Program
5th World Congress on Preventive & Regenerative Medicine

5 – 7th October 2010, Hannover, Germany

Official Congress of the:
World Federation & World Virtual Institute
Preventive & Regenerative Medicine (PYRAMED)

Organized by PYRAMED in conjunction with

5 – 7th October 2010 • Convention Center at the Hannover Exhibition Grounds • www.regmed.net
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International Committee of the 5th WCPRM

**Augustinus Bader**  
Congress President

Professor Augustinus Bader is the Director and Professor of Cell Technologies and Applied Stem Cell Biology at the Biotechnological- Biomedical Center (BBC) Leipzig University and Speaker and member of the Board of Directors of the World Federation and the World Virtual Institute Preventive & Regenerative Medicine (PYRAMED)

**Aubrey de Grey**  
Congress Vice President

Dr. Aubrey de Grey is an author and theoretician in the field of gerontology and the Chief Science Officer of the SENS Founder and member of the Board of Directors of the World Federation and the World Virtual Institute Preventive & Regenerative Medicine (PYRAMED)

**Hans-Günter Machens**  
Congress Vice President

Prof. Dr. Hans-Günter Machens is the Director of the plastic and Hand Surgery Department at the Technical University of Munich and member of the Board of Directors of the World Federation and the World Virtual Institute Preventive & Regenerative Medicine (PYRAMED)

**Henry Chen-Yao Su**  
Congress Vice President

Professor Henry Chen-Yao Su is Head of the Biomedical Research Unit, Department of Dentistry, National Yang-Ming University Taipei, Taiwan and member of the Board of Directors of the World Federation and the World Virtual Institute Preventive & Regenerative Medicine (PYRAMED)
Welcome Address

Dear colleagues,

I’m proud to invite you today for the 5th time to the World Congress on Preventive and Regenerative Medicine, to be held at the Convention Center at the Exhibition Grounds in Hannover, Germany from 5-7th October 2010.

Since 2003, we have been organizing this key event in the field of Regenerative Medicine - first in Leipzig, then in Bangkok, and now in Hannover.

More than seven years ago we established the World Congress on Regenerative Medicine as the only event addressing the entire sector of regenerative medicine.

This provides the one and only complete program for global experts, as we had recognized that such a platform was missing. The World Congress on Preventive and Regenerative Medicine (WCPRM) is being backed by the World Federation Preventive & Regenerative Medicine and will thus continue to be the most extensive event reflecting the world wide state of the art in preventive and regenerative medicine. This time, we will combine preventive with regenerative medicine, as these two areas may be the two sides of the same coin: Prevention and Regeneration. We’ve recognized the synergy between these two fields and are convinced that the integration into one another will be fruitful for their future development.

This World Congress will also be the first joint activity of the World Federation Preventive & Regenerative Medicine and the World Virtual Institute Preventive & Regenerative Medicine: PYRAMED. With the World Congress on Preventive & Regenerative Medicine we intend to provide scientific excellence and exchange of knowledge on cutting edge developments in all fields relevant.

We have a strong partner at the "Deutsche Messe" which has already been responsible for organizing the BIOTECHNICA, Europe’s key exhibition for the entire biotechnology sector. The World Congress will also include exhibitions on preventive and regenerative medicine - related both to consumer needs and to industrial products.

In 2010, the WCPRM will for the first time be held in parallel to the BIOTECHNICA, providing an excellent environment for science, technology, industry and is intended for both health care professionals and the educated public. The congress and the exhibition deal with related areas and will act synergistically. Sponsors and exhibitors of the WCPRM will be presenting in a dedicated area of BIOTECHNICA. This will guarantee them maximum visibility at the exhibition of their latest innovations in the fields of stem cells and regenerative medicine.

We are looking forward to welcoming you in Hannover, Germany.

Professor Dr. med. Augustinus Bader
(President of the 5th WCPRM 2010)
Initiator Prof. Dr. Augustinus Bader Answers Five Pertinent Questions

1. Prof. Bader, this occasion marks the fifth World Congress that has been initiated by you. This is the first time Hannover is hosting the event. What were the reasons that led you to choose Hannover as the venue?

Response Prof. Bader: This year, the Fifth World Congress for Preventative and Regenerative Medicine is entering into a strategic alliance with the BIOTECHNICA, which is Europe’s largest industry trade show for technology. The decision to combine the two was driven by the fact that the topics complement each other. Biotechnology has delivered significant anticipatory services for the clinical feasibility of regenerative and preventative approaches. However, especially the clinical sector is still not very familiar with these potentials and on the other hand, at this time, the biotechnological corporate structures that are already established have only been linked with the potential users of these technologies in very few cases.

