



# Tissue Ageing: from molecular biology to clinical perspectives



Martin-Luther University Halle-Wittenberg  
Department of Cardiothoracic Surgery  
Department of Cardiology



Meeting language English

**Friday September 28<sup>th</sup> 2007**

**18:00 Opening**

*Andreas Simm*

Address

*Rolf-Edgar Silber, Director of the Department of Cardiothoracic Surgery*

*Christoph Weiser, Vice Rector of the University*

*Steffen Hauptmann, Vice Dean of Research of the Medical Faculty*

*Thomas Klöss, Medical Director of the University Clinics*

*Eberhard Doege, Representative of the City Halle*

*Thomas Klie, President of the German Society of Gerontology and Geriatrics*

**Keynote lecture and Schober award**

*Laudation Thomas Rando by George Martin, Seattle, USA*

Keynote lecture:

*Thomas Rando, Stanford University, Palo Alto, USA*

*"Ageing of Tissue-Specific Stem Cells: The Role of the Systemic Environment"*

**20:00 Come Together**

## Saturday September 29<sup>th</sup> 2007

### 08:00 - 10:00 Session 1      Mechanisms of ageing

Chair: Andreas Simm

<i>Poly(ADP-ribosyl)ation and Cardiovascular Diseases: Good and Bad within DNA Repair Activity</i>	<i>Sascha Beneke</i>	<i>Konstanz, D</i>
<i>TERT and endothelial cell ageing</i>	<i>Judith Haendeler</i>	<i>Düsseldorf, D</i>
<i>Routes To Reversing Age Associated Thymic Atrophy</i>	<i>Richard Aspinall</i>	<i>London, UK</i>
<i>How the classical evolutionary biological theory of why we age elucidates the origins of human diseases of ageing</i>	<i>George Martin</i>	<i>Seattle, USA</i>

### 10:00 - 10:30 Coffee Break

### 10:30 - 12:30 Session 2      Protein modification during ageing

Chair: Juergen Holtz

<i>Degradation of oxidized proteins in aged microglial cells</i>	<i>Alexandra Stolzing</i>	<i>Leipzig, D</i>
<i>Protein maintenance in ageing: the role of oxidized protein repair</i>	<i>Bertrand Friguet</i>	<i>Paris, F</i>
<i>Advanced Glycation Endproducts and their receptor RAGE: markers of the biological age?</i>	<i>Andreas Simm</i>	<i>Halle, D</i>
<i>Human skin autofluorescence as a marker for advanced glycation endproduct accumulation during ageing</i>	<i>Hugo Corstjens</i>	<i>Oevel, B</i>

### 12:30 - 13:30 Lunch Break

**13:30 – 15:30 Session 3      Oxidative Stress**

**Chair: George Martin**

<i>Oxidative-stress induced premature senescence of human diploid fibroblasts: comparison with replicative senescence</i>	<i>Olivier Toussaint</i>	<i>Namur, B</i>
<i>The potential role of premature senescence of structural cells in lung emphysema: evidence from experiments with parenchymal lung fibroblasts</i>	<i>Olaf Holz</i>	<i>Großhansdorf, D</i>
<i>Relationship between ageing-related stress and myocardial function in the Newcastle 85+ study</i>	<i>Bernard Keavney</i>	<i>Newcastle, UK</i>
<i>Oxidative stress in surgery and in heart failure: effects of ageing</i>	<i>Franklin Rosenfeldt</i>	<i>Melbourne, AUS</i>

**15:30 – 16:30 Poster Session/Coffee Break**

**16:30 – 19:00 Session 4      Skeletal –Heart – Muscle Connection**

**Chair: Franklin Rosenfeldt**

<i>Age-related muscle weakness: strategies for reversal</i>	<i>LaDora Thompson</i>	<i>Minnesota, USA</i>
<i>Sarcopenia, from a clinical point of view</i>	<i>Jürgen Bauer</i>	<i>Nürnberg, D</i>
<i>Inflammation and Ageing</i>	<i>Ursula Müller-Werdan</i>	<i>Halle, D</i>
<i>Ageing, heart failure, and the skeletal muscle</i>	<i>Stephan Gielen</i>	<i>Leipzig, D</i>
<i>Bedrest after cardiac surgery: Big risks; little or no benefits</i>	<i>Joseph Flaherty</i>	<i>St. Louis, USA</i>

**20:00 Gala-Dinner (Moritzburg)**

## Sunday September 30<sup>th</sup> 2007

### 08:30 - 10:30 Session 5      Regeneration of the myocardium

Chair: Tilman Grune

<i>Age-related changes of endothelial progenitor cell function</i>	<i>Robert Scheubel</i>	<i>Halle, D</i>
<i>Regulation of the cardiomyocyte cell cycle</i>	<i>Loren J. Field</i>	<i>Indianapolis, USA</i>
<i>Clinical outcome of patients after stem cell treatment</i>	<i>Christof Stamm</i>	<i>Berlin, D</i>
<i>Progenitor cells: isolation, proliferation, and differentiation</i>	<i>Christoph Piechaczek</i>	<i>Bergisch Gladbach, D</i>

### 10:30 - 11:30 Poster Session/Coffee Break

### 11:30 - 13:30 Session 6      Prevention

Chair: Olivier Toussaint

<i>Ageing intervention and prevention through mild stressed-induced hormesis in human cells</i>	<i>Suresh Rattan</i>	<i>Aarhus, DK</i>
<i>Modification of cardiometabolic pathways as a potentially new therapeutic approach for the ageing and the failing heart?</i>	<i>Bernd Niemann</i>	<i>Halle, D</i>
<i>Granzyme B inhibitors: A Novel Means of Preventing Age-Related Tissue Degeneration</i>	<i>David Granville</i>	<i>Vancouver, CAN</i>
<i>Healthy Ageing: from theory to implementation</i>	<i>Jonathan Powell</i>	<i>Bedford, UK</i>

### 13:30 - 14:00 Farewell