medical University of Vienna
2000 - 2001 Specialist in PM&R, Rehabilitation Hospital "Weisser Hof", Klosterneuburg
1999 - 2000 Research fellow, NeuroMuscular Research Center, Boston University, Boston Massachussetts
1998 – present Assistant medical director at the Department of Physical Medicine & Rehabilitation, University Hospital of Vienna
1992 – 1998 Resident in Physical Medicine and Rehabilitation at the University Hospital of
1992 Resident at the Rehabilitation Hospital "Weisser Hof", Klosterneuburg
1991 - 1992 Army service, Austria
1989 - 1991 Medical training instructor, Zimmermann fitness center, Vienna

Career-related Activities
since 1999 Reviewer for grant proposals:
Foundation of Chiropractic Education & Research
Member of Editorial Boards:
since 2003 American Journal of Physical Medicine & Rehabilitation
Zeitschrift Physikalische Medizin, Rehabilitationsmedizin Kurortmedizin
Reviewer for national and international journals:
Wiener Medizinische Wochenschrift
Wiener Klinische Wochenschrift
Zeitschrift für Physikalische Medizin, Rehabilitation & Kurortmedizin
American Journal of Physical Medicine & Rehabilitation
Archives of Physical Medicine and Rehabilitation
British Medical Journal
Medicine and Science in Sports and Exercise
Muscle & Nerve
Ergonomics
Journal of Sports Medicine
Journal of Neuroengineering & Rehabilitation
Europa Medicophysica
Activities in scientific and organizing Committees:
Member of the Scientific Committee of the Mid-European Congress of Physical Medicine & Rehabilitation Munich, October 2005
Member of both the Scientific and the Organizing Committee, 3rd World Congress of the ISPRM, Sao Paulo, April 2005
Member of the Scientific Committee of the 7th World Conference on Injury Prevention and Safety Promotion, Vienna, June 2004
Member of the Scientific Committee of the XVth Congress of the International Society of Electromyography and Kinesiology, Boston, June 2004
Committee Chair of the XIVth Congress of the International Society of Electromyography and Kinesiology, Vienna, June 2002
Member of the Scientific Committee of the XIVth Congress of the International Society of Electromyography and Kinesiology, Vienna June 2002

STUDENT SUPERVISION
Lectures:
since 2005 Pathophysiology of Muscle
since 2002 Physical Medicine & Rehabilitation
since 2001 Physical Medicine & Rehabilitation of spine disorders
1995-1998 Surface Electromyography in PM&R
1994-1998 PM&R Following Spine Surgery
1992-1998 PM&R of Neck and Back Complaints
Practical training:
1992-1998 Physical Medicine & Rehabilitation for students

Awards
2006 Helene and Hans Adam Award 2006
2002 Helene and Hans Adam Award 2002

Memberships
International Society of Electromyography and Kinesiology
International Society of Physical & Rehabilitation Medicine
European Society of Physical Medicine and Rehabilitation
Österreiche Berufsverband für Physikalische Medizin & Rehabilitation
Österreiche Gesellschaft für Physikalische Medizin & Rehabilitation

Sources of funding in last 6 years (2002-2008)

<table>
<thead>
<tr>
<th>Period</th>
<th>Organization</th>
<th>Short Title</th>
<th>K€/year</th>
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<tbody>
<tr>
<td>06/2006-05/2007</td>
<td>Lorenz Böhler Forschungsfonds</td>
<td>Evaluierung von Muskelfunktionsmessungen bei chronischen Kreuzschmerzpatienten</td>
<td>~14</td>
</tr>
<tr>
<td>2/1999-9/2000</td>
<td>Austrian Science Foundation, Erwin Schrödinger Fellowship</td>
<td>Surface electromyography for the assessment of back muscle function.</td>
<td>~30</td>
</tr>
<tr>
<td>1997 - 2001</td>
<td>AUVA</td>
<td>Evaluation of a rehabilitation concept after lumbar disectomy; a randomized &quot;sham&quot; controlled study (AUVA 1997, and 2001; approximately</td>
<td>~5</td>
</tr>
</tbody>
</table>

Dr rer.nat., Dr.sci.med. Dr. techn. or PhD supervisions in last 6 years (2002-2008)

<table>
<thead>
<tr>
<th>Period</th>
<th>Name of student</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002 - 2006</td>
<td>Dr. Birgit Paul</td>
<td>Psychologie und Pathophysiologie von Patientinnen mit chronischen Rücken/ Kreuzschmerzen</td>
</tr>
<tr>
<td>2003 - 2006</td>
<td>Dr. Christoph Leitner</td>
<td>Reliability of posturographic measurements in the assessment of impaired sensorimotor function in chronic low back pain.</td>
</tr>
</tbody>
</table>
Publications
41 peer reviewed publications in scientific journals, 6 book chapters, 31 invited lectures, 0 patents

Peer reviewed manuscripts 2002-2008 (original research and reviews)
First, last or corresponding author manuscripts:


Co-author manuscripts:


Invited Talks 2002-2008
One day course: New developments in EMG-based assessment of motor function and activity: Implications for research and clinical practice in PRM Sao Paulo 3rd World Congress of ISPRM, Sao Paulo, Brazil, April 2005.
University of Kuala Lumpur: Physical Medicine and Rehabilitation in Austria, October 2006.
Curriculum Vitae

Michael B Fischer, MD

Address: Medical University of Vienna, Währingerstrasse 25a, 1090 Vienna

Personal Data
Date of Birth: 28.05.1962
Place of Birth: Vienna
Nationality: Austria

Education
2008
Training in Hematology

2003-2004
Training im Orthopedic Surgery

2004
Specialist in Bloodgroup Serology and Transfusion Medicine

1999-now
a.O. Univ Prof. Department of Transfusion Medicine

1997-1999
Training in Internal Medicine

1998
Venia Docendi in Immunology

1995-1997
Assistent Prof. and Member of the Faculty at Harvard Medical School Department of Pathology

1994-1995
Postdoctoral Fellow at the Department of Pathology Harvard Medical School; Specialist in Immunology

1988-1994
Postdoctoral Fellow at the Department of Immunology, University of Vienna

1986-1988
Sports Company Austrian Army

1980-1986
Studying Medicine at the University of Vienna

Sources of funding in last 6 years (2002-2008)

<table>
<thead>
<tr>
<th>Period</th>
<th>Organization</th>
<th>Short Title</th>
<th>K€/year</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000-2004</td>
<td>FWF</td>
<td>Stem Cells in RA</td>
<td>35 000</td>
</tr>
<tr>
<td>2001-2004</td>
<td>Jubil Fonds ÖNB</td>
<td>IgM in Nephritis</td>
<td>15 000</td>
</tr>
<tr>
<td>2002-2003</td>
<td>Bürgermeisterfonds</td>
<td>Expansion of cord blood stem cells</td>
<td>17 000</td>
</tr>
</tbody>
</table>

Dr. rer. nat., Dr. sci. med. Dr. techn. or PhD supervisions in last 6 years (2002-2008)

<table>
<thead>
<tr>
<th>Period</th>
<th>Name of student</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000-2003</td>
<td>Brigitte Gmeiner</td>
<td>Ex-vivo expansion of stem cells</td>
</tr>
<tr>
<td>2001-2005</td>
<td>David Hollemann</td>
<td>Stem cells in peripheral myopathies</td>
</tr>
<tr>
<td>2002-2006</td>
<td>Genya Yanagida</td>
<td>Gen expression in mesenchymal cells</td>
</tr>
<tr>
<td>2002-2006</td>
<td>Christine Vakulic</td>
<td>Endotoxin induced Nephropathy</td>
</tr>
<tr>
<td>2004-2007</td>
<td>Ferdi Arich</td>
<td>Chondro- and osteogenic potential of mesenchymal stem cells</td>
</tr>
<tr>
<td>2007-2009</td>
<td>Wendelin Wolfram</td>
<td>Characterization of ABO-isoagglutinine Abs</td>
</tr>
</tbody>
</table>
Peer reviewed manuscripts 2002-2008 (original research and reviews)

First, last or corresponding author manuscripts:


Co-author manuscripts:


21


Curriculum Vitae

Martijn van Griensven, MD, PhD

Address: Medical University Vienna, Währingerstrasse 25a, 1090 Vienna

Personal Data
Date of Birth: 16.08.1974
Place of Birth: Leiderdorp (NL)
Nationality: The Netherlands

Education
2002- Professor for Experimental Trauma Surgery (youngest of Germany)
1999-2002 Associate professor for trauma surgery (youngest of Germany)
1992-1996 Study Biochemistry and Medicine, Leiden University, M.Sc. and MD (both cum laude)
1996 Trainee Dept. Pathology, University of Michigan
1995 Trainee Dept. Medical Pharmacology, Leiden Amsterdam Centre for Drug Research
1995 Trainee Dept. Trauma Surgery, Hannover Medical School
1994 Certificate for designing, executing and leading animal experiments (FELASA)
1992-1993 First year’s exam Biochemistry and Medicine (cum laude)

Career History
2005-now Associate director Ludwig Boltzmann Institute for Experimental and Clinical Traumatology
2002-2005 Head department of Experimental Trauma Surgery, Hannover Medical School
2002-2005 Consultant for trauma surgery, Hannover Medical School
2001-2002 Head of the trauma surgical research unit, department of trauma surgery, Hannover Medical School
1998-2001 Principal investigator, department of trauma surgery, Hannover Medical School
1996-1998 Research assistant, department of trauma surgery, Hannover Medical School

Career-related Activities
2008-now General Secretary international federation of shock societies
2004-now Editorial Board “Shock”
2002-now Editorial Board “Archives of Orthopaedic and Trauma Surgery”
2000-2003 Principal investigator multicenter study “anti-L-selectin in multiply traumatized patients”

Awards
2007 Future Award, Vienna Future Symposium
2006 Poster award, DGU/DGOC
2005 Poster Award, ESACT meeting
2003 Hannelore-Munke Stipendium
2003 2nd award “Injury”, British Trauma Society
2002 European award for the best oral presentation, British Trauma Society
2002 Günther Schlag Award, European Trauma Society
2002 2nd prize best oral presentation, European Trauma Society
2001 Specialist prize surgical intensive care medicine, German Society of Surgery
2000: Young Investigator’s Travel Award, International Shock Society
1999: Best Ph.D. Thesis, Hannover Medical School
1999: The Excellence in Research Award, Am. Orthopaedic Society for Sports Medicine
1995: Best training period of “Biomedical Sciences”, Faculty of Medicine, Leiden
1995: Price for the best in Neuroanatomy, Medical faculty, University of Leiden

Memberships
2000: International and American Shock Society
2000: German surgical society
2002: German alliance of universities
2004: European Shock Society
2005: Tissue Engineering Society (TERMIS)
2007: Austrian Society for Trauma Surgery

Sources of funding in last 6 years (2002-2008)

<table>
<thead>
<tr>
<th>Period</th>
<th>Organization</th>
<th>Short Title</th>
<th>K€/year</th>
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<tbody>
<tr>
<td>2000-2002</td>
<td>DFG</td>
<td>Untersuchungen zur Pathogenese der Wirkung von Dehydroepiandrosteron auf posttraumatische Organfunktionsstörungen im Maus-Modell</td>
<td>30</td>
</tr>
<tr>
<td>2000-2003</td>
<td>DFG</td>
<td>Zelluläre Reaktionen von humanen Fibroblasten auf repetitive, zyklische mechanische Dehnung</td>
<td>40</td>
</tr>
<tr>
<td>2001-2004</td>
<td>DFG</td>
<td>Einfluß der Strategie der primären Frakturversorgung des Femur auf den posttraumatischen Verlauf beim Schwerverletzten</td>
<td>40</td>
</tr>
<tr>
<td>2002-2004</td>
<td>AO</td>
<td>Einfluß der Marknagelung beim Thoraxtrauma im Schafsmodell – physiologischen und immunologischen Auswirkungen</td>
<td>20</td>
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<td>2003-2005</td>
<td>AO</td>
<td>Effects of hypothermia and re-warming to the inflammatory response in a murine model of trauma; Characterisation of the first and the second hit impacts</td>
<td>22</td>
</tr>
<tr>
<td>2003-2005</td>
<td>AGA</td>
<td>Tissue Engineering von Bändern durch Injektion eines bioaktiven Fibrinklebergemisches mit humanen Knochenmarkstammzellen am Defektmodell des Ligamentum patellae immuninsuffizienter Ratten</td>
<td>30</td>
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<td>2005-</td>
<td>EU</td>
<td>Expertissue Network of Excellence</td>
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<tr>
<td>2005-</td>
<td>EU</td>
<td>Marie Curie EST</td>
<td>40</td>
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<td>2005</td>
<td>AO</td>
<td>The effect of insulin administration on the pathophysiological course in a trauma and sepsis model in rodents</td>
<td>50</td>
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<tr>
<td>2006-</td>
<td>DFG</td>
<td>Entwicklung neuartiger Bioreaktoren für Knochen Tissue Engineering</td>
<td>40</td>
</tr>
<tr>
<td>2007</td>
<td>AO</td>
<td>The influence of androstenediol on the pathophysiological course in a murine model of femur fracture, hemorrhage, and sepsis</td>
<td>40</td>
</tr>
<tr>
<td>2008</td>
<td>Novus Sanguis</td>
<td>Differentiation of amnion located stem cells in toto for the regeneration of bone, cartilage, tendon, nerves and vessels</td>
<td>50</td>
</tr>
</tbody>
</table>

