

# **The 10<sup>th</sup> WORLD CONGRESS of the International Society for ADAPTIVE MEDICINE**

*INTERCONTINENTAL HOTEL  
June 7 - 10, 2012, Bucharest, Romania*



**ISAM 2012**

# Summary

## **International Society for Adaptive Medicine**

The International Society for Adaptive Medicine (ISAM) is an interdisciplinary group interested in adaptive changes occurring in response to different environmental factors, sustained exercise, various pathological conditions or drug administration. Its main goal is to expand the understanding of the basic mechanisms of physiological adaptations at molecular and cellular levels as well as at the level of complex interactions responsible for the integrated control of body functions. Another objective consists in the better understanding of dismissed adaptations responsible for disease development. Finally, studies of different cross-adaptations continue to receive unceasing attention as it was demonstrated that repeated exposure to specific stress stimuli may have applications in the treatment and prophylaxis of different diseases. These observations lead to the recognition of a new discipline of adaptive medicine, which offers promise for therapeutic strategies in both experimental and clinical pathology.

## **Congress overview**

The 10<sup>th</sup> ISAM Congress served as a platform for confrontation of original data in the field of physiological adaptations and promoted the search for new trails in the field of adaptive medicine. Several scientific categories had their representatives at the meeting - clinicians, scientists, academic staff as well as engineers. We believe that our Congress had a major impact on disseminating knowledge and promoting the value of medical research to scientists as well as to general public. By the conferences held on various domains, from neurology to cardiac adaptation, from telemedicine to regenerative medicine, from hypoxia to cancer signaling, we brought together scientists, medical specialists and researchers. They were able to exchange ideas, discuss on common goals and set up or renew scientific partnerships for future joint grant applications or common projects.

The meeting gathered World experts, from more than 35 countries, who presented the cutting edge advances in medical science. The 25 symposia and 7 plenary lectures were the main agenda of the congress. An e-poster displayed showed in continuous loop posters from young researchers, during all the four days of the congress

## Scientific content

### Format of the Congress

We have chosen the Intercontinental hotel to be the congress venue, as well as the accommodation for the invited speakers from plenary lectures and congress symposia. The program included 7 plenary lectures and 25 different symposia, with invited speakers from more than 30 countries.

The congress was credited with 24 European Credits for continuous medical education. Several symposia were recommended (and advertised accordingly on specific websites) by European Professional Association (*e.g. European Society of Cardiology*).

### Organizing Committees

The **International Scientific Committee**, led by Professor P. Singal (Canada) analyzed and selected the abstracts for the Congress conferences. The **National Organizing Committee**, with members from all over the country was in charge of establishing the plenary lectures and symposia schedule. The **Local Organizing Committee** was in charge of the technical **Schedule at a glance**

The Congress was structured into four days.

The first day (June 7<sup>th</sup>) accommodated the first two plenary lectures and was concluded by the Get-together cocktail. The first plenary lecture took place in the afternoon of Thursday 7<sup>th</sup>, by Professor **P. Anversa** (*Harvard Medical School*, Boston, USA), a well-known figure in the field of cardiac stem cells. In the same session, the second plenary lecture was delivered by Professor **B. Winblad** (*Karolinska Institutet*, Stockholm, Sweden), the most cited scientist in Alzheimer's disease field and a distinguished member of the Nobel Committee.

The morning schedule of each of the second day (June 8<sup>th</sup>) was the busiest one, with four symposia<sup>1</sup> running in parallel (S01, S02, S14 and S19), followed by a Coffee Break and the plenary lecture of Professor **Maria-Simonetta Fausone-Pellegrini** (*Florence University*, Italy). The noon section also included four symposia (S11A, S09A, S21 and S06) in four of the Congress conference halls. After the lunch break, two sessions of three symposia each (S11B, S09B and S13 at 14:30 hours, as well as S15, S09C and S07 at 17:00 hours) surrounded the afternoon plenary lecture, held by Professor **Stefan N. Constantinescu** (*Ludwig Institute for Cancer Research*, Brussels, Belgium). The Gala Dinner was the closing point of the evening, starting at 20:00 hours at the 21<sup>st</sup> floor of the Intercontinental Hotel.

