FEPS 2017

PROGRAM

JOINT MEETING OF
THE FEDERATION OF EUROPEAN
PHYSIOLOGICAL SOCIETIES AND
THE AUSTRIAN PHYSIOLOGICAL
SOCIETY WITH PARTICIPATION OF
THE CZECH, FRENCH, ITALIAN,
SLOVAK, SLOVENIAN, SWISS AND
TURKISH PHYSIOLOGICAL
SOCIETIES

WWW.FEPS2017.ORG
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Dear Fellow Physiologists,

It is a pleasure and an honor to welcome you to this year’s FEPS Congress in Vienna. It is the 14th since 1995 and notably the 7th consecutive one following an annual schedule. Notably, because at a first, and rather fleeting glance, a congress such as this seems out of time for a number of reasons. From the news one could get the impression that Europe, or at least some of its political structures, is somewhat drifting apart. That a meeting with such a strong focus on European science can be sustainably held at alternating locations all over this continent on a regular basis unquestionably proves, though, that on a professional and operational level Europe is alive and strongly kicking. Conferences in general, and this one is no exception, also underline that in spite of the increasingly pervasive use of all the amenities modern technology offers to facilitate and speed up the transfer of information nothing can beat the personal exchange to discuss research results, generate new scientific ideas in the process, and hopefully initiate fruitful multinational collaborations. And finally, bringing hundreds of researchers together under the broad umbrella “physiology” when there are so many more specialized meetings one can attend shows that there is not only a high demand for an exchange across national, but also professional borders.

So I invite you to use this congress to talk with fellow researchers from other nations and other disciplines in the scientific sessions, during the breaks, and of course while sipping on a Wiener Melange, Einspänner or Kleiner Brauner in one of the famous coffee houses in the beautiful city of Vienna.

Markus Hecker
President of FEPS

Dear Colleagues and Friends – Dear Guests,

It is our great pleasure to welcome you here in Vienna at FEPS 2017, the joint meeting of the Federation of European Physiological Societies, the Austrian Physiological Society, and our conference partners, the Physiological Societies from the Czech Republic, France, Italy, Slovakia, Slovenia, Switzerland, and Turkey. We are eagerly looking forward to this festival of Physiology in the heart of Vienna.

When organizing this meeting we tried to cover all important aspects of Physiology from modern Physiology teaching techniques to Cell- and Molecular Physiology. A special focus will be on Vascular and Cardiac Physiology, on Neuroscience, and on Molecular and Cellular Physiology. As in previous FEPS meetings there will again be a European Young Physiologists’ Symposium (EYPS) and a Teaching Symposium on the first day of the meeting. We are pleased to announce that Acta Physiologa, the official Journal of FEPS, will sponsor a rising star award at this meeting, and that the winner of this rising star award, Jose Maya-Vetencourt, will deliver a special plenary lecture right after the opening ceremony. What is also new at this FEPS conference is that one of the plenary lectures will be a “public lecture”, delivered by Bente Klarlund Pedersen, and open to the interested general public.

We would like to thank all members of the International Scientific Program Committee and abstract reviewers for their most valuable contributions to the organization of the scientific program. Let me also thank the invited keynote speakers Marian Joëls (FEPS lecture), Bente Klarlund Pedersen (public lecture), Martin Biel, Barbara Demeneix, and Lora Heisler for sharing their exciting research with us. Thank you also to all symposium organizers and symposium speakers, and all those who submitted abstracts for oral and poster presentations. Your contributions will assure that the conference will be scientifically challenging, exciting, and enjoyable. Many thanks also to our conference partners, the Physiological Societies from the Czech Republic, France, Italy, Slovakia, Slovenia, Switzerland, and Turkey. It was really a pleasure working with you.