Dr.rer.nat., Dr.sci.med. Dr. techn. or PhD supervisions in last 6 years (2002-2008)

<table>
<thead>
<tr>
<th>Period</th>
<th>Name of student</th>
<th>Topic</th>
</tr>
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<tbody>
<tr>
<td>1999-2002</td>
<td>Tanja Barkhausen</td>
<td>Die Modulation zellulärer Reaktionen humaner Patellarsehenfibroblasten durch repetitive, zyklische mechanische Dehnung</td>
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<tr>
<td>Jahr</td>
<td>Name</td>
<td>Thema</td>
</tr>
<tr>
<td>--------</td>
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<td>--------------------------------------------------------------------------------------------------------</td>
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<tr>
<td>1997-2002</td>
<td>Tobias Wittwer</td>
<td>Die Rolle des TNF-Rezeptors 1 (p55) bei polymikrobieller Sepsis während der Behandlung mit Dehydroepiandrosteron (DHEA)</td>
</tr>
<tr>
<td>2000-2004</td>
<td>Kai Hillmann</td>
<td>Die Expression des Protoonkogens c-fos in humanen Fibroblasten nach zyklischer mechanischer Dehnung</td>
</tr>
<tr>
<td>2002-2004</td>
<td>Nina Zündel</td>
<td>Der Einfluss von Fcγ-RIII und TNF-RI auf den Respiratory Burst von neutrophilen Granulozyten in Abhängigkeit vom Migrationsverhalten in einem Ischämie-Reperfusions-Modell der Maus</td>
</tr>
<tr>
<td>2002-2004</td>
<td>Kristin Hildebrandt</td>
<td>Implantation von Tricalciumphosphat (TCP) und humanen Knochenmark-stammzellen (hBMSC) mit exogenem und endogenem rekombinanten Bone morphogenetic Protein-2 (BMP-2) in ein Femur-Defektmmodell der Ratte zu Beschleunigung der interkonnektiven Knochenheilung</td>
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<tr>
<td>2002-2005</td>
<td>dreamknecht</td>
<td>Effekt der Hypothermie und der Wiedererwärmung auf die inflammatorische Immunreaktion in einem Traumamodell der Maus</td>
</tr>
<tr>
<td>2003-2005</td>
<td>Alexandra Berndmeyer</td>
<td>Die Wirkung des Pan-Selektin Antagonisten TBC 1269 in einem multi-hit Trauma Modell mit infrarenaler Ischämie-Reperfusion und polymikrobieller Sepsis</td>
</tr>
<tr>
<td>2003-2005</td>
<td>Janna Schmidt</td>
<td>Untersuchungen zur Nierendysfunktion nach polymikrobieller Sepsis</td>
</tr>
<tr>
<td>2002-2006</td>
<td>Christian Frerker</td>
<td>Positive Effekte von NK-Zell Depletion in der polymikrobiellen Sepsis – Implikationen für die Wirkungsweise von DHEA</td>
</tr>
<tr>
<td>2003-2006</td>
<td>Birna Bergmann</td>
<td>Die Wirkung des Pan-Selektin Antagonisten TBC 1269 in einem multi-hit Trauma Modell mit Femurfraktur, Hämorrhagie und polymikrobieller Sepsis</td>
</tr>
<tr>
<td>2002-2006</td>
<td>Kirstin Suck</td>
<td>Neue Biomaterialien für das Tissue Engineering osteochondraler Gewebe und Knochenzüchtung mittels eines innovativen 3-D-Bioreaktorsystems</td>
</tr>
<tr>
<td>2004-2006</td>
<td>Carolin Mallig</td>
<td>Etablierung eines Polytrauma-Modells aus Schädelhirntrauma und Femurfraktur mit hämorrhagischem Schock bei der Maus</td>
</tr>
<tr>
<td>2005-2007</td>
<td>Thomas Brin</td>
<td>Die prognostische Bedeutung der Zytokine und konventioneller Laborparameter als Zusatzinformation bei der Abschätzung des klinischen Zustandes bei polytraumatisierten Patienten</td>
</tr>
<tr>
<td>2004-2007</td>
<td>Philip Dargatz</td>
<td>Hat HLA-DR Quantifizierung auf peripheren Monozyten einen prognostischen Wert für polytraumazisierten Patienten bezüglich der Entwicklung einer Sepsis oder MODS?</td>
</tr>
<tr>
<td>2005-2008</td>
<td>Solvig Diederichs</td>
<td>Mechanische Stimulation und Bioreaktorkultivierung humaner mesenchymaler Stammzellen aus dem Fettgewebe im Rahmen des Tissue engineering von Knochen</td>
</tr>
<tr>
<td>2005-2008</td>
<td>Johanna Meisnner</td>
<td>Der Verlauf von MIF Serumspiegel bei Polytrauma mit und ohne Komplikationen (SIRS, Sepsis und MODS)</td>
</tr>
<tr>
<td>2005-2008</td>
<td>Daniel Ross</td>
<td>Der Einfluß der primären Rettungszeit auf den posttraumatischen Verlauf polytraumatisierter Patienten</td>
</tr>
<tr>
<td>2004-2008</td>
<td>Björn Thobe</td>
<td>Untersuchung der Rolle der NK-Zellen und der TNF-RI in einem two-hit Trauma-Modell mittels NK-Zell Suppletion in TNF-RI Knockout Mäusen</td>
</tr>
<tr>
<td>2004-2008</td>
<td>Nadia Zghoul</td>
<td>Improved in vitro bone-like tissue formation by human trabecular bone cells in a novel three demensional cultivation system</td>
</tr>
</tbody>
</table>
Publications

First, last or corresponding author manuscripts:


Co-author manuscripts:


Invited Talks 2002-2008

Conferences (2002-2008)

Trauma und Infektion; 2nd international symposium on SIRS and Sepsis, 2002
Is there genetic predisposition to adverse outcome following trauma?; Britisch Trauma Society, 2003
Ist Osigraft kosteneffektiv in der Behandlung von Tibiapseudarthrosen.; Deutsche Gesellschaft für Chirurgie, 2003
Neurologische Schäden nach Trauma.; Internationales Bildungsforum Jahrestagung Orthopädie- und Schuhtechnik. 2003
Trauma, Immunantwort und Infektion.; III. internationales Symposium Sepsis, SIRS, Immunantwort. 2003
Inhibition of leukocyte diapedesis in trauma prevents complications.; 6th european congress of trauma and emergency surgery. 2004
Cultivation of bone and cartilage cells under physiological strain conditions for Tissue Engineering; Bioperspectives 2004/Dechima Jahrestagung, 2004
Sepsis oder SIRS - labordiagnostische Differentialdiagnostik aus traumatologischer Sicht. SIRS-Infection-Sepsis Diagnostische Strategien zur Differenzierung, 2004
DHEA: Modulation of the immune response following polymicrobial sepsis. 6th world congress on trauma, shock, inflammation and sepsis, 2004
DHEA and leptin modulate the immune reponse following trauma and sepsis. European Shock Society, 2005; Trauma Congress Brno, 2005; 9. Chirurgische Forschungstage, Frankfurt, 2005
Immunologic changes after trauma: surgery influences the severity and outcome. IV. internationales Symposium Sepsis, SIRS, Immunantwort, Sepsis, SIRS, Immune Response – concepts, diagnostics and therapy: update 2005
Mechanical strain induces differentiation of bone marrow derived stromal cells into osteoblasts, Trauma Congress Brno, 2005
Differenzierung in Richtung Knochen und Knorpel braucht ein physiologischer Streß mit allen biologischen Eigenschaften, MEDTEC, 2005
Polytrauma – Mediatorexplosion mit chirurgischen Konsequenzen. Deutsche Gesellschaft für Klinische Chemie und Laboratoriumsmedizin, Jena, 2005
SIRS en Sepsis: men kann bij trauma differentieren. Intensiefdagen van de nederlandse intensivist en, Ermelo (NL), 2005
Neu diagnostische Möglichkeiten für „damage control surgery“ in der Unfallchirurgie. Österreichische Gesellschaft für Unfallchirurgie, Salzburg, 2006

**Symposia and Workshops (2004-2008)**

Mechanical strain influences differentiation of human bone marrow stem cells into bone and tendon tissue. MSC-Symposium, Köln, 2004; Expertissues Workshop, Buxton, 2006
Entzündung oder Infektion: man kann differenzieren. Fortbildung der Ärztekammer Salzburg, 2005
Monitoring von Polytraumapatienten - Wahl des OP-Zeitpunktes. AUVA Fortbildungstag, AUVA Hauptstelle Wien, 2005
Een nieuw diagnostisch concept voor sepsis op de trauma ic. Jaarlijkse congres van de nederlandse intensivisten, Ede, 2007
IL-6 in der intensivmedizinische Diagnostik. Hoffmann-La Roche, Penzberg, 2007
Neue diagnostische Möglichkeiten für septische Komplikationen bei Unfallpatienten auf der Intensivstation. MTA Kongreß, Kassel, 2007
Endocrine-immunologic interactions during trauma and sepsis. Hamburger Intensivtage, 2007
Genetische Disposition für Infektion und Sepsis. Sepsis Workshop, Wien, 2007
Sheep critical segmental tibial defect (nail stabilisation). Kuros Workshop, Zürich, 2008
Sepsis and sepsis markers – Trauma. Siemens Fortbildung, Tarrytown, 2008
Können wir aus Stammzellen einen neuen Menschen machen? Science on Stage, Wien, 2008
Surgical infections. ESTES, Budapest, 2008
Das endokrine System ist wichtig für das Outcome in Polytrauma. Österreichische Gesellschaft für Unfallchirurgie (ÖGU), Salzburg, 2008
In-vitro expansion of human amniotic cells: considerations for cell banking. ITERA, Maastricht, 2008
Curriculum Vitae

Reinhard Gruber, PhD

Address: Medical University Vienna, Department of Oral Surgery, Währingerstrasse 25a, 1090 Vienna, Austria;
Tel (office): +43 (1) 4277-67 011; Fax (office): +43 (1) 4277-67 019; Tel (mobile): +43 (699) 107 18 472;
Email: reinhard.gruber@meduniwien.ac.at

Personal Data
Date of Birth: 8th July 1968
Place of Birth: Mödling
Nationality Austria

Education (academic)
11th December 1998 Dr. nat. techn., University of Natural Resources and Applied Life Sciences, Vienna, Austria
2nd February 1995 Dipl.-Ing. rer. nat., University of Natural Resources and Applied Life Sciences, Vienna, Austria

Career History
Since 2008 Coordinator of a lecture series in the curriculum for undergraduates, “Block Z1”, Dental School, MUW
Since 2007 Chair of the committee for quality control for diploma works, “Qualitätszirkel”; Dental School, MUW
Since 2005 Coordinator of the Doctoral Program "Bone and Joint Regeneration", MUW
2005, 2006 Carnegie Mellon University, PA; Visiting Professor
2008 University of Michigan, MI; Visiting Professor
1999-2004 Associate Professor for "Cell biology"; MUW
1998-1999 Assistant Professor; Department of Oral Surgery; MUW
Research associate; Department of Oral Surgery; MUW
Research associate; Department of Rheumatology; MUW

Awards
2001 Herbert-Czitober Forschungspreis der Österreichischen Gesellschaft zur Erforschung des Knochens und des Mineralstoffwechsels

Memberships
Österreichische Gesellschaft zur Erforschung des Knochens und des Mineralstoffwechsels
Deutsche Gesellschaft für Osteologie

Sources of funding of peer-reviewed projects in last 6 years (2002-2008)

<table>
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<tr>
<th>Period</th>
<th>Organization</th>
<th>Short Title</th>
<th>K€/year</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002-2003</td>
<td>ÖNB</td>
<td>Einfluss von Thrombozyten auf die Knochenregeneration</td>
<td>15</td>
</tr>
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</table>
2004-2006 ÖNB Bedeutung der Thrombozyten bei der Apoptosie von Osteoblasten 15
2007- Osteology Foundation Development of a model for evaluation of graft consolidation 30
2008- Osteology Foundation Regeneration of extraction defects under high dose zoledronic acid treatment in the rat 30