The third day of the Congress was also divided in several parts. In the morning, three symposia (S08, S03 and S12) opened the day and were followed by the plenary lecture by Professor **M. Ivan** (*Indiana University*, Indianapolis, USA). Another three-symposia session started at 12:00 hours (S18, S05 and S17). Two and a half hours later, two other symposia took place

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<sup>1</sup> *The symposia names and content are detailed in the final programme, at the end of this document*

## *10<sup>th</sup> World Congress of the International Society for Adaptive Medicine*

(S04 and S22). The day was concluded by the plenary lecture of Professor **R. E. Horch** (*Friedrich-Alexander Universitat, Erlangen, Germany*).

The last day of the Congress (June 10<sup>th</sup>) had a morning session accommodating three symposia (S10, S16 and S20) and a plenary lecture by Professor **Sawa Kostin** (*Max-Planck-Institute, Bad Nauheim, Germany*).

### **Posters**

The posters submitted by young researchers were displayed (electronically) on a large plasma display, in a continuous loop, the whole congress. On two days (June 8<sup>th</sup> and 9<sup>th</sup>), the presenters had an hour (13:30-14:30) to present their posters and answer to the questions. A poster has been selected by a judging committee to be the most successful one from scientific point of view. The winner was the work entitled **PYROPTOSIS, A NEW KIND OF CELL DEATH, AND ITS INTRICATE MECHANISMS**, by Andreia F. Nita<sup>1</sup>, Sanna Nystrom<sup>2</sup>, Steven Applequist<sup>2</sup>.

(<sup>1</sup>*Carol Davila University of Medicine and Pharmacy, Bucharest, Romania*, <sup>2</sup>*Center for Infectious Medicine, Huddinge Department of Medicine, Karolinska Institutet, Stockholm, Sweden*)

### **Discussion**

Each conference (either plenary lecture or symposium talk) was followed by a Q&A session, managed by the two chairpersons of the respective event. There were some symposia where a follow-up round table took place in the remaining time after all the symposium talks had finished and this was highly appreciated by the participants.

### **Technical details**

Besides the four conference halls, the speakers had the opportunity to use the special Congress Technical Office, where they were able to check/modify their presentations and surf the web/access their e-mail. Our staff was divided into several groups: airport waiting staff, floor guides and technical staff. Each invited guest received a personalized meeting agenda for the event, at the very arriving at Bucharest airport. We provided airport transfer to (and from) the hotel to all the invited guests. The accommodation was at the Congress Venue, in order to offer the maximum confort and convenience for our guests.

## Assesment of the results

### **Assessment of the results**

The meeting gathered several hundred people from more than 35 countries from five continents. It was, undoubtedly, the largest and most important medical event of the last years in Bucharest, and probably Romania. The symposia sessions were organized in 4 halls at once, and their running in parallel was smooth and very appreciated. Since all the halls were at the same floor, everyone could select a personalized schedule to fit their interests/topics. The opportunity to mix between different sessions was highly enjoyed by the attendance.

The congress was well received by all the participants and the media that covered the event. Several medical journals had correspondents on site and interviews took place with the invited speakers, organizers and attendees. The important speakers from all fields assured an unprecedented quality of the meeting, and all the participants expressed their positive opinions on the variety and high scientific standards of the conferences.

The meeting programme, as well as the abstracts were published in the Congress Book (ISBN 978-973-708-623-5).

Selected talks from the meeting will be published in the Adaptive Biology and Medicine series, at the end of 2012, edited by Professor Pawan K. Singal (Winnipeg, Canada).

### **Impact of the event on the future direction of the field**

Promoting a cultural attitude by putting the change or adaptation in the middle of our debate, we thought a new thinking will emerge. Trans-disciplinar and translational approaches that were presented are going to contribute to the improvement of medical knowledge in the years to come. The perspectives that invited speakers (about 120) offered were as varied as their fields of interest. From imaginative reinvention of medical approaches to the concept of trendsetter in science, the Congress agenda truly included something for everyone. It was our intention to provide an inspiring atmosphere for fruitful scientific discussion and for initiating new collaborations in this „adaptive medicine” community.