Through interaction the connections between biotechnology and medical uses are to be significantly intensified and expanded far beyond what they have been to date. Consequently, the Fifth World Congress is also distinctly different from the event that has typically taken place in this discipline, which could be primarily dedicated to only one aspect of fundamental research or materials development in these segments only.

2. The focus of the Congress is on prevention and regeneration. Which are the concrete core topics convention participants will be able to gain insights into?

Response Prof. Bader: In the discipline of regenerative technologies the key topics depicted will be stem cell therapy processes used to treat the tissue categories of bones, cartilage, liver, the nervous system and the skin as well as the muscles including the heart. Additional associated tissue areas will be examined in open discussion forums and ad-hoc presentations.

As far as the discipline of preventative medicine is concerned, topics will comprise sports medicine aspects, hormone therapy and antioxidant treatments, which will be the primary subjects. We are planning to combine these issues, which have already been established in prevention and age research, with questions arising from traditional pharmacology with regard to the prevention of the major diseases that affect large portions of the population – diabetes and cardiovascular diseases.

Sports medicine aspects will demonstrate the holistic approach of the prevention and regeneration concept of this Congress. We are planning to present the biotechnological procedures in the form of cross sectional platforms in both analytics and diagnostics; but will also offer insights into the product development sector for laboratory and clinical requirements. Numerous companies will present their solutions in conjunction with the BIOTECHNICA.
3. Who would benefit the most from attending the World Congress?

Response Prof. Bader: The Congress is particularly interesting for individuals who are eager to get more information about cross sectional functions and cross sectional topics with the objective of boosting the innovation potential for their own scopes of application. Extending their horizons allows scientists and medical experts, as well as the true practitioners – i.e. surgeons working in hospitals, as well as colleagues working in preventative and sports medicine to participate in biotechnological stem cell therapy innovations.

Opinion drivers from the discipline of medicine as well as from biotechnological fundamental research and stem cell technology will be in attendance. The Congress targets decision makers as well as up-and-coming talents and young scientists, who will be offered a pertinent forum for the presentation of their results.

In addition, the event will cover the relevant regulatory aspects, which will be presented by the EMA (European Medicine Agency) and representatives of the Paul Ehrlich institute. Consequently, the event is also particularly interesting for industrial continued GMT and GLP technologies education applications. Pertinent practical training results are also made possible thanks to the fact that cooperating exhibitors are engaged in this subject matter.

4. How important is the role of stem cell research play within the scope of the innovative results and approaches?

Response Prof. Bader: As far as its innovative force is concerned, stem cell research is one of the most powerful innovation drivers in the disciplines of medical research and application. Principled fundamental improvements can be anticipated in areas such as bone and cartilage regeneration, skin and liver regeneration, but also as far as the regeneration of the human nervous system is concerned. Based on the large tissue system of animal and human bodies partial solutions for smaller tissue constructions will already be possible with greater precision in certain scopes of application.

Aspects of rapid prototyping, as well as a method called organ printing will be presented; as will biotechnological procedures or stem cell treatment methods in the body that trigger tissue regeneration from the tissue itself. The entire bandwidth of stem cell research, covering everything from cell therapy based on the bionic of the IPS cells principle, embryonic cell types, fetal cell systems to traditional tissue engineering will be introduced.

5. Would you like to give potential visitors some recommendations on presentations and speakers they should definitely not miss?

Response Prof. Bader: Numerous key note speakers who are highly respected around the globe, for instance Professor Aubrey de Grey, who is one of the primary pioneers in age research, will come to the event. Prof. Dr. Machens of the Klinikum rechts der Isar and of the Technical University Munich will present a report on the treatment of burn trauma patients and initial results from clinical trials. Professor Su, who hails from Taiwan, will talk about technologies available for the preparation of blood platelet concentrates. This is a technology that will certainly be compatible with numerous applications in a variety of tissue areas. Professor Cimen Karasu will make a presentation on preventative medicine; specifically on aspects related to the prevention of age-related diseases and oxidative stress. Professor Dr. Halle will segue to the discipline of sports medicine.
# Overview

**Tuesday, October 5th, 2010**

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<td>Session 3: Translational Regenerative Medicine - Requirements and Innovation</td>
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# Overview