Dr rer nat., Dr sci med, Dr techn, or PhD supervisions in last 6 years (2002-2008)

<table>
<thead>
<tr>
<th>Period</th>
<th>Name of student</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002-2005</td>
<td>Barbara Kandler</td>
<td>Platelets and angiogenesis</td>
</tr>
<tr>
<td>2004-2008</td>
<td>Birgit Mair</td>
<td>Osseointegration of implants under compromised situations</td>
</tr>
<tr>
<td>2005-2006</td>
<td>Silvia Cei</td>
<td>Aging and osseointegration</td>
</tr>
<tr>
<td>2004-</td>
<td>Hermann Agis</td>
<td>Platelets, bone regeneration and pharmacological therapy</td>
</tr>
<tr>
<td>2004-</td>
<td>Dieter Busenlechner</td>
<td>Preclinical models of oral surgery</td>
</tr>
<tr>
<td>2004-</td>
<td>Alexander Fügl</td>
<td>Surface modification of dental implants &amp; NO</td>
</tr>
<tr>
<td>2007-</td>
<td>Gabriella Dvorak</td>
<td>Sheep model of osteoporosis in oral surgery</td>
</tr>
</tbody>
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Publications

Peer reviewed manuscripts 2002-2008

First, last or corresponding author manuscripts:


Originalarbeiten: Coauthor:


Invited Talks 2002-2008
10. Österr. Ges. für Orale Chirurgie und Implantologie, Kitzbühel, 29. 5. – 1. 6. 2002
4th Central European Congress for Rheumatology, Baden, 10. - 12. 5.2002
Wissenschaftliche Herbsttagung der ÖGEKM, Wien, 19.11.2005
Osteologie 2005, Basel, 2. - 5. 3. 2005
Knochenregeneration: Aktuell, Wien, 8. - 9. 4. 2005
Experttissue Workshop, Wien, 23. 3. 2006
Osteology Wien; Wien 17. – 18. 11. 2006
Seminar, IBMC/INEB Associate Laboratory, Porto, 9. 2. 2007
Osteologie 2007, Wien, 28. 2. – 3. 3. 2006
Seminar, Novartis Institutes for BioMedical Research, Wien, 28. 3. 2007
Int. Symposium Osteology Monaco, Monte Carlo, 10. - 12. 5. 2007
Blutspendezentrale Rotes Kreuz, Fortbildung, Linz 25. 5.2007
Osteoporoseforum, St. Wolfgang, 15.-17. Mai 2008
Abteilung für Osteopädie, Wien, 27. Oktober 2008
Curriculum Vitae

Katharina Kerschan-Schindl, MD

Address: Medical University of Vienna, Währingerstrasse 25a, 1090 Vienna

Personal Data
Date of Birth: 1968-05-09
Place of Birth: Vienna
Nationality Austria

Education
From 1978 to 1986 High school
Except summer 1984 to summer 1985 One year high school in Iowa, U.S.A. (high school degree)
From 1974 to 1978 Primary school

Career History
Since 2003 Research associate professor
Since 2002 Senior physician
Since 1999 Specialist in Physical Medicine & Rehabilitation
Since 1995 Resident at the Department of Physical Medicine & Rehabilitation, University of Vienna
1998 to 1999 Department of Neurology, University of Vienna
1994 to 1995 “Lehrpraxis” at Michael Müller, M.D.
1994 to 1994 Unfallkrankenhaus Lorenz Böhler, Vienna
1993 to 1994 Evangelisches Krankenhaus Wien, Orthopedic Department
1992 to 1993 Evangelisches Krankenhaus Wien Währing, Internal Department

Career-related Activities
Since January 2001 Head of the outpatient clinic „Ambulanz für Osteoporose, rheumatische Erkankungen und Wirbelsäulenschmerz“
Since January 2001 Head of the outpatient clinic „Beckenbodenambulanz“
2006 Member of the scientific board of the 3rd Central-European Congress of Physical Medicine und Rehabilitation
1999 Secretary of the International Course on Osteoporosis: Fractures, Back pain, Disability – Management (Vienna, Austria)

Awards
Poster price (3rd) at the „Österreichischer Geriatriekongreß“, Bad Hofgastein 1998

Ist COPD ein Risikofaktor bei älteren Patienten? (E. Uher, K. Kerschan, P. Nicolakis, H. Zwick)

Memberships
Austrian Society of Physical Medicine & Rehabilitation
Society of Rheumatology

Sources of funding in last 6 years (2002-2008)

<table>
<thead>
<tr>
<th>Period</th>
<th>Organization</th>
<th>Short Title</th>
<th>K€/year</th>
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</thead>
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<tr>
<td>2002</td>
<td>Hochschuljubiläumsstiftung der Stadt Wien</td>
<td>Serum Osteoprotegerin (OPG) - Werte vor und nach einer Herztransplantation.</td>
<td>5.000,-</td>
</tr>
<tr>
<td>2002</td>
<td>Österreichische Gesellschaft für Rheumatologie – für das Projekt „Lebensqualität bei Osteoporose.“</td>
<td>2.746,40,-</td>
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</table>
Dr. rer. nat., Dr. sci. med. Dr. techn. or PhD supervisions in last 6 years (2000-2006)

<table>
<thead>
<tr>
<th>Period</th>
<th>Name of student</th>
<th>Topic</th>
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</thead>
<tbody>
<tr>
<td>2002/2003</td>
<td>Elisabeth Kölly (Zahnmedizin)</td>
<td>„Lebensqualität bei Frauen mit Osteoporose“</td>
</tr>
</tbody>
</table>

Publications

Peer reviewed manuscripts 2002-2008

First, last or corresponding author manuscripts:


Coauthor author manuscripts


Curriculum Vitae

Stefan Marlovits, MD

Department of Traumatology, Medical University of Vienna
Währinger Gürtel 18-20, 1090 Wien
e-mail: stefan.marlovits@meduniwien.ac.at

Personal Data
Date of Birth: September 9, 1963
Place of Birth: Oberwart
Nationality: Austria

Education
2006 Post gradual University Diploma for Hospital Management at the Danube University in Krems
2004 Habilitation for Traumatology
2001-2003 Professional MBA Entrepreneurship Applied Biomedicine, Danube University Krems
1994 USMLE (United States Medical Licensing Examination) Step 1 and 2
1994 Bernhard Nocht Institute for Tropical Medicine, Hamburg
1981-1994 Medical School, Karl-Franzens University of Graz and University of Oxford
1973-1981 Bundesrealgymnasium, Oberschützen

Career History
2008 - date Deputy Medical Director and Director of Trauma, Orthopaedics and Sport Medicine at Al Ain Hospital, United Arab Emirates
2007 Senior Clinical Specialist at the Prince Court Medical Center, Kuala Lumpur, Malaysia
2001 - 2007 Head of Research, Department of Traumatology, Medical University of Vienna
2004 Habilitation at the Medical University of Vienna
2003 Master of Business Administration (MBA) for Entrepreneurship and Applied Biomedicine, Danube University of Krems
2001 - today Traumatologist at the Department of Traumatology, Medical University of Vienna
August 2001 Degree as a „Specialist for Traumatology“ („Facharzt“)
1995-2001 Residency at the Department of Traumatology, Medical University of Vienna
1994 Diploma in Tropical Medicine and Parasitology, Bernhard Nocht Institute for Tropical Medicine, Hamburg

Career-related Activities
2006 - date Chairman of the Experimental Research Group, Austrian Society of Traumasurgery
2006 - date Board Member of the ICRS (International Cartilage Research Society)
2003 - date Chairman of the Cartilage Working Group, Austrian Society of Traumasurgery

Awards
2005 Sixt Oral Presentation Prize, XXIII SICOT/SIROT Triennial World Congress
2005 Poster Award; Vienna Future Symposium
2005 Scientific Award, European Society of Traumatology
2003 Dr. Kolass Rheuma Award
2002 Günther Schlag Memorial Award
2002 Baxter-Immuno Tissucoll Award
2000 Experimental Forum Award, German Society of Traumasurgery
1999 Emanuel Trojan Poster Award
1992 Student Award; Carl-Gustav Carus Stiftung

Memberships

Sources of funding in last 6 years (2002-2008)

<table>
<thead>
<tr>
<th>Period</th>
<th>Organization</th>
<th>Short Title</th>
<th>€</th>
</tr>
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<tbody>
<tr>
<td>2006-10</td>
<td>EC</td>
<td>EXPERTTISSUE</td>
<td>40/yr</td>
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<tr>
<td>2005-9</td>
<td>EC</td>
<td>STEPS</td>
<td>87.5/yr</td>
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<tr>
<td>2004</td>
<td>MWF</td>
<td>Ultrastructures of Chondrocytes</td>
<td>40</td>
</tr>
<tr>
<td>2002</td>
<td>MWF</td>
<td>Vitality of Osteoblasts after Reaming</td>
<td>8</td>
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<td>2002</td>
<td>MWF</td>
<td>Immortalisation of HAC</td>
<td>8</td>
</tr>
<tr>
<td>2002</td>
<td>MWF</td>
<td>VIDITE II</td>
<td>25</td>
</tr>
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Dr. rer. nat., Dr. sci. med. Dr. techn. or PhD supervisions in last 6 years (2002-2008)

<table>
<thead>
<tr>
<th>Period</th>
<th>Name of student</th>
<th>Topic</th>
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<tbody>
<tr>
<td>2005-2007</td>
<td>Christian Albrecht</td>
<td>Molecularbiology of HAC</td>
</tr>
</tbody>
</table>

Publications

Peer reviewed manuscripts 2002-2008 (original research and reviews)
First last or corresponding author manuscripts:


Wondrasch B, Marlovits S. Rehabilitation after MACT in the Knee. Presentation of two rehabilitation protocols after MACT according to defect localization based on the biomechanics of the knee, the physiology of cartilage and the healing process of the graft. Osteo Trauma Care 2006; 14:208-212.


Co-author manuscripts:


Invited Talks 2004-2008


Autologous Chondrocyte Implantation. 36th MOA AGM Annual Scientific Meeting & 2nd APOA Trauma Section Meeting, Kuala Lampur, Malaysien 2006.

Bone Graft Substitute – Indication and Outcome. 36th MOA AGM Annual Scientific Meeting & 2nd APOA Trauma Section Meeting, Kuala Lampur, Malaysien 2006.


CaRes®. ICRS Surgical Skills Course, Vienna 2005.


La tecnica ad alta risoluzione MRI nel follow up di pazienti trattati con Hyalograft C. Hyalograft C: Passato, Presente e Futuro a confronto. Naples, Italy 2005.


**Curriculum Vitae**

Peter Pietschmann, MD

*Department of Pathophysiology, Medical University of Vienna, Waehringer Gürtel 18-20, A – 1090 Vienna, Austria, Phone +43-1-40400-51-26; Fax: +43-1-40-400-51-30; E-mail peter.pietschmann@meduniwien.ac.at*

---

**Personal Data**

Date of Birth:  
**May 13, 1960**

Place of Birth:  
Vienna

Nationality  
Austria

---

**Education**

2002  
Appointment as Associate Professor of Pathophysiology, Medical School, University of Vienna

2001  
Certification as Specialist of Pathophysiology

1994  
Certification as Specialist of Rheumatology

1992  
Appointment as Associate Professor of Internal Medicine, Medical School, University of Vienna

1990  
Certification as Specialist of Internal Medicine

1984  
Graduation as Medical Doctor

1979 – 1984  
Medical School, University of Vienna

1978 – 1979  
Military Service

1970-1978  
Secondary School (Vienna)

1966-1970  
Elementary School (Vienna)

---

**Career History**

2007-present  
Head of the Division of Cellular and Molecular Pathophysiology

2006 – present  
Deputy Head of the Department of Pathophysiology

2006-2007  
Head of the Division of Molecular and Biochemical Pathology

2002 – present  
Associate Professor of Pathophysiology at the Department of Pathophysiology, Medical University of Vienna

1999-present  
Head of the "Bone, Cartilage and Connective Tissue Research Group"

1998-present  
Department of Pathophysiology (former Department of General and Experimental Pathology), University of Vienna (since 2004: Medical University of Vienna)

1997-1998  
Institute of Immunology, University of Vienna

1992-1997  
Division of Rheumatology/Department of Internal Medicine 3, University of Vienna

1992-present  
Associate Professor of Internal Medicine, Medical University of Vienna

1991-1992  
Rheumatic Diseases Division, Department of Internal Medicine, Southwestern Medical Center at Dallas, University of Texas, Dallas, TX, USA

1990-1991  
Department of General and Experimental Pathology, University of Vienna

1984-1990  
Department of Medicine 2, University of Vienna

---

**Career-related Activities**

2007-present  
President of the Austrian Society for Geriatrics and Gerontology

2000-2008  
Treasurer of the Austrian Society for Bone and Mineral Research

1998-present  
Board member of the Austrian Society for Geriatrics and Gerontology