**The 10<sup>th</sup> WORLD CONGRESS of the  
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**Final Programme**

# The 10th WORLD CONGRESS of the International Society for ADAPTIVE MEDICINE

INTERCONTINENTAL HOTEL, June 7 - 10, 2012, Bucharest, Romania

| Time  | Thursday, 7th                         | Friday, 8th   | Saturday, 9th   | Sunday, 10th  |
|-------|---------------------------------------|---|---|---|
| 8:30  |                                       | Symposia<br>Main Hall S01<br>Hall A S02<br>Hall B S14<br>Hall C S19   | Symposia<br>Main Hall S08<br>Hall A S03<br>Hall B S12 | Symposia<br>Main Hall S10<br>Hall A S16<br>Hall B S20 |
| 10:45 |                                       | Coffee break  | Coffee break  | Coffee break  |
| 11:00 |                                       | Plenary Lecture<br>Main Hall P03                                      | Plenary Lecture<br>Main Hall P05                      | Plenary Lecture<br>Main Hall P06                      |
| 12:00 |                                       | Symposia<br>Main Hall S11A<br>Hall A S09A<br>Hall B S21<br>Hall C S06 | Symposia<br>Main Hall S18<br>Hall A S05<br>Hall B S17 |   |
| 13:30 |                                       | Poster viewing  | Poster viewing  |   |
| 14:30 |                                       | Symposia<br>Main Hall S11B<br>Hall A S09B<br>Hall B S13               | Symposia<br>Hall A S04<br>Hall B S22                  |   |
| 15:45 |                                       | Coffee break  | Coffee break  |   |
| 16:00 |                                       | Plenary Lecture<br>Main Hall P02                                      | Plenary Lecture<br>Main Hall P04                      |   |
| 17:00 |                                       | Symposia<br>Main Hall S15<br>Hall A S09C<br>Hall B S07                |   |   |
| 17:30 | Plenary Lecture<br>Main Hall P01      |   |   |   |
| 18:30 | Plenary Lecture<br>Main Hall P07      |   |   |   |
| 19:30 |                                       |   |   |   |
| 20:00 | Get together cocktail<br>Fortuna Hall | Gala Dinner<br>Fortuna Hall   |   |   |

ISAM Executive Council Meeting will take place on June 7<sup>th</sup> starting 19:45, in Hall D.

**Registration Desk – Ground floor (Open 8:00-18:00, June 7<sup>th</sup> - 9<sup>th</sup>)**

**Technical office – Bolero, 2<sup>nd</sup> floor (Open 8:00-18:00, June 7<sup>th</sup> - 9<sup>th</sup>)**

Main Hall – Ronda, 1<sup>st</sup> floor

Hall A – Rapsodia, 1<sup>st</sup> floor

Hall B – Salonul Oglinzilor, 1<sup>st</sup> floor

Hall C – Concerto, 1<sup>st</sup> floor

Hall D – Simfonia, 2<sup>nd</sup> floor

## Plenary lectures

### **P-1 P. Anversa**

Harvard University, Boston, USA  
Mechanism of Cardiac Repair

### **P-2 S.N. Constantinescu**

Ludwig Institute for Cancer Research,  
Brussels, Belgium  
Actors of Blood Regeneration:  
Erythropoietin, Thrombopoietin and their  
Receptors

### **P-3 Maria-Simonetta Fausone-Pellegrini**

Florence University, Florence, Italy  
The Interstitial-Stromal Cells: State of the Art

### **P-4 R.E. Horch**

Friedrich-Alexander Universitat, Erlangen,  
Germany  
Tissue Engineering – Where Do We Stand?