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<td>09:00 -10:30</td>
<td>Session 9: Scaffolds &amp; Differentiation</td>
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<td>Session 8: Regulatory Affairs</td>
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<td>Session 11: Novel Technologies</td>
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Tuesday, October 5th, 2010, 8:30 – 12:00
Convention Center, Room 2

08:30 - 09:00  Hauke Jagau, President of the Hannover Region
Welcome address and official opening

09:00 – 09:30  William Haseltine
The Future of Regenerative Medicine (Presidential Address)

09:30 – 10:00  Linda Powers
Commercialization in Regenerative Medicine (Presidential Address)

10:00 – 10:30  Coffee Break (Foyer Area Convention Center)

10:30 - 11:00  Michael Manns
Official “Rebirth” lecture: Hepatocyte Transplantation – a Clinician’s Viewpoint
(Presidential Address)

11:00 - 11:30  Augustinus Bader
Bionic Technologies for Stem Cell Therapies– Physiology, preclinical and clinical studies
(Presidential Address)

11:30 - 12:00  John Dalli, European Commissioner responsible for Health and Consumer Policy
Preventive and Regenerative Medicine - the EU Role in Addressing Public Health Challenges
(Rudolf Pichlmayr Honorary Lecture)

12:00 – 13:00  Lunch / Poster Exhibition ( Hall 9)

12:10 – 12:40  Press Conference ( Room 104 )

Tuesday, October 5th, 2010, 13:00 – 15:00
Convention Center, Room 2;  Session 1: Stem Cell Mechanisms
Chairmen: Hans-Günther Machens, Georg Duda

13:00 – 13:20  Hans-Dieter Volk
Keynote: Crosstalk Between Immune Cells and Stem Cells

Keynote: New Regenerative Tools for Chronic Wounds

13:40 – 14:00  Georg Duda
Keynote: Bone Regeneration
Tuesday, October 5th, 2010, 14:00 – 15:00
Convention Center, Room 2
Session 1: Stem Cell Mechanisms
Short Communications

Chairmen: Hans-Günther Machens, Georg Duda

Gökhan Duruksu
Stem Cells and Organ Transplantation - Telomerase Activity: Indicator for Stable Transformation Efficiency in Mesenchymal Stem Cells

Armando de Mattos Carvalho
Veterinary Requirements for Stem Cell Therapy - Isolation and Immunophenotypic Characterization of Equineperipheral Blood-Derived Mesenchymal Stem Cells: Preliminary Results

Maria Beatriz Herrera Sanchez
Stem Cell Therapy for All Tissue Types

Shibashish Giri
Isolation, Characterization and Ex Vivo Expansion of Stem Cell Like Population from Healthy Rat Adult Liver with their Multilineage Potential in a Clinically Relevant Bioreactor

Jörg Heine
In-vivo Model for Tissue Engineering of Peripheral Defects of Onferior Alveolar Nerve (IAN) with Solid Tissue, Stem Cells and Growth Factors in Artificial Bünger-Bands

15:00 – 15:30 Coffee Break (Foyer Area Convention Center )
Tuesday, October 5th, 2010, 15:30 – 18:00 Parallel Session
Convention Center, Room 2
Session 2: Biomaterials & Stem Cell

Chairmen: Feng-Huei Lin, Frederica Calegari

15:30 – 15:50  Feng-Huei Lin
Keynote: Thermo-sensitive Hydrogel as Cell Carrier for Nucleus Pulposus Regeneration

15:50 – 16:10  Frederica Calegari
Keynote: Inducible Expansion of Neural Stem Cells in the Adult Mammalian Brain

Short Communications

Frantisek Straka
Valve Interstitial Cells Growth and Differentiation upon Porous Collagen I Scaffold under Static and Dynamic Culture Conditions for Heart Valve Tissue Engineering

Katrin Montzka
Growth Factor and Cytokine Expression of Human Mesenchymal Stromal Cells Is Not Altered in an In Vitro Model of Tissue Damage

Gökhan Duruksu
Pancreatic Islets Protected by Pancreatic Islet Derived Stem Cells through Cytokines

Regina Avelina de Moraes da Silva
Ex vivo Expansion of Urothelial Cells in Tridimensional Scaffolds

Christina Greulich
Endocytosis, Intracellular Distribution and Exocytosis of Silver Nanoparticles in Human Mesenchymal Stem Cells