We would also like to thank the Medical University of Vienna and the Federation of Austrian Scientific Societies (VWÖ) for their valuable support. Special thanks go to the German Physiological Society (DPG), the Scandinavian Physiological Society (SPS), The Physiological Society (UK), and the Austrian Vascular Biology Organization (AVBO) for their financial support. We would also like to thank all those who contributed to the organization of the meeting, especially Kathleen Schäfer (K.I.T. Dresden), Florian Weber (University Vienna), as well as Uma Bulusu, Sabine Komnenovic, and Gabriele Hassan-Kani (all Medical University Vienna).

Last but not least we would like to express our gratitude to all exhibitors and industrial sponsors for their generous support.

Welcome again on behalf of the local organizing committee, enjoy the science and enjoy an exciting conference and a pleasant stay in Vienna.

Sincerely yours,

Margarethe Geiger
Congress President
Acknowledgement

The organizers of FEPS 2017 gratefully acknowledge the collaboration and the support of the following partners:

Exhibitors and Sponsors

We would like to thank the following sponsors and exhibitors for their generous support:

Sponsors

(in alphabetical order)

ADInstruments Ltd, UK
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Multi Channel Systems MCS GmbH, Germany
Springer, Austria
TSE Systems GmbH, Germany
World Precision Instruments Germany GmbH, Germany
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- Nandu Goswami (Graz, Austria)
- Markus Ritter (Salzburg, Austria)
- Marjan Slak Rupnik (Vienna, Austria)
- Johann Wojta (Vienna, Austria)

**International Scientific Program Committee**
**Society Representatives**
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- Alice Assinger (Vienna, Austria)
- Emmanuel Letavernier (Paris, France)
- Burcu Seker (Munich, Germany)
- Nina D. Ullrich (Heidelberg, Germany)

**General Information**

**Congress President:**
- Univ.-Prof. Dr. med. univ. Margarethe Geiger
- Medical University of Vienna

**Center for Physiology and Pharmacology**

**Institute of Vascular Biology and Thrombosis Research**

**Schwarzenbergstrasse 17**

**1090 Vienna, Austria**

**Organization**

Austrian Physiological Society

c/o Institute of Vascular Biology and Thrombosis Research

Medical University of Vienna

Schwarzenbergstrasse 17

**1090 Vienna, Austria**

www.physiologie.at

The Federation of European Physiological Societies (FEPS)
c/o Yeditepe University, Faculty of Medicine
Professor Dr. Bayram Yilmaz /Head of Department of Physiology

Kayssadagi cad. Atasehir 34755

Istanbul, Turkey

www.feps.org

K.I.T. Group GmbH Dresden

Bautzner Straße 117–119

0109 Dresden, Germany

www.kit-group.org

**Congress Venue**

Campus of the University of Vienna

Auditorium Centre

Spirtalgassee 2–4

1090 Vienna, Austria

**Registration Desk**

**Opening hours**

September 13, 2017: 08:30 – 18:30

September 14, 2017: 08:00 – 18:30

September 15, 2017: 08:00 – 18:30

**On-site Registration Fees**

- Regular: 370.00 €
- Student/PhD Student: 150.00 €
- Congress Dinner: 39.00 €
- Day Ticket: 250.00 €
- Student/PhD Student: 100.00 €
- Congress Dinner: 39.00 €

**Industrial Exhibition**

**Opening hours**

September 13, 2017: 10:30 – 17:30

September 14, 2017: 09:30 – 17:30

September 15, 2017: 09:30 – 17:30

**Abstracts**

The congress abstracts will solely be published in electronic form in a supplement of Acta Physiologica. A PDF version is available for download on the congress website. Abstracts are also available via the interactive online program. Out of the highest rated abstracts there have been selected some abstracts for presentation in symposia. These contributions are marked with an (O) in the program.

**Badge**

Congress badges need to be picked-up on-site at the registration desk upon arrival. All participants must wear the congress identification badge visibly at any time on-site at the venue. Please note that if an attendee loses, misplaces or forgets the name badge, a handling fee of 15.00 € will be charged for a new name badge.
Certificate of Attendance
Certificates of attendance will be sent to every participant by e-mail after the conference.