### **P-5 M. Ivan**

Indiana University, Indianapolis, USA  
The Ever Expanding Universe of Hypoxia

### **P-6 S. Kostin**

Max-Planck-Institute, Bad Nauheim,  
Germany  
Dhalla Lecture: Cardiomyocytes in Cardiac  
Repair

### **P-7 B. Winblad**

Karolinska Institutet, Stockholm, Sweden  
Re-Thinking Alzheimer Disease Therapy;  
Lessons Learned From Ongoing Clinical Trials

## Symposia

### **S-01** Symposium

“Adaptation to hypoxia: friend or foe”

### **S-02** Symposium

“Inflammation and Sepsis”

### **S-03** Symposium

“Advances in stroke”

### **S-04** Symposium

“Multimodal molecules in neuroprotection and  
neurorecovery treatment”

### **S-05** Symposium

“The management of early and late  
Parkinson’s disease”

### **S-06** Symposium

“Experimental models in adaptive medicine”

### **S-07** Symposium

“Advances in dementia research and clinical  
practice”

### **S-08** Symposium

“Obesity, fat tissue and coronary heart  
disease”

### **S-09-A** Symposium

“Mechanisms in cardiovascular adaptation” I

### **S-09-B** Symposium

“Mechanisms in cardiovascular adaptation” II

### **S-09-C** Symposium

“Mechanisms in cardiovascular adaptation” III

### **S-10** Symposium

“Myocardial ischemia and reperfusion”

### **S-11-A** Symposium

“Signaling mechanisms of adaptation to  
hypoxia” - I -

### **S-11-B** Symposium

“Signaling mechanisms of adaptation to  
hypoxia” - II -

### **S-12** Symposium

“Cardiac stem cells”

### **S-13** Symposium

“Blood Brain Barrier and angiogenesis – role  
in neurodegeneration”

### **S-14** Symposium

“Response to oxidative stress”

### **S-15** Symposium

“Telocytes” - I -

### **S-16** Symposium

“Physical activity in adaptive medicine”

### **S-17** Symposium

“Telocytes” - II -

### **S-18** Symposium

“Measuring health”

### **S-19** Symposium

“Epigenetics and adaptive medicine”

### **S-20** Symposium

“Modern trends in adaptive medicine”

### **S-21** Symposium

“Pathophysiology of adaptation”

### **S-22** Symposium

“Current view on adaptive medicine”



**S-01 Symposium**  
***“Adaptation to hypoxia: friend or foe”***

*Chaired by: M. Ivan, Susanne Schlisio*

*Date: Friday, June 8<sup>th</sup>*  
*Starting time: 08:30*  
*Location: Main Hall (Ronda)*

**1. C. Koumenis**  
*Unfolded Protein Response*

**2. G. Melillo**  
*Pharmacological Applications of HIF Pathway*

**3. Susanne Schlisio**  
*Prolyl Hydroxylases*

**4. M. Ivan**  
*Non-coding RNA in Hypoxia*

## **S-02 Symposium**

### ***“Inflammation and Sepsis”***

*Chaired by: F.Lupu, R.P. McEver*

*Date: Friday, June 8<sup>th</sup>*  
*Starting time: 08:30*  
*Location: Hall A (Rapsodia)*

**1. T.E. Mollnes**

*Targeting complement activation and CD14-mediated TLR signaling as potential therapy in sepsis*

**2. R.P. McEver**

*Leukocyte adhesion and signaling on vascular surfaces during inflammation*

**3. G.T. Kinasevitz**

*Coagulopathy of sepsis: view from the bedside*

**4. F. Lupu**

*Pathophysiology, staging and therapy of severe sepsis*

**5. Cristina Lupu**

*Regulation of tissue factor dependent coagulation*

## **S-03 Symposium** ***“Advances in Stroke”***

*Chaired by: N. Bornstein, W.-D. Heiss*

*Date: Saturday, June 9<sup>th</sup>*

*Starting time: 08:30*

*Location: Hall A (Rapsodia)*

### **1. N. Bornstein**

*Secondary stroke prevention*

### **2. W.-D. Heiss**

*Imaging the penumbra: the pathophysiologic basis for therapy of ischemic stroke*

### **3. Antonio Federico**

*Small vessel inherited diseases: clinical and molecular findings*

**S-04 Symposium**  
**“Multimodal molecules in neuroprotection and  
neurorecovery treatment”**

*Chaired by: A. Alvarez, D.F. Mureşanu*

*Date: Saturday, June 9<sup>th</sup>*

*Starting time: 14:30*

*Location: Hall A (Rapsodia)*

**1. D.F. Mureşanu**

*Towards a unified theory in brain damage and recovery*

**2. A. Alvarez**

*Multimodal molecules with pleiotropic neuroprotective in brain protection and recovery*