1993-present  
Scientific collaboration with the Ludwig Boltzmann Institute of Aging Research, Vienna
Awards
1986  Paracelsus Award Austrian Society for Internal Medicine
1996  Young Investigator Award World Congress on Osteoporosis

Memberships
Austrian Society for Geriatrics and Gerontology (President)
Austrian Society for Bone and Mineral Research (Board Member)
International Bone and Mineral Society

American Societies for Bone and Mineral Research

Society for Internal Medicine of Vienna and Lower Austria
Austrian Society for Rheumatology
Austrian Society for Endocrinology and Metabolism
Austrian Society for Cytometry
Austrian Diabetes Society
Medical Society of Vienna
Affiliation with the Ludwig Boltzmann Institute for Aging Research, Vienna

Sources of funding in last 5 years (2002-2008) Only FWF and equivalent projects

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<tr>
<th>Period</th>
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<th>K€</th>
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<tbody>
<tr>
<td>2007-2009</td>
<td>Jubiläumsfonds-projekt der Österreichischen Nationalbank, Projekt Nr. 12544</td>
<td>Vergleichsstudie von Hüftknochen</td>
<td>47</td>
</tr>
<tr>
<td>2007-2009</td>
<td>FWF Forschungsprojekt P20239-B13</td>
<td>Cathepsin S: ein Modulator in der Osteoimmunologie</td>
<td>82</td>
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<td>2002-2004</td>
<td>Medizinisch-wissenschaftlicher Fonds des Bürgermeisters der Bundeshauptstadt Wien, Projekt # 2240</td>
<td>Die Wirkung von Bone morphogenetic protein-5 auf die Generation von Osteoklasten in Knochenmarkskulturen.</td>
<td>26</td>
</tr>
<tr>
<td>2002-2004</td>
<td>Hochschuljubiläumsstiftung der Stadt Wien, Projekt # H-1166/2003</td>
<td>The role of lymphocyte subpopulations in osteoclast generation in murine bone marrow cultures.</td>
<td>4</td>
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</table>

Dr. rer.nat., Dr. sci.med.Dr. techn. or PhD supervisions in the last 6 years (2002-2008)

<table>
<thead>
<tr>
<th>Period</th>
<th>Name of student</th>
<th>Topic</th>
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<tbody>
<tr>
<td>2005-2008</td>
<td>Daniela Stupphann</td>
<td>Bone metabolism in HLA-B27 transgenic rats, an animal model for spondyloarthropathies</td>
</tr>
<tr>
<td>2005-present</td>
<td>Brigitte Behal</td>
<td>Meta-Analysis of the spontaneous course of osteoporosis</td>
</tr>
<tr>
<td>2006-present</td>
<td>Janina Patsch</td>
<td>Microarchitecture of bone in osteoporotic men: relation with osteoblastic gene expression patterns and treatment effects</td>
</tr>
<tr>
<td>2006-present</td>
<td>Martina Rauner</td>
<td>Molecular mechanism of osteoblast differentiation: relevance to senile osteoporosis</td>
</tr>
</tbody>
</table>

Publications

Peer reviewed manuscripts 2002-2008 (original research and reviews)

First, last or corresponding author manuscripts:


expression of functional surface molecules ICAM-1, HLA-DR and B7-2 on human monocytes. Osteol 15: 188-196


Co-author manuscripts:


Curriculum Vitae

Heinz Redl, PhD

Adresse: Ludwig Boltzmann Institut für klinische und experimentelle Traumatologie
Donaueschingenstraße 13
A-1200 Vienna

Personal Data
Date of Birth: 29. Februar 1952
Place of Birth: Vienna, Austria
Nationality Austrian

Education
1978 - 1982 Research Institute for Traumatology; Traumatology - Shock Research; Postdoctoral Fellow
1975 - 1979 Technical University Vienna; Degree: Ph.D./Dr. Doctorate Biochemistry; Research Institute for Traumatology, Vienna
1970 - 1975 Technical University Vienna; Technical Biochemistry Degree: Dipl.Ing. - Academically Trained Engineer
1962 - 1970 Gymnasium (A-level), BRG XII, Vienna

Present position and address
Director; Ludwig Boltzmann Institute for Experimental and Clinical Traumatology; Vienna, Austria
Research Center for Trauma of AUVA (Austrian Workers Compensation Board; Vienna, Austria
Associate Professor; Institute of Chemical Engineering; Technical University Vienna
Consultant for Tissue Regeneration

Career History
1995 - 1998 Deputy Director; Ludwig Boltzmann Institute for Experimental and Clinical Traumatology (Director: Prof.Dr.G.Schlag)
1983 until to date Associate Professor Institute of Chemical Engineering
Technical University Vienna
1980 - 1995 Research Scientist; Ludwig Boltzmann Institute for Experimental and Clinical Traumatology (Director: Prof.Dr.G.Schlag)
1978 until to date Consultant Tissue Regeneration
1976 - 1998 Research Institute for Traumatology of AUVA (Austrian Workers Compensation Board)
1975 - 1983 Assistant Professor; Technical University Vienna, Institute for Technical Microscopy, (Prof.Dr.Stachelberger)
1974 - 1975 Research Assistant; Technical University Vienna, Institute for Technical Microscopy (Prof.Dr.Stachelberger)

Awards
1986 Research Award of Austrian Society for Clinical Chemistry and MERCK AUSTRIA

Memberships
ANA Austrian Neuroscience Association
Austrian Society for Electron Microscopy
Austrian Society for Biomedical Engineering
Austrian Society for Experimental Surgery
Austrian Society for Clinical Chemistry
Austrian Society for Trauma Surgery
Deutschsprachige Medizinische Gesellschaft für Paraplegie
European Shock Society
European Society of Biomaterials
European Tissue Repair Society
International Endotoxin and Innate Immunity Society
International Society for Fibrinolysis and Proteolysis
Internationals Society for Stem Cell Research
International Tissue Engineering Society  
Society for Free Radical Research  
Society for Molecular Imaging  
Shock Society (US)  
TERMIS  
Wound Healing Society

Functions:
Secretary of the European Shock Society (until 2000)  
Council Member US Shock Society  
Secretary Federation of the International Shock Societies (since 2005)  
Präsidium Lorenz Böhler Fonds (- 2006)  
Scientific Board Fibrex Medical  
Nomination Committee TERMIS-EU  
Visiting Professor Peter Safer Center, Pittsburgh 2003

Editorial Board:
Shock  
European Journal of Trauma  
European Cells and Materials  
Journal Tissuengineering and Regenerative Medicine

Sources of funding in last 6 years (2002-2008)

<table>
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<tr>
<th>Period</th>
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<tr>
<td>01/2004 - 12/2007</td>
<td>Hippocrates (EU-Project)</td>
<td>A hybrid approach for bone and cartilage tissue engineering using natural origin scaffolds, progenitor cells and growth factors</td>
<td>130</td>
</tr>
<tr>
<td>07/2005 - 06/2008</td>
<td>Marie Curie (EU-Project)</td>
<td>Shaping the Future of a New Generation of Hybrid Human Resources for the Tissue Engineering of Connective Tissues</td>
<td>119</td>
</tr>
<tr>
<td>02/2004 - 01/2007</td>
<td>Gen-au-Project (bm:bwk)</td>
<td>GRAM – Genetic Response According to the type of Microbial infection during sepsis</td>
<td>129</td>
</tr>
<tr>
<td>02/2006 - 01/2007</td>
<td>FFG</td>
<td>Entwicklung eines neuen Diagnosesystems für das bettseitige immunologische Intensivmonitoring</td>
<td>433</td>
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Dr.rer.nat., Dr.sci.med. Dr. techn. or PhD supervisions in last 6 years (2002-2008)

<table>
<thead>
<tr>
<th>Period</th>
<th>Name of student</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>Peter Dungel</td>
<td>Pathophysiological relevance of 5-hydroxytryptamine as a vasoconstrictive factor in endotoxin shock</td>
</tr>
<tr>
<td>2002</td>
<td>Andrey V. Kozlov</td>
<td>Development and application of low temperature electron paramagnetic resonance spectroscopy for studying oxidative stress and nitric oxide in human and animal diseases.</td>
</tr>
</tbody>
</table>
Publications

290 peer reviewed publications in scientific journals (Medline cited), 140 book chapters, 15 patents

Peer reviewed manuscripts 2002-2008 (original research and reviews)
First, last or corresponding author manuscripts:


Co-author manuscripts:


**Invited Talks 2002-2008**


A novel topical bioactive treatment for massive hemorrhage. 7th European Congress of Trauma and Emergency Surgery, Malmö, 8. September 2006


Bacteremia in non-human primates. 6th World Congress on Trauma, Shock, Inflammation and Sepsis, in conjunction with the 5th International Congress on Shock, München, 2. bis 6. März 2004

Not all tissue sealants are equal. 6th World Congress on Trauma, Shock, Inflammation and Sepsis, in conjunction with the 5th International Congress on Shock, München, 2. bis 6. März 2004


Tissue engineering – Facts und Perspektiven Gesichtsrejuvenation – Minimal Invasive Methoden, Wien, 2. bis 4. April 2004


Current projects at the research center for traumatology: special emphasis on TBI, S-100 and NO as well as TLRs in ischemia/reperfusion. Safar Center for Resuscitation Research, Pittsburgh, 14. Jänner 2003
Pathophysiologie der Sepsis – neue Konzepte und Ergebnisse. Institut für Chirurgische Forschung der Universität München, 10. April 2003
Baboon model - hemorrhage only models. Consensus Conference on Preclinical Models of Hemorrhage with / without Head Injury, March 12 – 14, 2002, Chantilly, Virginia, USA
Spinal cord injury. Options for treatment today and in the future. 10th Annual Spinal Unit Symposium, Brünn, 19. April 2002
The case for the development of in vitro and in vivo standards for tissue adhesives. Cambridge Healthtech Institute’s Seventh Annual Tissue Sealants and Adhesives. San Francisco, 5. bis 6. Oktober 2002

56
Curriculum Vitae

Kurt Redlich, MD

Address: Medical University Vienna, Department of Internal Medicine III, Division of Rheumatology, Währinger Gürtel 18-20, 1090 Vienna, Austria

Personal Data
Date of Birth: 08/04/66
Place of Birth: Vienna
Nationality: Austria

Education
1994 Graduation to Medical Doctor
1993-1994 Fellowship at the Institute for General and Experimental Pathology, University of Vienna (Head: Prof. M. Peterlik)
1985-1994 Medical Student, University of Vienna
1976-1985 Secondary Modern School, Vienna
1972-1976 Primary School, Vienna

Career History
since 2004 Associate Professor of Internal Medicine at the Division of Rheumatology
2004 Specialist for Internal Medicine
1996-2004 Training in Internal Medicine at the Division of Rheumatology, Department of Internal Medicine, University of Vienna (Head Prof. J. Smolen)
1996 Fellowship at the University of Alabama, Birmingham, USA (Head: Prof. Steffen Gay): Role of synovial fibroblasts in the pathogenesis of RA
1994-1996 Postdoctoral Fellowship at the Institute for General and Experimental Pathology, University of Vienna (Head: Prof. M. Peterlik): Role of calcium channel blockers on bone resorption

Career-related Activities
2007-2009 Member of the scientific planning committee of the Annual Scientific Meeting of the American College of Rheumatism
2006-2008 Member of the scientific committee organizing the Annual European Congress of Rheumatology of the European League Against Rheumatism

Awards
2004 Billroth Preis
2005 Herbert-Czitober Preis

Sources of funding in last 6 years (2002-2008)

<table>
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<th>Period</th>
<th>Organization</th>
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<tr>
<td>2005/2006</td>
<td>FWF</td>
<td>Role of IL-1 in TNF-induced erosive Arthritis</td>
<td>70</td>
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Dr rer.nat., Dr sci.med. Dr techn. or PhD supervisions in last 6 years (2002-2008)

<table>
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<th>Period</th>
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<th>Topic</th>
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<tbody>
<tr>
<td>2005</td>
<td>Nikolaus Binder (PhD)</td>
<td>The Role of MCP1/CCR2 interactions on bone homeostasis</td>
</tr>
</tbody>
</table>
Publications
49 peer reviewed publications in scientific journals, 3 book chapters, 35 invited lectures, 0 patents

Peer reviewed manuscripts 2002-2008 (original research and reviews)

First, last or corresponding author manuscripts:


Co-author manuscripts:


Paul Roschger, PhD

Ludwig Boltzmann Institut für Osteologie im Hanusch-KH der WGKK und UKH Meidling der AUVA
Kundratsr. 37, A-1120 Wien
e-mail.: paul.roschger@osteologie.at

Personal Data
Date of Birth: Feb. 21, 1951
Place of Birth: Gmunden
Nationality: Austria