Huiying Chung
Biomaterials, Effects of Hydroxyapatite Nanoparticles in Mesenchymal Stem Cells - Investigation of Cytotoxicity and Genotoxicity

Tali Re’em
TGFβ1 / Affinity-bound Alginate Scaffold Enhances Chondrogenic Differentiation of Human Mesenchymal Stem Cells (HMSC)

Ismet Gurhan
Nanofibrous Surface Effect on Neuronal Differentiation of MSC’s
Tuesday, October 5th, 2010, 15:30 – 18:00 Parallel Session
Convention Center, Room 2
Session 2: Short Communications
Biomaterials & Stem Cell

Chairmen: Feng-Huei Lin, Frederica Calegari

Hana Hamaee Ahvaz
The Effects of Hydrostatic Pressure on the Gene Expression in Smooth Muscle Cells Grown on Polymer Scaffolds

Sorada Kanokpanont
Modification of Gelatin Structure with Cholesterol for Curcumin Delivery

Mahboubeh Kabiri
In vivo Evaluation of Carbon Nanotube Incorporated Poly (L-lactic acid) Aligned Nanofibrous Scaffolds for Peripheral Nerve Regeneration

Tim Habijan
Influence of Nickel Ions on Human Multipotent Mesenchymal Stromal Cells

Fabian Will
New Sample Preparation Methods for Soft Tissue, Hard Tissue and Biomaterials

Jarupa Viyoch
Evaluation of In Situ-Forming Chitosan/Starch Hydrogel for Retaining Chondrocyte Function: In vivo Study

Tetsuji Yamaoka
Suppressed Cascular Calcification in the Porcine Acellular Bioscaffolds Prepared by Ultra High Pressure Treatment
Tuesday, October 5th, 2010, 15:30 – 16:45 Parallel Session
Convention Center, Room 3A
Session 3: Translational Regenerative Medicine - Requirements and Innovation
Chair: Linda Powers, Alex Zhavoronkov

15:30 – 15:45
Keynote: EU Research Agenda on Regenerative Medicine
Arnd Hoeveler

15:45 – 16:00
Keynote: Analytical Standardization (GLP)
Arnold Raem

16:00 – 16:15
Keynote: Translational Medicine – From Bench to Bed
Rita Dobmeyer

16:15 – 16:30
Keynote: Good Clinical Practice (GCP)
Udo Breyer

16:30 – 16:45
Keynote: Diabetic Foot – Incidence and Current Treatment, Potential for Innovation
Gernot-Rainer Storm
Wednesday, October 6th, 2010, 09:00 – 10:30 Parallel Session
Convention Center, Room 3A

Session 4: Ontogenesis, Neurogenesis, Neural Repair, Spinal Cord Injury/Genetics, Epigenetics, Engineering

Chairmen: Michael Brand, Lukas Sommer

09:00 – 09:20 Michael Brand
Keynote: Regeneration of the Adult Zebrafish Brain: Towards Endogenous Stem Cell based Repair in a Vertebrate Brain

09:20 – 09:40 Lukas Sommer
Keynote: Multipotent Neural Crest Stem Cells in Development and Disease

Short Communications

Mahboubeh Kabiri
Neutral Differentiation of Mouse Embryonic Stem Cells Seeded on Nanofibrous CNT-incorporated Scaffolds

Sophia Chia-Ning Chang
Long Term Bone Regeneration by Engineered Mesenchymal Stem Cells

Anne des Rieux
Spinal Cord Regeneration – Injectable Hydrogel-based Formulations for Spinal Cord Regeneration

Shafiee Abbas
Nasal Septum Derived Progenitors: Isolation, Characterization and Multi-lineage Differentiation Potential

10:30 – 11:00 Coffee Break (Foyer Area Convention Center)
Wednesday, October 6th, 2010, 08:30 – 10:30 Parallel Session
Convention Center, Room 2

Session 5: Bone and Cartilage Regeneration
(Orthopedics, Trauma and Maxillofacial Surgery)

Chairmen: Jörg Wiltfang, René van Weeren
08:30 – 08:50 Jörg Wiltfang
Keynote: Stem Cell Based Augmentation of the Jaws

08:50 – 09:10 Gorka Orive
Keynote: Potential of Endogenous Regenerative Technology for in situ
Regenerative Medicine

09:10 – 09:30 René van Weeren
Keynote: A Zonal Approach to Articular Cartilage Repair

Short Communications
Armando de Mattos Carvalho
Use of Adipose Tissue-derived Mesenchymal Stem Cells for Experimental Tendinitis Therapy in Equines