**3. A. Cedazo-Minguez**

*Neurotrophic factors in CNS biology*

**4. Mihaela Băciuţ**

*Regeneration of the peripheral nerve - the maxillo-facial surgeon's view*

**5. Chung-Hsin Wu**

*Adaptive mechanisms of hypothermic neuroprotection in Taiwan leaf-nosed bat*

**S-05 Symposium**  
***“The management of early and late Parkinson’s disease”***

*Chaired by: A. Antonini, O. Bäjenaru*

*Date: Saturday, June 9<sup>th</sup>*  
*Starting time: 12:00*  
*Location: Hall A (Rapsodia)*

**1. Regina Katzenschlager**

*Non-invasive treatment options for motor complications in Parkinson's disease*

**2. A. Antonini**

*The role of Apomorphine in the treatment of Parkinson's disease*

**3. O. Bäjenaru**

*Interventional treatment of continuous dopaminergic stimulation in advance Parkinson's disease*

**4. Tarek Tawfik**

*Future strategies in Parkinson’s disease treatment*

## **S-06 Symposium**

### ***“Experimental models in adaptive medicine”***

*Chaired by: M Taggart, Narcisa Tribulova*

*Date: Friday, June 8<sup>th</sup>*

*Starting time: 12:00*

*Location: Hall C (Concerto)*

#### **1. M. Taggart**

*A pause for thought – what are the key advantages and disadvantages of rodent models of human pregnancy and preterm labour?*

#### **2. Satoshi Matsuo**

*Effects of lower body positive pressure on cardiovascular functions*

#### **3. Narcisa Tribulova**

*Myocardial connexin-43 is implicated in adaptation and maladaptation to hypertension as well as in cardioprotective effects of the treatment*

**S-07 Symposium**  
***“Advances in Dementia Research  
and Clinical Practice”***

*Chaired by: Illana Gozes, B.O. Popescu*

*Date: Friday, June 8<sup>th</sup>*  
*Starting time: 17:00*  
*Location: Hall B (Salonul Oglinzilor)*

**1. K. Jellinger**

*Challenges in the neuropathological diagnoses of dementias*

**2. Illana Gozes**

*Microtubules and brain protection: Davunetide*

**3. S. Baloyannis**

*The philosophy of dementia*

**S-08 Symposium**  
**“Obesity, fat tissue and coronary heart disease”**  
*(Recommended by the European Society of Cardiology)*

*Chaired by: Maria Dorobanțu, Cor deWit*

*Date: Saturday, June 9<sup>th</sup>*  
*Starting time: 08:30*  
*Location: Main Hall (Ronda)*

**1. Gabriela Roman**

*Obesity, a global epidemic*

**2. R. Bugiardini**

*Obesity, gender and coronary heart disease*

**3. M. Vintilă**

*Abdominal obesity and inflammation*

**4. A. Koller**

*Coronary vascular tone and obesity*

**5. S. Bălănescu**

*Intravascular interventions in obese patients*

**6. Lina Badimon**

*Adipose derived stem cells: future options*



**S-09-A Symposium**  
***“Mechanisms in cardiovascular adaptation”***  
**- I -**

*Chaired by: N.S. Dhalla, D. Vinereanu*

*Date: Friday, June 8<sup>th</sup>*  
*Starting time: 12:00*  
*Location: Hall A (Rapsodia)*

**1. N.S. Dhalla**

*Mechanisms of cardiac adaptation in hypertrophy due to volume overload*

**2. A.G. Fraser**

*Diagnosis of myocardial fibrosis*

**3. F. Cecchi**

*Subclinical LV dysfunction and pathology*

**4. R. Weisel**

*Cardiac restoration by tissue engineering*

**S-09-B Symposium**  
**“Mechanisms in cardiovascular adaptation”**  
**- II -**

*Chaired by: O. Binah, F. Cecchi*

*Date: Friday, June 8<sup>th</sup>*  
*Starting time: 14:30*  
*Location: Hall A (Rapsodia)*