Education
1980 Graduation, Dr. Tech. Nat.
1975-1980 Doctural Student, Technical University Vienna
1975 Graduation, Dipl. Ing. in Technical Physics
1975-1970 Studies in Technical Physics, Technical University Vienna
1962-1970 Bundesrealgymansium Gmunden

Career History
1992-today Senior Scientist at Ludwig Boltzmann Institute of Osteology, Vienna
2003 Univ. Doz.- Habilitation in Biomaterial Sciences
1989-1992 Scientist in Inaba Biophoton Project an Exploratory Research for Advanced Technology project of JRDC (Research Development Corporation of Japan), Sendai, Japan
1981-1989 Assistent Scientist at the Atominstitute of Austrian Universities, Vienna

Career-related Activities
2003 – today Main Research fields: Bone structure in all its hierarchical level from marcro scale down to nano scale. Scanning electron microscopy by backscattered electrons for determination of local mineral content in bone tissue. Basic bone research and medical applications. Structure function relation in bone material

Editorial Board: Calcified Tissue International
Lectures at the Institute of Metal Physics of University Leoben and on the MUW

Awards
2007 COPP-Preis der Deutschen Gesellschaft für Osteologie (Coauthor)
2002 Herbert Czitober-Forschungspreis
2000 Byk TOSSE_Osteslogiepreis (Coauthor)
1994 Österreichischer Staatspreis für Grundlagenforschung auf dem Gebiet der Rheumatologie (Coauthor)

Memberships
Member of American Society for Bone & Mineral Research
Member of the International Bone and Mineral Society
Member of the European Calcified Tissue Society
Member of Austrian Society for Bone & Mineral Research
Member of Materials Research Society
Member of Austrian Physics Society
Sources of funding in last 6 years (2002-2008)

<table>
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<th>Period</th>
<th>Organization</th>
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<th>K€/year</th>
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<tr>
<td>2003-2006</td>
<td>FWF</td>
<td>Bone material quality</td>
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<tr>
<td>2006-2009</td>
<td>FWF</td>
<td>Micromechanics of lamellar bone (Cointvestigator)</td>
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<tr>
<td>2006-2008</td>
<td>ESA-Project ESTEC</td>
<td>Microgravity Application Program / Biotechnology (Cointvestigator)</td>
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</table>

Dr.rer.nat., Dr.sci.med. Dr. techn. or PhD supervisions in last 6 years (2002-2008)

<table>
<thead>
<tr>
<th>Period</th>
<th>Name of student</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004-2007</td>
<td>Ruth Zöhrer</td>
<td>FTIR of bone tissue</td>
</tr>
<tr>
<td>2005-today</td>
<td>Sabine Pfeffer</td>
<td>Bone mineralization</td>
</tr>
</tbody>
</table>

Publications
80 peer reviewed publications in scientific journals, 1 book chapters, 14 invited lectures, 0 patents

Peer reviewed manuscripts 2002-2008 (original research and reviews)

First, last or corresponding author manuscripts:


Co-author manuscripts:


**Invited Talks 2002-2008**


Roschger P 2007 Bone mineral density distribution. European Calcified Tissue Society Meeting, Copenhagen, Denmark, May 5 – 9, 2007


Roschger P 2005 Knochenqualität. Advisory Board Meeting, Bern, Switzerland, April 14, 2005

Roschger P 2005 Characteristics of the collagen-mineral nano-composite and skeletal fragility. NIH/ASBMR Bone Quality Meeting, Bethesda, USA, May 2- 3, 2005


Roschger P 2004 Bone fragility – a challenge to material scientists. Seminar ATHENS der Technischen Universität Wien, October 16, Vienna

Roschger P 2004 Contribution of bone mineral content to bone quality. Seminar Biomineralisation, Max Planck Institute of Colloids and Interfaces, December 9, Potsdam, Germany
Andreas Schedle, MD, DDS

Address: Medical University of Vienna, Währingerstrasse 25a, 1090 Vienna
1090 Wien, Währingerstrasse 25a

Personal Data
Date of Birth: 23.2.1961
Place of Birth: Vienna
Nationality: Austria

Education
from – to
1999 Graduation to doctor of dental medicine (D.M.D.)
1999 “Habilitation” in Dentistry
1995-1997 Specialisation in Dentistry
(Facharzt für Zahn-, Mund- und Kieferheilkunde)
1986-1994 Specialisation in Histology and Embryology
(Facharzt für Histologie und Embryologie)
1989 Jus practicandi (licence as general practitioner; praktischer Arzt)
1988 -1989 Internship at the Hospital of Lainz, Vienna, Austria (Turnusarzt)
1986 - 1988 Internship at the Hospital of Allentsteig, Austria (Turnusarzt)
1985 Graduation to doctor of medicine (M.D.)
1979-1985 Medical studies

Career History
from – to
Since 1999 Associate professor at the Bernhard Gottlieb University Clinic of Dentistry
1997 - 1999 Assistent professor at the University Clinic of Dentistry
1995 - 1997 University assistent at the University Clinic of Dentistry
1985 - 1995 University assistant at the Institute of Histology and Embryology, University of Vienna
1993 - 1994 Compulsory military duty
1983 - 1985 Tutor and student assistent at the Institute of Histology and Embryology, University of Vienna

Career-related Activities
Since 2007 Reviewer for Journal of Adhesive Dentistry
Since 2004 ISO TC 106 meetings (Dentistry- Biological evaluation of dental materials)
Since 1999 Reviewer for the “Journal of Dental Research”
Since 1996 Reviewer for “Dental Materials”
1997 WHO Consultation on „Assessing the risks and benefits to oral health, oral care and the environment using Dental Amalgam and its replacement.”
Since 1995 ISO/CEN meetings TC 194 (Biological evaluation of medical devices)
Since 1995 Member of the „European Union ad hoc working group on Dental Amalgam
Since 1992 Member of the working group on dental materials of the ministry for social security and generations

Memberships
Since 1995 „International Association for Dental Research“ (IADR)
Since 1990 Member of the Austrian Society for Allergy and Immunology
Since 1989 member of the German Anatomical Society
### Sources of funding of peer-reviewed projects in last 6 years (2002-2008)

<table>
<thead>
<tr>
<th>Period</th>
<th>Organization</th>
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<th>K€/year</th>
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<tbody>
<tr>
<td>Since 2008</td>
<td>ITI-foundation</td>
<td>Monitoring of osteoblast-endothelial cocultures on Ti-surfaces with different hydrophilicity, topography and protein coatings by quantitative time-lapse microscopy and conventional cell culture experiments as a model for wound healing</td>
<td>40,3</td>
</tr>
<tr>
<td>2004-2006</td>
<td>ITI-foundation</td>
<td>The influence of hydrophilic vs. hydrophobic Ti specimens on contact guidance and cellular proliferation evaluated with time-lapse microscopy</td>
<td>56,5</td>
</tr>
<tr>
<td>Since 2006</td>
<td>ITI-foundation</td>
<td>The influence of hydrophilicity and topography of Titanium samples on cell proliferation/activation/differentiation evaluated by time-lapse microscopy</td>
<td>64,4</td>
</tr>
<tr>
<td>2003</td>
<td>Bürgermeisterfonds</td>
<td>In vitro Neurotoxizität von Dentalkompositen</td>
<td>17,9</td>
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</table>

### Dr.rer.nat., Dr.sci.med. Dr. techn. or PhD supervisions in last 6 years (2002-2008)

<table>
<thead>
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<th>Period</th>
<th>Name of student</th>
<th>Topic</th>
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<tbody>
<tr>
<td>2002-</td>
<td>Alexander Franz</td>
<td>Dental materials</td>
</tr>
</tbody>
</table>


Co-author manuscripts:


Invited Talks 2002-2008
On what level of evidence do we provide therapy? „Do adverse effects of dental materials exist?“ What are the consequences, and how can they be diagnosed and treated? Society of Reconstructive Dentistry (SSR&D) First European Workshop on Evidence-Based Reconstructive Dentistry Castle of Huenigen, Switzerland November 4-7, 2006
Biokompatibilität dentaler Werkstoffe, Schaan, Mai 2006
Langlebigkeit von Kompositfüllungen im Seitenzahnbereich, Marbach, 2005
Bio-Verträglichkeit direkter Füllungsmaterialien, Österreichischer Zahnärztekongress, Rust, 2004
Die Biokompatibilität von direkten Füllungsmaterialien, Ärztekammer Steiermark, 2003
Zytotoxizitätstestung von K-137 im Vergleich zu Tetric Ceram und Ketac Molar, Wolfsburg, April 2003
Adverse effects of dental materials, FDI world congress, Vienna, Austria, 2002
Curriculum Vitae

Robert Schmidhammer, MD

Address: Medical University of Vienna, Währingerstrasse 25a, 1090 Vienna

Personal Data
Date of Birth: 10.04.1962
Place of Birth: Braunau/Inn
Nationality Austria

Education
12.9.2006 Habilitation University of Vienna
1992-1997 Orthopedic trauma surgery
Hand surgery
Microsurgery
Peripheral nerve surgery

Career History
Since 2002 Head of the Peripheral Nerve Regeneration Group, Ludwig Boltzmann Institute for Experimental and Clinical Traumatology Vienna

Since 2004 Head of the Microsurgical Trainings-Center, Ludwig Boltzmann Institute for Experimental and Clinical Traumatology Vienna

Since 2004 Head of the Microsurgical Trainings-Center, Ludwig Boltzmann Institute for Experimental and Clinical Traumatology Vienna

Since 2004 Associate - Millesi Center for Peripheral Nerve and Brachial Plexus Surgery, Vienna Private Clinic

Since 2004 Head of the Microsurgical Trainings-Center, Ludwig Boltzmann Institute for Experimental and Clinical Traumatology Vienna

Since 2006 Head of the Neuro-Regeneration within the AUSTRIAN Cluster for Tissue Regeneration, Ludwig Boltzmann Institute for Experimental and Clinical Traumatology Vienna

Since 2006 Partner Millesi Center for Surgery of Peripheral Nerve and Brachial Plexus, Vienna

June 2008 Ao Univ. Professor University of Donetsk

Career-related Activities
International Training
Mayo Clinic, USA (Dept. of Hand surgery)
University of Paris, FR (Dept. of Orthopedic surgery)
University of Hannover, Ger (Dept. of Plastic surgery)
University of Bern, CH (Dept. of Hand surgery)
University of Potchefstroom, SA (Dept. of Experimental Surgery)

2002 Management course for medical executive personnel, University of Salzburg

Memberships
Austrian Society of Trauma Surgery
Austrian Society of Hand Surgery
German Society of Hand Surgery
Member of the World Society of Reconstructive Microsurgery
Member of the Peripheral Nerve Society
Member of the European Shock Society
Member of the Sunderland Society
Dr. rer. nat., Dr. sci. med. Dr. techn. or PhD supervisions in last 6 years (2002-2008)

<table>
<thead>
<tr>
<th>Period</th>
<th>Name of student</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004-2006</td>
<td>Mittermayr Rainer</td>
<td>Aspects of wound healing and angiogenesis in flap surgery – Experimental studies</td>
</tr>
<tr>
<td>2004-2005</td>
<td>Shahin Zandieh</td>
<td>Biodegradable scaffolds in peripheral nerve regeneration</td>
</tr>
</tbody>
</table>

Publications


**Invited Talks 2002-2008**

AKH-Linz, 4.12.2002
Neurologische Abteilung KFJ-Spital Wien, Prof. Grisold, 12.2.03
UKH-Linz, 5.6.2003
LBI f. klinische und tierexperimentelle Unfallchirurgie Wien, 22.9.2003
Zahnklinik Wien, 17.10.2003
Rehab Zentrum Weissr Hof, Klosterneuburg, 22.10.2003
Hand and Microsurgery Center Mayo Clinic, Rochester, Minnesota, USA, 16.3.2004
Mikrochirurgischer Fortgeschrittenen Kurs, Linz, 19.4.2004
The 15th Meeting of the Sunderland Society, Toronto, Ontario, September 12-15, 2004
Czech Trauma congress Brünn 30.9.2005
Third Congress of the World Society for Reconstructive Surgery, Buenos Aires, October 23-26, 2005
Donetz, Ukraine, 11-12. November 2005
4. Jahrestagung der Österreichischen Gesellschaft für Neurologie, Austria Center Wien, 15.-18.3.2006
3rd Annual Meeting of Czech Spinal cord Society, 9.-10.11.2006
Baxter Symposium 14.11.2007, Wien
First Austrian-Ukrainian Microsurgical Course, Donetsk, 19.-21.6.2008
Wiener Handkurse, 24.9.2008
Peripheral Nerve Surgery-How to improve the Results, 14-17.3.2008, Vienna
First Sino-European Brachial Plexus Symposium, 7.-9.4.2008, Venice
SESU, Klagenfurt, 2.-3.5.2008
EUNI, Treviso 16.-17.5.2008 (invited lecture)
ÖGU Salzburg, 2.-4.10.2008
Curriculum Vitae