Stephanie Yin Wai Ting
Scaffold-free Cartilage Tissue by Mechanical Stress Loading for Tissue Engineering

Dusanka Mandic
Regeneration of Joint Cartilage Achieved with Madu Treatment in Patients with Degenerative Diseases of Joints

Jelena Popovic
Cartilage Regeneration in Patients with Rheumatoid Arthritis

Maryam A. Nowghani
The Synergistic Effects of Lysophosphatidic Acid Receptor Agonists and Calcitriol on MG63 Osteoblast Maturation at Titanium and Hydroxyapatite Surfaces

Aránzazu Diaz-Cuenca
Biomaterials – Nano-Organised Silica Material with Improved Bioactivity

Marcus Olbrich
Separation and Characterization of Osteoprogenitors from the Entire Periosteum-derived Tissue

10:30 – 11:00 Coffee Break (Foyer Area Convention Center)
Wednesday, October 6th, 2010, 11:00 – 12:30 Parallel Session
Convention Center, Room 2
Session 5: Bioartificial Organs - ESAO Meeting

Chairmen: Bart Meyns, Birgit Glasmacher

11:00 – 11:15 Bart Meyns
Keynote: Upcoming Challenges of Mechanical Support in Chronic Heart Failure

11:15 – 11:30 Beat Walpoth
Keynote: Cell based or Cell free Nano Scaffolds for Cardiovascular Regeneration

11:30 – 11:45 Jörg Vienken
Keynote: Requirements for the Treatment of Uremic Patients with the Artificial Kidney

11:45 – 12:00 Dieter Falkenhagen
Keynote: Nanostructured Biomaterials - a Successful Way for Extracorporeal Adsorption Therapy in Sepsis and Liver Failure

12:00 – 12:15 Birgit Glasmacher
Keynote: Scaffolds, Tracer and Depots for Engineering and Bioprinting of Tissues

12:15 – 12:30 PANEL DISCUSSION WITH THE ESAO BOARD

12:30 – 14:00 Lunch / Poster Exhibition ( Hall 9 )
Wednesday, October 6th, 2010, 11:00 – 13:00 Parallel Session

Convention Center, Room 3A Session 6: Novel Technologies and Models

Chairmen: Henry C. Y. Su, Eckard Wolf

11:00 – 11:20 Henry C.Y. Su
   Keynote: Long Life Platelet Technologies

11:20 – 11:40 Eckard Wolf
   Keynote: Transgenic Large Animal Models for Regenerative Medicine

Short Communications

Katsuko Furukawa
Synergetic Effects of Rotational Culture and BMP2 Stimulation on Scaffold-free Cartilage Formation

Nikolaos Papadopulos
Successful Closure of Fetal Membrane Defects Using Manufactured, Decellularized Human Amnion Membrane after Fetoscopy in the Midgestational Rabbit Model

Stephan Becker
Endocultivation: 3D Printed Customized Porous Scaffolds for Heterotopic Bone Induction

Elena Filova
Periadventitial Wrap Releasing Sirolimus Prevented Intimal Hyperplasia in a Rabbit Model

Tiziana Martinello
Veterinary Requirements for Stem Cell Therapy Studies of Efficacy Procedures to Assure Stem Cells Vitality During Cryopreservation and Shipment

Timo Hammer
In-vivo Vascularisation of Fibre-based Scaffolds Biofunctionalised with Adult Mesenchymal Stem Cells

Stefania Bruno
Microvesicles from Mesenchymal Stem Cells Protect against Acute Kidney Injury and Improve Survival

13:00 – 14:30 Lunch / Poster Exhibition ( Hall 9 )
Wednesday, October 6th, 2010, 14:30 – 17:30 Parallel Session
Convention Center, Room 2
Session 7: Rejuvenation Biotechnologies: Applying Regenerative Medicine to Aging
Chairmen: Aubrey de Grey, Rita Dobmeyer

14:30 – 15:00 Aubrey de Grey
Presidential Keynote: Applying of Regenerative Medicine to Aging:
Many Targets and Techniques, Unprecedented Impact

15:00 – 15:30 Jürgen Frölich
Keynote: Prevention in Pharmacotherapy

15:30 – 16:00 Ettore Bergamini
Keynote: DANI (Dynamic Antaging Nutritional Intervention): a Novel Hormetric Strategy for Antiaging Intervention and Rejuvenation