**1. D. Vinereanu**

*Adaptation of the heart function in athletes*

**2. O. Binah**

*Investigating inherited cardiac arrhythmias by means of induced pluripotent stem cell-derived cardiomyocytes*

**3. F. Kolar**

*Distinct effects of various adaptation regimens on ischemic tolerance of chronically hypoxic hearts*

**4. B.S. Tuana**

*Transcriptional control of dilated cardiomyopathy in the absence of hypertrophy*

**S-09-C Symposium**  
**“Mechanisms in cardiovascular adaptation”**  
**- III -**

*Chaired by: A.G. Fraser, Y. Wei*

*Date: Friday, June 8<sup>th</sup>*  
*Starting time: 17:00*  
*Location: Hall A (Rapsodia)*

**1. Y. Wei**

*LTBP-2 is a novel biomarker in heart failure - a preliminary study*

**2. D. Maurice**

*Subcellular signaling in the vascular endothelium: Cyclic nucleotides take their place*

**3. J. Kyselovic**

*Cardiac microRNAs in human end-stage heart failure*

**4. G. Pierce**

*The use of a novel dietary supplement to regulate blood pressure: powerful results from a randomized trial*

**S-10 Symposium**  
**“Myocardial ischemia and reperfusion”**

*Chaired by: A. Tosaki, J. Slezak*

*Date: Sunday, June 10<sup>th</sup>*  
*Starting time: 08:30*  
*Location: Main Hall (Ronda)*

**1. R.C. Kukreja**

*Role of microRNA in Cardioprotection*

**2. A. Tosaki**

*The role of heme oxygenase-1 in myocardial ischemia and reperfusion*

**3. F. Boucher**

*Evolution of cytokine expression and insulin sensitivity in the myocardium after preperfused infarction in rats*

**4. D.J. Hausenloy**

*Remote ischemic conditioning: Bench to bedside and back again*

**5. Tanya Ravingerova**

*Lifestyle-related risk factors of cardiovascular diseases alter myocardial response to ischemia via interference with cellular adaptive mechanisms*

**6. J. Slezak**

*Chronic myocardial ischemia and mediastinal irradiation injury*

**S-11-A Symposium**  
**“Signaling mechanisms of adaptation to hypoxia”**  
**- I -**

*Chaired by: F. Downey, I.Y. Malyshev*

*Date: Friday, June 8<sup>th</sup>*  
*Starting time: 12:00*  
*Location: Main Hall (Ronda)*

**1. P.S. Wang**

*Effects of Intermittent Hypoxia on the Production of Testosterone in Rats*

**2. Yulia I. Kirova**

*The role of oxidative stress in the induction of transcription factors at different stages of adaptation to hypoxia*

**3. I.Y. Malyshev**

*Hypoxia-induced reprogramming of macrophages: Role in tumorigenesis.*

**S-11-B Symposium**  
**“Signaling mechanisms of adaptation to hypoxia”**  
**- II -**

*Chaired by: P.S. Wang, G. Melillo*

*Date: Friday, June 8<sup>th</sup>*  
*Starting time: 14:30*  
*Location: Main Hall (Ronda)*

**1. Tatiana Serebrovskaya**

*Migration pathways of hematopoietic stem cells in the mechanisms of adaptation to acute and intermittent hypoxia*

**2. Benedetta Bussolati**

*The plasticity of human renal CD133+ progenitors is modulated by hypoxia through Oct4/miR-145 balance*

**3. F. Downey**

*Anti-hypertensive effects of adaptation to hypoxia.*

# **S-12 Symposium**

## ***“Cardiac stem cells”***

*Chaired by: P.A. Doevendans, M. Pesce*

*Date: Saturday, June 9<sup>th</sup>*  
*Starting time: 08:30*  
*Location: Hall B (Salonul Oglinzilor)*

### **1. V. Lionetti**

*Self-Renewing heart in the era of stem cells: who have saved the heart of Prometheus?*