Günter Steiner, PhD

Adresse: Division of Rheumatology, Internal Medicine III, Medical University of Vienna, Währinger Gürtel 18, A 1090 Vienna; E-mail: guenter.steiner@meduniwien.ac.at

Personal Data
Date of Birth: 29.10.1953
Place of Birth: Vienna
Nationality: Austrian

Education
1981-1986 PhD studies (Biochemistry) at the Institute of Biochemistry, University of Vienna Medical School
1979-1981 Diploma thesis at the Institute of Biochemistry, University of Vienna Medical School
1973-1979 Studies in Biochemistry, University of Vienna
1964-1972 High school, Bundesgymnasium 21, Vienna

Career History
2000- Associate Professor (a.o.Univ.Prof), Head of Laboratory, Division of Rheumatology, Univ. of Vienna Medical School
2000 Habilitation in Biochemistry, Univ. of Vienna Medical School
1995-2000 Group leader, Division of Rheumatology, Internal Medicine III, Univ. of Vienna Medical School
1986-1989 Postdoctoral Fellow, Ludwig Boltzmann-Institute for Clinical Endocrinology, Vienna

Career-related Activities
2005-present Member of the International Organizing Committee of the International Congress on Autoimmunity
2002-2006 Board member, Austrian Society for Biochemistry and Molecular Biology
2002-2005 Scientific programme committee member, European League against Arthritis and Rheumatism (EULAR)
2001 Coorganizer, European Workshop for Rheumatology Research
2000 - present International Advisory Board, Dresden Symposium on Autoantibodies
1999 Coorganizer, 4th European Conference on SLE
1997 Advisory board, 10th EULAR Workshop
1992 Coorganizer, Int. Symposium on Ribonucleoproteins
1991 Coorganizer, Int. Workshop on Cytokines in Rheumatology

Awards
1997, 2000 Austrian State Award for Rheumatology
1992 Young Investigator’s Award of the European Workshop for Rheumatology Research (EWRR)
1990 Forschungsförderungspreis der 1. Österr. Sparkasse
1987 Theodor Körner Award

Memberships
Austrian Society for Biochemistry and Molecular Biology
Austrian Society for Allergology and Immunology
Austrian Society for Rheumatology
**Sources of funding in last 6 years (2002-2008)**

<table>
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<tr>
<th>Period</th>
<th>Organization</th>
<th>Short Title</th>
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<tr>
<td>2009 - 2013</td>
<td>EU</td>
<td>MASTERSWITCH (Integrated Project)</td>
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<td>2006 - 2011</td>
<td>EU</td>
<td>AUTOCURE (Integrated Project)</td>
<td>90</td>
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<td>2005 - 2007</td>
<td>ÖAW</td>
<td>CeMM 20060</td>
<td>121</td>
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<tr>
<td>2003 - 2004</td>
<td>ÖAW</td>
<td>CeMM 20060</td>
<td>152</td>
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<tr>
<td>2002</td>
<td>ÖAW</td>
<td>CeMM 20060</td>
<td>43</td>
</tr>
<tr>
<td>2001 - 2007</td>
<td>FWF</td>
<td>SFB 017/F1705: RNA Fate and Function</td>
<td>49</td>
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**PhD supervisions in last 6 years (2002-2008)**

<table>
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<tr>
<th>Period</th>
<th>Name of student</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999 - 2003</td>
<td>Silvia Hayer</td>
<td>Molecular and cellular mechanisms leading to autoimmune responses and tissue destruction in rheumatoid arthritis</td>
</tr>
<tr>
<td>2002 - 2004</td>
<td>Atijeh Valai</td>
<td>Interactions of hnRNP I and hnRNP K with autoantibodies and human Y1 RNA</td>
</tr>
<tr>
<td>2004-2008</td>
<td>Markus Hoffmann</td>
<td>The role of the autoantigen hnRNP-A2/B1 (RA33) in the pathogenesis of rheumatoid arthritis</td>
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</tbody>
</table>

**Publications**

87 peer reviewed publications in scientific journals, 20 book chapters, >40 invited lectures

**Peer reviewed manuscripts 2002-2008 (original research and reviews)**

*First, last or corresponding author manuscripts*


---

Co-author manuscripts


**Invited Talks 2002-2008**


European Workshop for Rheumatology Research, Marseille, 1.3.2003.

International Symposium on Autoimmunity; Vienna, 4.4.2003.


Yale University School of Medicine; New Haven, 7.5.2004.
7th Dresden Symposium on Autoantibodies; Dresden, 2.9.2004.
Austrian Proteome Form; Wien, 15.10.2004.
Kennedy Institute of Rheumatology; London, 7.3.2005.
8th Dresden Symposium on Autoantibodies, Dresden, 12.9.2007.
European Workshop for Rheumatology Research, Toulouse, 1.3.2008.
Joint Annual Meeting of Immunology of the Austrian and German Societies, Wien, 6.9.2008.
Curriculum Vitae

Siegfried Trattnig, MD

Adress: MR-Center of Excellence; Department of Radiology, Medical University of Vienna; Vienna General Hospital, Waehringer Guertel 18-20; A-1090 Vienna, Austria

Personal Data
Date of Birth: 30. July 1959
Place of Birth: Villach, Austria
Nationality: Austria

Education
1993 Habilitation in Radiology
1985 -1992 Residency in Radiology
1985 MD Degree
1979 -1985 Study of Medicine, Medical school, University of Vienna
1978 Baccalaureat with Distinction
1970 -1978 BG and BRG Villach, Carinthia

Career History
2005 up to now Project leader for the 3T and 7T project of the MUW
2004 Authorisation by the Rector according to §28 UG 2002 for the management of the „Ultrahochfeld MR-Project“
2003 Foundation of the Centre of Excellence „High-Field MR“ of the Medical University of Vienna – Medical Director
2000 up to now Medical Director of the High-Field MR research scanner of the Clinics for Radiodiagnostics, Vienna Medical School
1994 -1999 Acting Medical Director of the Institute „klinischen Einrichtung §83 UOG Magnetic-Resonanz“ of the Medical Faculty of the University of Vienna
1993 Habilitation in Radiology
1992 -1993 Acting Medical Director of the Department of Neuroradiology of the Clinics for Radiodiagnostics, Vienna Medical School
1992 Appointment to Specialist in Radiology

Career-related Activities
2008 Scientific Advisory Board of the Austrian Soc. for functional MRI
Member of the „International Skeletal Society“
Verband für medizinischen Strahlenschutz Österreichs (VMSSÖ)
Leader of the workgroup: „Non-ionizing radiation“
Member of the Scientific Programm Committee of the International Cartilage Repair Society for the congress 2009
Nominated NIH Grant (NIH NIAMS Grant reviews 2008)
Member of the International MSK Scientific Advisory Board of Siemens AG Health Care Sector
Co-Editor for Investigative Radiology: Special issue on high field MR entitled “High field MR – the new clinical standard”
Guest editor for Seminars in Musculoskeletal Radiology Special issue on MSK imaging at 3T and beyond
Member of the Österreichischen Normierungskommission in Fragen der MR Sicherheit
Scientific expert and Chairperson for an Ad Hoc Expert Group of the European Medicines Agency (EMEA)
Nomination as a referee for a professorship application of the MAYO Clinic, USA
Line coordinator (Imaging) of the Cluster for Tissue Engineering of the Ludwig Boltzmann Institute for Experimental and Clinical Traumatology with the Medical University of Vienna
2006  Member of the international Guerbet Advisory Board for Contrast Agent Research
2004  Scientific Editorial Board of the journal “European Radiology”
2003  Austrian Delegate and Project Leader of the EU-COST-B21 Programme
2003  Nominated full member of the Austrian Medical Association
2002  Expert-Evaluator of the European Commission

Awards

2006  Resarcher of the months 2006 Medical University of Vienna
2005  Mentor of the year 2005 Department of Radiology, MUW
2005  ESBS Award 7th Congress of the European Skull Base Society
1997  Giovanni Di Chiro Award for Outstanding Scientific Research Journal of Computer Assisted Tomography
1997  Österreichische Röntgengesellschaft Schering-Preis 1996
1996  Dr.-Kolassa-Stiftung zur Rheumaforschung der Österreichischen Gesellschaft für Rheumatologie
1996  Österreichische Röntgengesellschaft Schering-Preis 1995

Memberships

Member of the Scientific Editorial Board of the journal: “European Radiology”
Expert-Evaluator of the European Commission
Member of Imaging Group of the International Cartilage Repair Society (ICRS)
Austrian Delegate and Project Leader of the EU-COST-B21 Programme
Nominated full member of the Austrian Medical Association
Member of the Austrian Radiological Society
Member of the European Society of Radiology
Member of the International Society of Magnetic Resonance in Medicine (ISMRM)
Member of the international Guerbet Advisory Board for Contrast Agent Research
Cooperation Partner of Siemens Company Erlangen for clinical application studies at the clinical 3T MR (TIM TRIO)
Member of the international MR Advisory Board of Siemens Medical Solutions Erlangen, Germany

Sources of funding in last 6 years (2002-2008)

<table>
<thead>
<tr>
<th>Period</th>
<th>Organization</th>
<th>Short Title</th>
<th>K€/year</th>
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<tbody>
<tr>
<td>2004 - 2007</td>
<td>Uni-Infrastrukturprogramm II/III des BM BWK</td>
<td>Project application for a 7 Tesla whole body - MRT</td>
<td>4 Mio</td>
</tr>
<tr>
<td>2005</td>
<td>FWF-Projekt P18110B15</td>
<td>Visualization of Biomechanical properties of articular cartilage by MR</td>
<td>408.000</td>
</tr>
<tr>
<td>2006</td>
<td>BRIDGE-Progr. des FFG</td>
<td>Sequence technique and development and Optimization at high field MR (3+7 Telsa)</td>
<td>340.000</td>
</tr>
<tr>
<td>2005</td>
<td>FWF-TRP-Projekt L243-B15</td>
<td>Monitoring of autologous cartilage implantation by 3T MR</td>
<td>273.000</td>
</tr>
<tr>
<td>2003-2005</td>
<td>Jubiläumsfondprojekt Nr.10158</td>
<td>Examination of T1rho relaxation times as apossible marker for proteoglycan loss</td>
<td>45.000</td>
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<tr>
<td>2005</td>
<td>Jubiläumsfondprojekt NR. 11744</td>
<td>Improved pre-operative planning for autologous chondrocyte implantation surgery through automated 3D image analysis and reconstruction of MR images</td>
<td>45.000</td>
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<tr>
<td>2005</td>
<td>Bracco</td>
<td>Contrast-Enhanced SWI of brain tumors</td>
<td>65.000</td>
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<tr>
<td>Year</td>
<td>Project Funding</td>
<td>Project Details</td>
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<tr>
<td>2006</td>
<td>Jubiläumsfondprojekt Nr. 11954</td>
<td>Improved preoperative evaluation of cerebral cavernous hemangiomas by high resolution and contrast-enhanced SWI-high field MRT (3T). Comparison with standard MRI and histopathology</td>
<td>41.000</td>
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<tr>
<td>2001-2003</td>
<td>Jubiläumsfondprojekt Nr. 9285</td>
<td>Noninvasive high resolution MRI of ankle joint at high field strength</td>
<td>42.000</td>
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<tr>
<td>2001-2003</td>
<td>Bürgermeisterfond-Projekt: Nr. 1971</td>
<td>High resolution of MR-Venography of the human brain at 3 Tesla</td>
<td>35.000</td>
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<tr>
<td>2005-2007</td>
<td>Bürgermeisterfond-Projekt: Nr. 2332</td>
<td>Sodium Imaging of cartilage</td>
<td>25.000</td>
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<tr>
<td>2000-2002</td>
<td>Jubiläumsfondprojekt Nr. 8422</td>
<td>Correlation of Proteoglycan depletion in articular cartilage with Gadolinium-DTPA enhanced MRI</td>
<td>23.000</td>
</tr>
<tr>
<td>2004</td>
<td>GE Healthcare</td>
<td>Contrast-enhanced high-resolution MRI of Cartilage Repair</td>
<td>7.000</td>
</tr>
<tr>
<td>2008</td>
<td>FWF TRP</td>
<td>Biochemical imaging of the intervertebral disc</td>
<td>287.000</td>
</tr>
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<td>2008</td>
<td>Jubiläumsfond-projekt</td>
<td>Morphological and biochemical hip imaging</td>
<td>108.000</td>
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</table>

**Dr.rer.nat., Dr.sci.med. Dr. techn. or PhD supervisions in last 6 years (2002-2008) Only students in your lab, no external**