16:00 – 16300 Cimen Karasu
Keynote: Advanced Lipoxidation and Glycoxidation in Aging: Therapeutic Prospects for the Inhibitors

16:30 – 17:00 Martin Halle
Keynote: The Role Exercise Plays in Prevention and Therapy of Cardiovascular Diseases

Short Communications
Nihat Dilsiz
Oxidative Stress, Apoptosis and Aging

Olga Safonicheva
Anti-Aging Medicine - The Lymphatic System and Postural Stress. New Strategy of Anti-Aging Medicine

17:30 Coffee Break (Foyer Area Convention Center )

17:30 – 18:00 BIOTECHNICA EXHIBITION

18:00 BIOTECHNICANIGHT including dinner at Bavaria Hall. Enjoy a lively evening with typical Bavarian food & drinks as well as live music for only EUR 20.00

18:00 – 19:00 Board Meeting PYRAMED
Thursday, October 7th, 2010, 09:00 – 10:30 Parallel Session
Convention Center, Room 3A
Session 8: Regulatory Affairs

Chairmen: Ian Rees, Ralf Sanzenbacher

09:00 – 09:25 Ian Rees
Keynote: European Regulatory Policy in Regenerative Therapies

09:25 – 09:40 Ralf Sanzenbacher
Keynote: Regenerative Therapies: Current Challenges and Regulatory Requirements from a Member’s State Point of View

09:40 – 09:55 David Estape
Keynote: Manufacturing Excellence in GMP and Biotechnology

Short Communications

Peter Novak
Principles of Cleanroom Technology - Why Cleanroom Technology Is Crucial for Regenerative Medicine

Carsten Schewe
GMP Requirements and Regulatory Affairs From A Practitioner's Perspective

10:30 – 11:00 Coffee Break (Foyer Area Convention Center)
Thursday, October 7th, 2010, 09:00 – 10:30 Parallel Session
Convention Center, Room 2
Session 9: Scaffolds & Differentiation

Chairmen: Loredana de Bartolo, Axel Neffe

09:00 – 09:20
Loredana De Bartolo
Keynote: Polymeric Membranes for Guiding Neuronal Regeneration

09:20 – 09:40 Hans-Peter Wendel
Keynote: Fishing for Stem Cells – New Ways for Generating in Vivo Self-Endothelializing Surfaces for Blood Contacting Implant

09:40 – 10:00
Axel Neffe
Keynote: Biomaterials for Regenerative Therapies

Short Communications

Carla Campana
Functional Differentiation and Expansion of Rat Embryonic Liver Cells on Biodegradable and Synthetic Membranes

Cornelia Hildebrandt
Non Invasive Observation of the Ultrastructure and the Mechanical Properties in hMSCS by Acoustic Microscopy

Tobias May
Novel Cell Technologies for Stem Cells

Symzar Hosseinzadeh
The Effects of Nano Scale on Satellite Cells Proliferation and Differentiation Potential

Melanie Köllmer
Superporous Poly(ethylene glycol) Diacrylate Scaffolds Support Differentiation of HumanMesenchymal Stem Cells

Very Coulic
Combination of Chitosan Tubular Bioprosthesis and Fetal Oesophagus Graft for Oesophagus Plasty (Early Observations)

10:30 – 11:00 Coffee Break (Foyer Area Convention Center)
Thursday, October 7th, 2010, 11:00 – 13:00 Parallel Session
Convention Center, Room 2
Session 10: Stem Cells: From Bench to Therapy

Chairmen: Paolo Macchiarini, Herwig Gutzeit

11:00 – 11:20  Ralf Huss
Keynote: Iterative Process of Stem Cell Product Development for Therapy

11:20 – 11:40  Paolo Macchiarini
Keynote: Airway Tissue Engineered Replacement and Cell Therapy

11:40 – 12:00  Herwig Gutzeit
Keynote: Biology of Gonial Stem Cells in Fish

Slobodan Kazic
Tissue Regeneration in Madu-treated Patients with Arterial Disease of the Lower Extremities

Olena Deryabina
Variability in MSC Surface Markers Expression Depending on Umbilical Cord Sample and
Amount of Ex vivo Passages

Wolf-Rainer Abraham
Asymptomatic Bacterial Biofilm Communities on Rhythm Management Devices Differ Considerably
from Virulent Ones

Priscilla Murador
Histological Evaluation of Urothelial Adhesion Cells from Rabbit Bladder in Heterologous Acellular Matrix as Scaffold
for Implantation in Rabbit Urethra