Certification (The Austrian Medical Association – Österreichische Ärztekammer, ÖAK)
The conference was approved by the Austrian Medical Association for the DFP (Diplomfortbildungsprogramm der Österr. Akademie der Ärzte) with 30 training points. Please have your ÖAK number ready.

Conference Language
The official language of the conference is English. No simultaneous translation will be provided.

Internet Access
Wireless internet access will be available free of charge. Additionally, the Eduroam wireless network is available throughout the university campus. You will get vouchers at the registration desk.

Instructions for Speakers
Please go to your session room in due time (at least 15 minutes prior to the start of your session). We expect you to submit your presentation in due time directly at the session room - latest during the break before the respective session starts.

Photography and Copyright
Taking pictures and recording any kind in the lecture halls and poster exhibition without the prior written consent of the presenter of the work recorded are prohibited. The official conference photographer is exempt from this rule and will be recording and taking pictures during the conference. If you do not want to be recorded, please address your objection to the conference secretariat.

Social Program
Welcome Reception
(Wednesday, 13 September 2017 / 19:30)
We invite all conference participants to join us for the Welcome Reception which will take place on Wednesday evening at the Vienna City Hall. It states the perfect opportunity to meet colleagues and friends or start new networks in a relaxed atmosphere.

Meeting Point
Vienna City Hall
Lichtenfelsgasse 2
1010 Vienna
/Public transportation: Subway: Line U2, Station: Rathaus/ Tram: Line 1, 2, D, J)

Congress Dinner
(Thursday, 14 September 2017 / 20:00)
The congress dinner will take place at the Heuriger „Schuebel-Auer“.

Ticket price: 39.00 €
The ticket price includes buffet dinner as well as a selection of drinks (provided on tables). Further drinks and beverages have to be paid extra.

Meeting Point
Heuriger „Schuebel-Auer“
Kahlenberger Str. 22
1190 Wien-Nussdorf

Public transportation
Take the Tramline 5 or 33 (towards Praterstern or Friedrich-Engels-Platz, respectively), change at „Franz-Josefs-Bahnhof“ to the Tramline D and get off at the final station ‘Nussdorf’. You just have to cross the street and are at the back entrance of Schuebel-Auer. There is a sign labeled “Heuriger Schuebel-Auer“.

You will find more detailed information about getting there with public transportation on the congress website.
**Wednesday, 13 September 2017**

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Wednesday, 13 September 2017

09:30 – 11:00 / Hall C1
European Young Physiologists’ Symposium (EYPS)
Chairs: A. Assinger (Vienna, Austria); N. D. Ullrich (Heidelberg, Germany)

09:30
Synthetic Peptides restore the Epithelial Sodium Channel Function in Pseudohypoaldosteronism Type 1B Mutants (EYPS-01)
A. Willam1,2, M. Aufy1, S. Tzotzos1, B. Fischer1, H. Fischer1, H. Pietschmann1, I. Czikora1, R. Lucas2, R. Emmendov1, W. Shabbir2,2
1University of Vienna, Department of Pharmacology and Toxicology, Vienna, Austria; 2AEPTEC GmbH, Vienna, Austria

09:45
Different modulation of ion currents in hippocampal pyramidal neurons and NG108-15 cell line by delta opioid receptor antagonist naltrindole (EYPS-02)
L. Lapinova1, E. Drmencov1,2, L. Lacinova1
1Centre of Biosciences SAS, Institute of Molecular Physiology and Genetics, Bratislava, Slovakia; 2Biomedical Research Center SAS, Institute of Experimental Endocrinology, Bratislava, Slovakia

10:00
Investigation of the extracellular Ca2 entry in mouse pancreatic ductal cells (EYPS-03)
M. Görög1, A. Grassalkovich1, A. Balázs1, P. Pallagi1, P. Hegyi2, J. Máléth1
1University of Szeged, First Department of Medicine, Szeged, Hungary; 2Univ. of Pécs, Szeged, Institute for Transl. Med. & 1st Dep. of Medicine, MTA-SZTE Transl. Gastroenterology Research Group, Szeged, Hungary