<table>
<thead>
<tr>
<th>Period</th>
<th>Name of student</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>Christoph Müller</td>
<td>Optimierung morphologischer hochauflösender MR-Bildgebung: 1.5 Telsa versus 3.0 Telsa;</td>
</tr>
<tr>
<td>2007</td>
<td>Louisa Brandi</td>
<td>Biochemische Bildgebung des Knorpels</td>
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<tr>
<td>2007</td>
<td>Martin Mühlenweg</td>
<td>MR Sicherheit unter besonderer Berücksichtigung von Hochfeld-MR</td>
</tr>
<tr>
<td>2006</td>
<td>Matthias Feuchtenhofer</td>
<td>7 Tesla MRT: die zukünftige Rolle des Radiologie-Technologie Assistenten</td>
</tr>
<tr>
<td>2006</td>
<td>Anna Prajsnar</td>
<td>Cerebral Cavernous Malformations-Importance of MRI</td>
</tr>
<tr>
<td>2005</td>
<td>Ilse-Gelinde Sunk</td>
<td>Auswirkungen eines 3 Tesla Magnetfeldes auf die biosynthetische Aktivität von artikulären Chondrozyten. Sunk IG</td>
</tr>
<tr>
<td>current</td>
<td>Dr. Stephan Domayer</td>
<td>T1rho mapping of matrix associated autologous chondrocyte transplantation in vivo with high field MRI and correlation with clinical results</td>
</tr>
<tr>
<td>current</td>
<td>Dr. Marius Mayerhöfer</td>
<td>Experimental basis and clinical application of texture analysis and pattern recognition on high-resolution MR images</td>
</tr>
</tbody>
</table>
Publications
Total 220, First Autorship 64, Top Journals 82, Book contributions 19

Peer reviewed manuscripts 2000-2006 (original research and reviews)
First, last or corresponding author manuscripts:


Curriculum Vitae

Christian Ulm, MD, DDS

Address: Bernhard Gottlieb Dental School, Medical University of Vienna, Waehringerstr. 25 a, 1090 Vienna

Personal Data
Date of Birth: 25.6.1963
Place of Birth: Vienna
Nationality Austria

Education
1988 Doctoral thesis on "Anatomical-radiographical study of the mandibular canal in the atrophic mandible"
1988 M.D. degree, University of Vienna
1991 D.M.D. degree, Dental School, University of Vienna

Career History
1991 University Assistant at the Department of Oral Surgery (Head: G. Watzek, M.D., D.D.S.) of the Dental School of the University of Vienna
2000 Representative Head of the Department of Periodontology, (Head: M. Matejka, M.D., D.D.S.), Bernhard Gottlieb Dental School, Medical University of Vienna

Awards
1990 Förderungspreis für Dissertationen der Studenten-Fakultätsvertretung Medizin (ÖMU) 1990 für die Dissertation
1993 Stomatologie-Preis
1993 Wissenschaftlicher Förderungspreis der Bundesfachgruppe für Zahn-, Mund- und Kieferheilkunde der Österreichischen Ärztekammer für das Jahr 1993 (Hauptpreis)
1996 Wissenschaftlicher Förderungspreis der Bundesfachgruppe für Zahn-, Mund- und Kieferheilkunde der Österreichischen Ärztekammer
1996 Stomatologie-Preis
1999 Wissenschaftlicher Förderungspreis (1. und 2. Platz) der Bundesfachgruppe für Zahn-, Mund- und Kieferheilkunde der Österreichischen Ärztekammer

Memberships
American Academy of Periodontology
Österr. Gesellschaft für Parodontologie

Dr rer. nat., Dr. sci. med. Dr. techn. or PhD supervisions in last 6 years (2002-2008)

<table>
<thead>
<tr>
<th>Period</th>
<th>Name of student</th>
<th>Topic</th>
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<tbody>
<tr>
<td>2008</td>
<td>Karoline Reich</td>
<td>Atrophy of the Residual Alveolar Ridge Following Tooth Loss: the National History of Disease in a Mediaeval Population without Modern Oral Health Care</td>
</tr>
</tbody>
</table>
Publications
90 Publications, 35 peer reviewed publications in scientific journals, 9 book chapters, 2 invited lectures

Peer reviewed manuscripts 2002-2008 (original research and reviews)
First, last or corresponding author manuscripts:


Co-author manuscripts:

Interleukin 1ß - Induced Prostaglandin E2 Production by Human Gingival Fibroblasts Is Upregulated by Glycine. J. Periodontol. 76 (7): 1182 – 1188


Curriculum Vitae

Franz Varga, PhD

Address: Hanusch Hospital, A-1140 Vienna, Heinrich Collin-Str. 30; Tel.: +43 (0)1 91021 86 933;
Fax.: +43 (0)1 91021 86 929; e-mail: franz.varga@osteologie.at

Personal Data
Date of Birth: September 20th 1950
Place of Birth: Vienna
Nationality Austria

Education (academic)
1974 – 1982
University of Vienna, Biochemistry
1974 – 1983
Study of Chemistry and Biochemistry at University of Vienna
Graduation as a master of science (Biochemistry)
1983
Research Assistant at the Institute of Molecular Biology at the
University of Vienna, Medical School
1984 – 1986
Graduation as a Ph.D. in natural sciences (Molecular Biology)

Career History
1986 – 1992
Assistant Professor at the Institute of Botany, Dept. of Genetics
und Cytogenetics
Since 1992
Senior Scientist for Molecular- and Cell-Biology at the Ludwig
Boltzmann Institute of Osteology (Head: Univ. Prof. Dr. Klaus
Klaushofer) at the Hanusch Hospital

Awards
1996
Posterpreis der 27. Jahrestagung der Österreichischen
Gesellschaft für Innere Medizin in Linz
1998
Herbert Czitober Forschungspreis
2000
Young Investigator Award beim 27th European Symposium on
Calcified Tissues in Tampere, Finnland
2002
Young Investigator Award beim 29th European Symposium on
Calcified Tissues in Zagreb, Kroatien

Memberships
Since 1992: Austrian Society for Bone and Mineral Research (AuSBMR)
Since 1995: International Society for Bone and Mineral Research (IMBS)

Dr.rer.nat., Dr.sci.med. Dr. techn. or PhD supervisions in last 6 years (2002-2008)

<table>
<thead>
<tr>
<th>Period</th>
<th>Name of student</th>
<th>Topic</th>
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<tbody>
<tr>
<td>2004-2008</td>
<td>Claudia Turecek</td>
<td>The influence of native and artificial extracellular matrix on the function and differentiation of osteoblasts</td>
</tr>
<tr>
<td>2004-2008</td>
<td>Birgit Buchinger</td>
<td>The effects of drugs on osteoblast-associated tumour cell-lines</td>
</tr>
<tr>
<td>2003-2007</td>
<td>Marlies Huemer</td>
<td>T3 and Runx2 cooperatively regulate mOPG transcription in NIH3T3</td>
</tr>
<tr>
<td>2000-2004</td>
<td>Monika Rumpler</td>
<td>Isolation and characterization of differentially regulated mRNAs during the differentiation process of osteoblasts</td>
</tr>
</tbody>
</table>

Publications

Peer reviewed manuscripts 2002-2008
Varga, F., M. Rumpler, S. Spitzer, H. Karlic, and K. Klaushofer. 2009. Osteocalcin Attenuates T3- and Increases Vitamin D3-Induced Expression of MMP-13 in Mouse Osteoblasts. Endocr J.


7. Junior Supervisors

Curriculum Vitae

Christian Albrecht, MD, MBA

Medical University of Vienna, Department of Traumatology, Währinger Gürtel 18-20, 1090 Vienna, Austria; Email: christian.albrecht@meduniwien.ac.at

Personal Data
Date of Birth: 06.11.1980
Place of Birth: Salzburg
Nationality Austria

Education
2005 Dr. rer. nat. in Cell Biology at the University of Salzburg
2004 – 2007 Professional MBA in Health Care Management at the University of Economics and Business Administration in Vienna
1999 – 2004 M.D. degree at the Medical University of Vienna

Career History
since 2008 Group leader of the Trauma Research Laboratories, Department of Traumatology, MUW
since 2004 Postdoctoral research fellow at the Department of Traumatology

Career-related Activities
2005 – 2007 Lector at the Academy for Biochemical Analyses, Vienna

Awards
2008 50 Best Abstracts Award of TERMIS-EU 2008 Meeting in Porto

Sources of funding in last 6 years (2000-2006)

<table>
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<tr>
<th>Period</th>
<th>Organization</th>
<th>Short Title</th>
<th>K€/year</th>
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<tbody>
<tr>
<td>2008-2009</td>
<td>LBF</td>
<td>Redifferenzierungsmechanismen humaner artikulärer Chondrozyten in 3D Kulturen</td>
<td>19</td>
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<tr>
<td>2008-2009</td>
<td>LBF</td>
<td>Einfluss des BMPR2 auf das Redifferenzierungsverhalten von humanen artikulären Chondrozyten</td>
<td>18</td>
</tr>
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</table>

Publications

Peer reviewed manuscripts 2002-2008 (original research and reviews)
First, last or corresponding author manuscripts:


90
**Co-author manuscripts:**


**Invited Talks 2002-2008**

Sitzung des Arbeitskreises Knorpel der Österreichischen Gesellschaft für Unfallchirurgie, 2007, Wien
Curriculum Vitae

Catharina Chiari, MD

Adress: Department of Orthopaedics, Medical University of Vienna, Währinger Gürtel 18-20, 1090 Vienna

Personal Data
Date of Birth: 30.06.1974
Place of Birth: Salzburg
Nationality: Austrian

Education
1992-1998 University of Vienna, Medical School
1984-1998 High School
1980-1984 Primary School

Career History
3/2007 to present Deputy Head of the Pediatric Orthopaedic Team
2005 Speciality diploma for Orthopaedic Surgery
2001-2005 Residency at the Department of Orthopaedics, MUW
1999-2001 Residency at the Department of Surgery, MUW
1998-1999 Residency at the Department of Traumatology, MUW

Career-related Activities
2008 –2008 Fellowship at the International Center for Limb Lengthening, Baltimore, USA
2007 - 2009 EPOS Instructional Courses in Pediatric Orthopaedics
1996 Internship at the Hospital for Special Surgery, New York, USA

Awards
2007 Reseacher of the Month, Medical University of Vienna
2007 Poster Prize GOTS Annual Meeting 2007, Munich
2006 –2006 Poster Prize ICRS World Congress 2007, Warsaw
2006 –2006 GOTS Travelling Fellowship Korea and Japan

Memberships
International cartilage Repair Society; Society for Orthopaedics, Traumatology and Sports Medicine; Austrian Orthopaedic Society

Publications
Peer reviewed manuscripts 2002-2008 (original research and reviews)


Invited Talks 2002-2008
Wissenschaftliche Sitzung Gesellschaft der Ärzte, Wien, 13.6.2007
2nd YSOS Meeting, Castello di Bossi, Siena 26.5.2007
GOTS Meeting Zürs am Arlberg, 30 3. – 1.4.2006
A Tissue Engineering Approach towards Meniscus Regeneration
1st YSOS Meeting, Bologna, 1. 7.2005
Curriculum Vitae

Silvia Hayer, PhD

Adress: Medical University Vienna, Department of Internal Medicine III, Division of Rheumatology, Währinger Gürtel 18-20, 1090 Vienna

Personal Data
Date of Birth: 14.05.1972
Place of Birth: Vienna
Nationality Austria

Education
2003 Dr.rer.nat., University of Vienna
12/1998 Mag.rer.nat., University of Vienna
1997-1998 Diploma Thesis
1990-1998 University Study of Biology (Microbiology), University of Vienna
1982-1990 Mathematisches Rea lgymnasium, Vienna
1978-1982 Primary School, Vienna

Career History
Since 1st July 2008 Senior PostDoc, Division of Rheumatology, Internal Medicine III, MUW
2003-2008 PostDoc (Startprojekt, Ao. Univ. Prof. Georg Schett), Division of Rheumatology, Internal Medicine III, MUW

Awards
2006 Publikationspreis d. Österr. Gesellschaft für Rheumatologie
2004 Poster Award, European Workshop for Rheumatology Research

Memberships
Österreichische Gesellschaft für Rheumatologie
Österreichische Gesellschaft für Biochemie und Molekularbiologie

Dr.rer.nat., Dr.sci.med. Dr. techn. or PhD supervisions in last 6 years (2002-2008)

<table>
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<tr>
<th>Period</th>
<th>Name of student</th>
<th>Topic</th>
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<td>2008-</td>
<td>Antonia Puchner</td>
<td>Untersuchung von Pthomechanismen bei der chronisch entzündlichen Gelenkdestruktion unter Verwendung des human Tumornekrosefaktor-trangenen Arthritis-Mausmodells</td>
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Publications
24 peer reviewed publications in scientific journals