Katrin Montzka
Optimal Materials for Urological Tissue Engineering

Eva Woenne
Evaluation of the CellTiter-Blue Assay for Cell Growth Analysis of Human Embryonic Stem Cells During Cultivation

13.15 – 13:30 Closing Ceremony

14:00 – 15:00 Press Conference
Thursday, October 7th, 2010, 11:00 – 12:00 Parallel Session
Convention Center, Room 3A
Session 11: Novel Technologies

Chairmen: Ursula Graf-Hausner, Vitalii Kordium

11:00 – 11:10 Vitalii Kordium
Analytics and Imaging - Regulation in Spatial Dimension

11:10 – 11:30 Heiko A. Golpon
Regenerative Medicine - Treatment for Lung Diseases?

11:30 – 11:50 Ursula Graf-Hausner
A Bioreactor Test System to Mimic the Biological and Mechanical Environment of Oral Soft Tissues and to Evaluate Substitutes for Connective Tissue Grafts

Discussion

13.15 – 13:30 Closing Ceremony

14:00 – 15:00 Press Conference
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Maria Alvarez-Viejo
Analysis of Human Bone Marrow Mesenchymal Stem Cell used for Cellular Therapy in Pseudoarthrosis Patients with long Bone non-Union: First Steps

P2
Maria Alvarez-Viejo
Bone Marrow Mesenchymal Stem Cells (BM-MSCs) Improve Islet Viability in a Subcutaneous Xenotransplantation Model

P3
Ayse Ceren Calikoglu
Cartilage Tissue Engineering on 3D Scaffolds Using Human Tooth Germ Stem Cells

P4
Pinar Cetinalp Demircan
Stem Cells and Organ Transplantation - Comparative Study of Immunosuppressive Characteristics of Human Dental Pulp Derived Mesenchymal Stem Cells on T Cells In-Vitro

P5
Marcio Teoro do Carmo
Intra-testicular Transplantation of Autologous Mesenchymal Stem Cells in Stallions

P6
Marcio Teoro do Carmo
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Sophia Chia-Ning Chang
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Karym El Sayed
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Atchariya Faikrua
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Elena Filova
Adhesion and Growth of Valve Interstitial Cells on Nanofibres Oriented Randomly and in Parallel

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Görke Gürel
A 2D Co-culture System of Rat Bone Marrow Stromal Cells and Rat Aortic Endothelial Cells

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Erdal Karaöz
Stem Cells and Organ Transplantation - Molecular and Immunophenotypic Characterization of Isolated Human Parathyroid Gland Mesenchymal Stem Cells

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Erdal Karaöz
Healing Effect of Mesenchymal Stem Cells on Ischemic Colonic Anastomoses

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Erdal Karaöz
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Erdal Karaöz
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Elena Kholodkova
Active Study of new Methods Improving the Transplant Survival Proceeds. In particular, Platelet rich Plasma (PRP) is Plied for the Improvement of Wound healing in Surgery, Dentistry, etc.

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Leandro Maia
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Luis Meseguer-Olmo
In Vivo Evaluation of Bioeutic Ceramics

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Luis Meseguer-Olmo
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Luis Meseguer-Olmo
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Marcela Munzarova
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Keynote Speakers