### **2. Elisa-A. Liehn**

*Cell therapy after myocardial infarction: present and future*

### **3. M. Pesce**

*Cardiovascular stem cells: from regeneration to engineering*

### **4. P.A. Doevendans**

*Cardiac stem cells: the solution*

### **5. Mihaela Gherghiceanu**

*Cardiac stem and progenitor cells by electron microscopy/tomography*

### **6. S.F. Yet**

*Cytoprotection of heme oxygenase-1 in embryonic stem cells and cardiovascular system*

**S-13 Symposium**  
***“Blood Brain Barrier and angiogenesis – role in neurodegeneration”***

*Chaired by: Carola Foerster, K. Jellinger*

*Date: Friday, June 8<sup>th</sup>*  
*Starting time: 14:30*  
*Location: Hall B (Salonul Oglinzilor)*

**1. P. Religa**

*Cellular mechanisms of vascular structure formation*

**2. Carola Foerster**

*Role of the blood brain barrier in secondary brain injury development - folly adaptations for survival?*

**3. D. Frenkel**

*Immunotherapy of cerebrovascular amyloidosis in a transgenic mouse model*

**4. B.O. Popescu**

*Alteration of blood-brain barrier in neurodegenerative diseases*



**S-14 Symposium**  
**“Response to oxidative stress”**

*Chaired by: Eugenia Manukhina, P. Singal*

*Date: Friday, June 8<sup>th</sup>*  
*Starting time: 08:30*  
*Location: Hall B (Salonul Oglinzilor)*

**1. P. Singal**

*Subcellular adaptations in response to oxidative stress*

**2. A. Srivastava**

*Modulation of Oxidant-induced signaling by calcium and calmodulin system in vascular smooth muscle cells*

**3. Eugenia Manukhina**

*Prevention of Nitric Oxide Overproduction in Protective Effects of Adaptation to Hypoxia*

**4. Madhu B. Anand-Srivastava**

*Role of ROS in G Protein Expression and signaling in Hypertension*

**S-15 Symposium**  
**“Telocytes”**  
**- I -**

*Chaired by: G. Bussolati, X. Wang*

*Date: Friday, June 8<sup>th</sup>*  
*Starting time: 17:00*  
*Location: Main Hall (Ronda)*

**1. X. Wang**

*Variation of lung telocytes among human, mouse and rat, and their gene analysis comparing with mesenchymal stem cells and fibroblasts*

**2. M.C. Rusu**

*Microanatomy of telocytes*

**3. Laura-C. Ceafalan**

*Telocytes and/or pericytes*

**4. G. Bussolati**

*Telocytes as origin of GISTs/PEComas*

**5. G. Radenkovic**

*Patterns of occurrence of interstitial cells of Cajal in the human digestive tract*

**S-16 Symposium**  
***“Physical activity in adaptive medicine”***

*Chaired by: V. Adams, CH Kuo*

*Date: Sunday, June 10<sup>th</sup>*

*Starting time: 08:30*

*Location: Hall A (Rapsodia)*

**1. V. Adams**

*Molecular alterations in the skeletal and diaphragmatic muscle in heart failure: Impact of exercise training*

**2. Shyi-Wu Wang**

*Effect of passive repetitive isokinetic training on plasma interleukin (IL-6 and IL-15)*

**3. M. Chia**

*Focus on fitness and fatness in youth - foolhardy or foolproof?*

**4. CH. Kuo**

*Physical activity and insulin resistance*

**5. I. Ehrenburg**

*Interval exercise training and interval hypoxic training in coronary heart disease patients*

**S-17 Symposium**  
**“Telocytes”**  
**- II -**

*Chaired by: D. Cai, Maria Simonetta Faussonne Pellegrini*

*Date: Saturday, June 9<sup>th</sup>*  
*Starting time: 12:00*  
*Location: Hall B (Salonul Oglinzilor)*

**1. D. Cai**

*Cardiac Telocytes in Infarcted Myocardium*

**2. Mihaela Gherghiceanu**

*Telocyte junctions: transcellular communication*

**3. S. Kostin**

*Telocytes and myocardial pathology*

**4. M. Taggart**

*A critical appraisal of the role(s) of smooth muscle caveolae*

**5. T. Gevaert**

*From interstitial cells to telocytes in the urinary tract: probably more than passive bystanders*