Peer reviewed manuscripts 2002-2008

First, last or corresponding author manuscripts:


First author/equally contributed

Co-author manuscripts:


**Curriculum Vitae**

Jochen G. Hofstaetter, MD

Address: Department of Orthopaedic Surgery, Vienna General Hospital, Medical University of Vienna, Waehringer Guertel 18-20, A-1090 Vienna Austria

**Personal Data**

Date of Birth: September 3rd, 1975
Place of Birth: Salzburg
Nationality: Austria

**Education**

- 1994 –2001: Medical School of Vienna, Austria
- 1985 –1993: BRG Brucknerstrasse 16, Wels, Austria

**Career History**

- Since 2005: Department of Orthopaedic Surgery, MUW
- Since 2006: Junior Scientist, Ludwig Boltzmann Institute of Osteology, Vienna, Austria
- 2001-2005: Research Fellow: Laboratory for Skeletal Disorders and Rehabilitation Department of Orthopaedic Surgery, Children’s Hospital Boston, Harvard Medical School, USA

**Career-related Activities**

- 2003: Diploma Course – Clinical Research; Harvard Medical School, Boston, MA, USA
- 2003 – 2005: Co-Organizer Children’s Hospital Orthopaedic Research Seminar Series, Department of Orthopaedic Surgery; Children’s Hospital Boston, Harvard Medical School, Boston, MA, USA
- 2008-: Organizer Orthopaedic Seminar Series; MUW

**Awards**

- 2007: ASBMR Young Investigator Travel Grant
- 2007: YIOSS’07 – Young Investigator Award, Osteologie 2007, Vienna, Austria
- 2005: JCR 2005 International Scholarship Award; Japanese College of Rheumatology; Yokohama, Japan
- 2004: New Investigator Recognition Award; Orthopaedic Research Society; 5th Combined Meeting of the Orthopaedic Research Societies of Canada, U.S.A, Japan and Europe Banff, Canada
- 2002: Kepler Internationalisierungs-Förderpreis; Land Oberösterreich
- 2002: Jefferson Cup – student poster price; University of Virginia; Charlottesville, VA, USA

**Memberships**

- International Bone and Mineral Society (IBMS)
- Austrian Bone and Mineral Society (AuSBMR)
- Austrian Scientists and Scholars in North America (ASCINA)

**Sources of funding in last 6 years (2002-2008)**

<table>
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<td>2008-2011</td>
<td>NIH</td>
<td>Bone Quality in shn3 null mice</td>
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Peer reviewed manuscripts 2000-2008 (original research and reviews)

First, last or corresponding author manuscripts:


Co-author manuscripts


Invited Talks 2002-2008
Institut für Pathophysiologie, Veterinärmedizinische Universität Wien, 21.5.2007
Day of Science, Children’s Hospital and Harvard Medical School, 4.5.2007, Boston, MA, USA
Harvard School of Public Health, 14.09.2006, Boston, MA, USA
18th Grice Lecture & Orthopaedic Alumni Symposium, Harvard Medical School, Boston, USA, 2004
Orthopaedic Research Seminar Series, Children’s Hospital, Harvard Medical School, Boston, USA, 2002
8. Lecturers

Curriculum Vitae

Oleh Andrukhov, PhD

Address: Medical University of Vienna, Währingerstrasse 25a, 1090 Vienna

Personal Data
Date of Birth: 24.09.1974
Place of Birth: Riwne, Ukraine
Nationality: Ukrainian

Education
2008 Venia docendi for Molecular Cell Physiology, University of Salzburg
2002 Candidate of Biological Sciences (equal PhD) for Biophysics,
Bogomoletz Institute of Physiology, National Academy of Sciences of
Ukraine
1996 Master degree in Radiophysics (speciality Medical Radiophysics),
National Taras Shevchenko University of Kiev, Ukraine

Career History
Since 2008 Research associate, University clinic of Dentistry, MUW
2002 – 2007 Postdoc, Department of Cell Biology, University of Salzburg, Austria
2000 –2002 Junior Research Scientist, Department of circulation, Bogomoletz
Institute of Physiology, National Academy of Sciences of Ukraine, Kiev,
Ukraine
1996 – 1999 PhD student, Department of Circulation, Bogomoletz Institute of
Physiology, National Academy of Sciences of Ukraine, Kiev, Ukraine

Awards
2000 Young Scientist Fellowship in Cell physiology (Bogomoletz Institute of
Physiology)

Publications
19 peer reviewed publications in scientific journals

Peer reviewed manuscripts 2002-2008 (original research and reviews)
First, last or corresponding author manuscripts:

kinetics of stretch-induced force transients of fast-twitch type IIA fibres of rat. Pflugers Arch 455: 1165-
1172.

Andruchov O, Andruchova O, Galler S (2006). The catch state of mollusc catch muscle is established
during activation: experiments on skinned fibre preparations of the anterior byssus retractor muscle of
Mytilius edulis L. using the myosin inhibitors orthovanadate and blebbistatin. J Exp Biol 209: 4319-
4328.

depending on myosin light chain isoform. Pflügers Arch 452:667-673


isoforms in mouse skeletal muscle: Comparison with rat, rabbit and human and correlation with amino


Co-author manuscripts:


Curriculum Vitae

Nadja Fratzl-Zelman, PhD

Adress: Ludwig Boltzmann Institute of Osteology, UKH Meidling, Kundratstraße 37, A-1120 Vienna
E-mail: nadja.fratzl-zelman@osteologie.at

Personal Data
Date of Birth: February 05th, 1960
Place of Birth: Vienna
Nationality Austrian

Education
1986 PhD, University of Vienna
1984 – 1986 Institute of Organic Chemistry at the University of Vienna
1978-1984 Study of biology at the University of Vienna
1978 French “Baccalauréat” and Austrian “Matura” at the Lycée Francais of Vienna

Career History
From november 1987 Scientific staff member at the Ludwig Boltzman Institute of Osteology (since 2004 tele worker)
1986 - 1987 Assistant at the Institute of Organic Chemistry at the University of Vienna.

Publications
Peer reviewed manuscripts 2002-2008 (original research and reviews)


Gerold Holzer, MD

Address: Medical University of Vienna, Währingerstrasse 25a, 1090 Vienna

Personal Data
Date of Birth: Dec 17th, 1957
Place of Birth: Klagenfurt
Nationality: Austria

Education
2002 Habilitation Orthopaedics, MUW
1995 Board Certification „Facharzt für Orthopädie und orthopädische Chirurgie”
1986 Medical Doctor University of Vienna

Career History
2007 Visiting Professor, Chinese University of Hongkong, China
2006 Visiting Professor, Boston University, Boston, USA
1992 – Department of Orthopaedics, Medical University of Vienna
1997 - 1998 Department of Orthopaedics, The Mount Sinai School of Medicine, New York, USA
1995 Guest Professor Yamagate Medical School, Yamagata, Japan

Career-related Activities
1999 Postgraduate Course for Leading Medical Professionals
1996 Postgraduate Course for Clinical Investigator

Awards
2004 Medical-Scientific Fund of the Major of Vienna
2001 University Jubilee Fund of the Major of Vienna
1999 Medical-Scientific Fund of the Major of Vienna
1996 Research Fellowship Max Kade Foundation
1992 Medical-Scientific Society of Carinthia

Publications
34 peer reviewed publications in scientific journals, 5 book chapters, 52 invited lectures, 1 patent

Peer reviewed manuscripts 2002-2008 (original research and reviews)
First, last or corresponding author manuscripts:


Co-author manuscripts:


Curriculum Vitae

Hanns Plenk, MD

Address: Histological-Embryological Institute, University of Vienna
Schwarzespanierstrasse 17, A-1090 Vienna, Austria
Tel.Nr: **/43/1/4277-61336; Telefax Nr:**/43/1/4277-9613
E-mail: hanns.plenk@meduniwien.ac.at

Personal Data
Date of Birth: March 15, 1940
Place of Birth: Vienna, Austria
Nationality Austria

Education
1958 Matura, Humanistic Gymnasium, Vienna, Austria
1958-1964 Medical School, University of Vienna, Austria.
1964 Promotion Doctor of Medicine (M.D.)

Career History
1961-1964 Demonstrator, then Student Assistant at the Institute for Histology and Embryology, Medical School, University of Vienna, Austria
1964-1976 University Assistant
1976, July 1 Venia docendi for Histology and Embryology
1983, August 1 ao. University Professor (associate professor)
1989-2003 Head, Department Bone & Biomaterials Research
2003, December 31 Retirement (Prof. Emeritus)
1962-2003 Medical School, University of Vienna, teaching Histology and Embryology
2005- Paracelsus Private Medical University Salzburg, teaching Histology

Career-related Activities
1981-1990 Industrial sabbatical (6 months) at 3 M Comp., St. Paul, USA.
Consultant work
1987-1988 Consultant for GORE Comp., Flagstaff, USA
1977-1988 Consultant for METALLWERKE PLANSEE, Reutte, Austria
1988-1990 Consultant for W&H DENTALWERK, Bürmoos, Austria
2003- Scientific Consultant Baxter A.G., Vienna, Austria
2004 Scientific Consultant Microvention Inc., Alto Viejo, CA, USA

Awards
1971 Wander-Preis
1976 Hoechst-Preis
1977 Eiselsberg-Preis
1983 Austrian Orthop. Society Award
1978, 1987, 1992 Austrian Chamber Dentists
2006 Austrian Neurosurg. Society Award
1981 Clemson Award (Soc. F. Biomater. USA) For Outstanding Contributions To Basic Biomaterials Research
1985 Canadian Orthop. Res. Society Award
1991 US-Academy For Osseointegration Research Award
Memberships
European Society for Biomaterials (founding member, 1978-1986 council member); Society for Biomaterials USA; Austrian Society for Artificial Organs, Biomaterials and Replacement Systems (founding and council member); Austrian Society for Bone and Mineral Research (founding and council member)


Publications


Curriculum Vitae

Heinz-Bodo Schmiedmayer, PhD

Adress: Vienna University of Technology; Institute for Mechanics and Mechatronics
Wiedner Hauptstraße 8-10/325/A1;1040 Wien - Austria

Personal Data
Date of Birth: 1963-03-15
Place of Birth: Vienna
Nationality Austria

Education
1988 – 1994 Doktoratsstudium der technischen Wissenschaften, TU-Wien (PhD in Engineering Sciences)

Career History
2000- Associate Professor in Biomechanics; TU-Wien
1987 – 2000 Research Assistant; TU-Wien

Memberships
ISB (International Society of Biomechanics)
GAMM (Gesellschaft für angewandte Mathematik und Mechanik e.v.)
ÖGBMT (Österreichische Gesellschaft für Biomedizinische Technik)

Sources of funding in last 6 years (2002-2008)

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<td>2000-2003</td>
<td>FFF Austrian Found for Applied Sciences</td>
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Dr.rer.nat., Dr.sci.med. Dr. techn. or PhD supervisions in last 6 years (2002-2008)

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<tr>
<td>2000-2004</td>
<td>Peter Brugger</td>
<td>Modellbildung und Simulation zur Verbesserung des Prothetischen Ganges von Oberschenkelamputierten</td>
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<tr>
<td>2001-2004</td>
<td>Martin Tutz</td>
<td>Das menschliche Bein als elastisches Mehrkörpersystem</td>
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Publications

Peer reviewed manuscripts 2002-2008 (original research and reviews)


Invited Talks 2002-2008


Stefan Tangl, MS
Address: Medical University of Vienna, Währingerstrasse 25a, 1090 Vienna

Personal Data
Date of Birth: 10. 12. 1964
Place of Birth: Mürzzuschlag
Nationality: Austrian

Education
1985-1997 MS in Human Biology, University of Vienna
1978-1984 College of Mechanical Engineering Specialising in Machinery and Systems Engineering in Kapfenberg
1974-1978 Elementary School in Langenwang
1970-1974 Primary School in Langenwang

Career History
1999-2008 Head of Histomorphometric Laboratory, Department of Oral Surgery, Bernhard Gottlieb Dental School
1994-1999 Anthropological evaluation of archeological human skeletal remains for the Austrian Federal Office of Historical Monuments and on archeological excavations in Tell el-Dab’a / Egypt and Patara / Turkey

Career-related Activities
2003-2008 Collaborator of the Ludwig Boltzmann Institute for Experimental and Clinical Traumatology, Vienna
1994-1999 Collaborator of the Bone and Biomaterials Research Laboratory (Prof. Plenk) of the MUW
2005-2008 Lecturer at the course for Oral Surgery, University Clinic of Dentistry, MUW
1992-2008 Tutor for Courses in Somatoloy, Physical Anthropology, Palaeopathology and Skeletal Variation at the Anthropological Institute at the University of Vienna

Publications
Peer reviewed manuscripts 2002-2008 (original research and reviews)