Bader, Augustinus University Leipzig, Leipzig, Germany
Bergamini, Ettore University of Pisa, Pisa, Italy
Brand, Michael Technische Universität Dresden, Dresden, Germany
Breyer, Udo Galenus-G. H. AG, Basel, Switzerland
Calegari, Frederico DFG-Forschungszentrum und Exzellenzcluster für Regenerative Therapien Dresden (CRTD), Dresden, Germany
De Bartolo, Loredana National Research Council of Italy, ITM-CNR, Rende, Italy
De Grey, Aubrey Methuselah Foundation, Cambridge, United Kingdom
Dalli, John European Commissioner, Brussels, Belgium
Dobmeyer, Rita Galenus-G. H. AG, Basel, Switzerland
Duda, Georg Charité Berlin, Berlin, Germany
Estape, David M+W Process Industries GmbH, Stuttgart, Germany
Falkenhausen, Dieter Donau-Universität Krems, Krems, Austria
Fröhlich, Jürgen Medizinische Hochschule Hannover (MHH), Fraunhofer Institut ITEM, Hannover, Germany
Glasmacher, Birgit Leibniz Universität Hannover, Hannover, Germany
Gutzeit, Herwig Technische Universität Dresden, Dresden, Germany
Halle, Martin Technische Universität München, Klinikum rechts der Isar, Munich, Germany
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Huss, Ralf Roche Diagnostic GmbH, Prenzberg, Germany
Karasu, Cimen Gazi University, Ankara, Turkey
Lin, Feng-Huei National Taiwan University, Taipei, Taiwan
Macchiariini, Paolo University of Florence, Florence, Italy
Machens, Hans-Günther Technische Universität München, Klinikum rechts der Isar, Munich, Germany
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Powers, Linda Toucan Capital, Bethesda, USA
Raem, Arnold Arrows Biomaterials Deutschland GmbH, Muenster, Germany
Rees, lan Medicines and Healthcare Products, Regulatory Agency, London, United Kingdom
Sanzenbacher, Ralf Paul-Ehrlich-Institut, Federal Institute for Vaccines and Biomedicines, Langen, Germany
Sommer, Lukas University of Zurich, Zurich, Switzerland
Storm, Rainer-Gernot Diabetologische Schwerpunktpraxis, Lehrte, Germany
Su, Henry C.Y. National Yang-Ming University, Taipei, Taiwan
Van Weeren, René Utrecht University, Utrecht, The Netherlands
Vienken, Jörg Fresenius Medical Care GmbH, Bad Homburg, Germany
Volk, Hans-Dieter Charité Berlin, Berlin, Germany
Walpoth, Beat HUG University Hospital, Geneva, Switzerland
Wendel, Hans Peter Universitätsklinikum Tübingen, Tübingen, Germany
Wiltfang, Jörg Universitätsklinikum Schleswig-Holstein, Campus Kiel, Kiel, Germany
Wolf, Eckard Ludwig-Maximilians Universität München, Munich, Germany
Rudolf Pichlmayr Honorary Lecture

John Dalli


As a qualified accountant, Dalli has also worked in the private sector in Malta and abroad, both in industry and as an independent consultant.

In February 2010 John Dalli was appointed as European Commissioner responsible for Health and Consumer Policy.

John Dalli is awarded the 2010 Rudolf Pichlmayr honorary lecture:

Rudolf Pichlmayr has not only been a visionary, but his medical and social engagement has brought major innovations to routine clinical use. He worked relentlessly to shape also the political environment to advance health policies for the sake of patients and the sustainability of clinical innovations. Also as a human being Professor Pichlmayr has been and continues to be a role model for the medical community. The Professor Rudolf Pichlmayr lecture symbolizes an award in recognition of excellence and pioneering spirit. This award is given for the first time to John Dalli in recognition for his outstanding contributions to advancing health policies in Europe. The award is given by the decision of the joint board of directors of the World Federation and the World Institute Preventive & Regenerative Medicine (PYRAMED).
General Information

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Credits

The accreditation for CME credits has been requested from the EACCME (European Accreditation Council for Continuing Medical Education).

All CME activities approved by the EACCME are valid for recognition by the American Medical Association (AMA) towards the Physician’s Recognition Award (PRA).

We have also applied for German CME- Credits.
Venue

Convention Center at the Hannover Exhibition Grounds
Deutsche Messe AG
30521 Hannover, Germany
www.messe.de
WCPRM Meets

BIOTECHNICA NIGHT

Wednesday, 6th October 2010
Munich Hall (behind Hall 3)
6:30 pm start, doors open at 6:00 pm

You are warmly invited to join us for an enjoyable evening featuring culinary delights, musical highlights and the very best of company!

Price EUR 20.00 per person

Please register online for this event: www.regmed.net
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**Benefits for all**

Every full registration for the period booked entitles:

- Full admission to the 5th World Congress on Preventive & Regenerative Medicine, 2010
- Full admission to BIOTECHNICA 2010
- Lunch and coffee breaks during the World Congress
- Name tag and delegate bags

**Member Registration**

Members of the national or international organizations, societies, federations and associations in the field of preventive and regenerative medicine are entitled to register at a reduced fee. If your organization or association is not included in the list provided at the registration, please contact the organizer. For successful registration you will need to provide proof of your membership during the registration process.

**Current Members:** IFRM, WFRM, EFRM, PYRAMED, ESAAM

**Student Registration**

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Please visit our exhibition partners at the Congress Center.

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We are happy to welcome the following companies at the special exhibition area at the BIOTECHNICA (Hall 9):

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The German Medical Association accredit 18 CME- Points for the whole CONGRESS.