# **S-18 Symposium**

## ***“Measuring health”***

*Chaired by: F.A.C. Wiegant, Y. Kawai*

*Date: Saturday, June 9<sup>th</sup>*  
*Starting time: 12:00*  
*Location: Main Hall (Ronda)*

### **1. F.A.C. Wiegant**

*The challenge of measuring “health” using the ability to adapt*

### **2. Mei-Chich Hsu**

*Effects of Swimming on Metformin Levels and Insulin Sensitivity in Insulin Resistant Rats*

### **3. Y. Kawai**

*Effects of lower body positive pressure on cardiovascular functions*

### **4. Shin-Da Lee**

*Anti-apoptotic and Pro-survival Effects of Exercise Training on Hypertensive Hearts*

### **5. H. Morita**

*Cardiovascular adaptation/deconditioning in gravitational change*

# **S-19 Symposium**

## ***“Epigenetics and Adaptive Medicine”***

*Chaired by: Ana-Maria Vlădăreanu, J. Drach*

*Date: Friday, June 8<sup>th</sup>*  
*Starting time: 08:30*  
*Location: Hall C (Concerto)*

**1. R.A. Wang**

*The molecular adaptation of cell*

**2. C. Müller-Tidow**

*Genetic mutations and epigenetic alterations in the pathogenesis of myeloid malignancies*

**3. Ana-Maria Vlădăreanu**

*The adapted therapeutic strategies in hepatitis-viruses related non-Hodgkin lymphomas - a concept of targeted approach*

**4. J. Drach**

*Mantle cell lymphoma: Recent advances in biology and therapy with novel agents*

**5. R. Chaunchaiyakul**

*Habitual physical activity and aging on respiratory function*

**6. B Mihălțan**

*Speleotherapy and respiratory diseases between myths and realities*

**S-20 Symposium**  
**“Modern Trends in Adaptive Medicine”**

*Chaired by: C. Bai, C. Ionescu-Târgoviște*

*Date: Sunday, June 10<sup>th</sup>*  
*Starting time: 08:30*  
*Location: Hall B (Salonul Oglinzilor)*

**1. X. Wang**

*Clinical bioinformatics in development of disease-specific biomarkers*

**2. R.K. Goyal**

*Changing Trends in the Treatment of Diabetic Cardiomyopathy*

**3. C. Bai**

*Cell phone based Telemedicine - brief introduction*

**4. R.K. Li**

*Myocardial Resident Bone Marrow Stem Cells Govern Repair after Myocardial Infarction*

# **S-21 Symposium**

## ***“Pathophysiology of Adaptation”***

*Chaired by: M. Bhatia, Y.T. Konttinen*

*Date: Friday, June 8<sup>th</sup>*  
*Starting time: 12:00*  
*Location: Hall B (Salonul Oglinzilor)*

### **1. M. Bhatia**

*Hydrogen Sulfide and Substance P: Novel Inflammatory Mediators and Therapeutic Targets for Acute Pancreatitis*

### **2. Y.T. Konttinen**

*Osteoarthritis as an auto-inflammatory disease caused by chondrocyte-mediated inflammatory responses*

### **3. Chen-Hsen Lee**

*The Management of Well Differentiated Thyroid Cancer*

### **4. A. Cortot**

*IBD: from epidemiology to pathophysiology*

### **5. J-F. Flejou**

*Premalignant Lesions in Inflammatory Bowel Diseases - The Pathologist's View*



**S-22 Symposium**  
**“Current view on adaptive medicine”**

*Chaired by: A. Pries, M. Cintează*

*Date: Saturday, June 9<sup>th</sup>*  
*Starting time: 14:30*  
*Location: Hall B (Salonul Oglinzilor)*

**1. Patrizia d'Alessio**

*Quality of Life and inflammation: gender differences in response to dietary supplementation in elderly people in the RISTOMED study*

**2. Chi-Chang Huang**

*Potassium oxonate-induced proteinuria and acute renal failure in vivo*

**3. A. Pries**

*Design principles of vascular networks: Angiogenesis, adaptation, heterogeneity and function.*