10:15
Blockage of exosome generation reduces tau protein caused neuronal loss and microglia proliferation (EYPS-04)
K. Pampuscenko1, R. Morkuniene1, V. Smirnovas2, V. Borutaite1
1Lithuanian University of Health Sciences, Neuroscience Institute, Kaunas, Lithuania; 2Vilnius University, Institute of Biotechnology, Vilnius, Lithuania

10:30
TRPA1 and TRPV1 photosensitization by 7-dehydrocholesterol – connections to the Smith-Lemli-Optiz syndrome (EYPS-05)
C. I. Ciutu1,2, A. Babes2,3, T. Kichko2, T. Selescu1, C. Neacsu1, S.K. Sauer1, P.W. Reeh1, M.J.M. Fischer1,2
1Medical University of Vienna, Center for Physiology and Pharmacology, Vienna, Austria; 2Friedrich-Alexander University Erlangen-Nuremberg, Institute of Physiology and Pathophysiology, Erlangen, Germany; 3Faculty of Biology, University of Bucharest, Department of Anatomy, Physiology and Biophysics, Bucharest, Romania
10:30 – 12:30 / Hall C2
Teaching Symposium: “Has Physiology the right to exist in a 21st century Medical Curriculum”
Chairs: G. van der Vusse (Maastricht, Netherlands); G. Andries (Maastricht, Netherlands)

10:30
Physiology in a classical curriculum in the 21st century: Flexner 2.0 (TS-01)
L. Kiss
Semmelweis University, Department of Physiology, Budapest, Hungary

11:00
Structural and functional integration of physiology teaching: the view from Cardiff (TS-02)
S. Hall
Cardiff University, School of Biosciences, Cardiff, United Kingdom

11:30
Organizational consequences of discipline-oriented versus integrated teaching (TS-03)
M.G.A. oude Egbrink
Maastricht University, Physiology, Maastricht, Netherlands

12:00
General Discussion

12:30 – 13:30
Lunch break for EYPS & Teaching Symposium participants

13:30 – 14:00 / Hall C1
Opening Ceremony

14:00 – 15:00 / Hall C1
Plenary Lecture (Rising star lecture)
Chair: P. B. Persson (Berlin, Germany)

A fully organic retinal prosthesis reinstates vision in blind animals (PL-01)
J. F. Maya-Vetencourt
Italian Institute of Technology, Synaptic Neuroscience and Technologies, Genova, Italy

15:00 – 17:00 / Hall C1
Symposium 1: Mitochondrial and cell membrane Ca\(^{2+}\) and Na\(^{+}\) signaling in health and disease
Kindly supported by Organizers: I. Sekler (Be’er Scheva, Israel); Alexej Verkhratsky (Manchester, United Kingdom)

15:00
Systematic identification of MCU modulators by orthogonal interspecies chemical screening (S01-1)
F. Perocchi
LMU, Biochemistry, Munich, Germany

15:30
Shaping cell motility and metabolism by coordinated Ca\(^{2+}\) and Na\(^{+}\) signals (S01-2)
M. Trebak
Penn State University, Cellular and Molecular Physiology, Hershey, United States

16:00
Dynamic aspects of calcium-dependent regulation in mammalian isoform/splice variants of the sodium-calcium exchanger (S01-3)
D. Khananshvili
Tel-Aviv University Medical School, Physiology and Pharmacology, Ramat-Aviv, Tel-Aviv, Israel

16:30
Adrenergic stimulation leads to distinct intracellular Ca\(^{2+}\) and cAMP-dependent PKA responses in single rat astrocytes (S01-4 (O))
A. Horvat\(^{1,2}\), R. Zorec\(^{1}\), N. Vardjan\(^{1,2}\)
\(^{1}\)University of Ljubljana, Medical Faculty, Institute of Pathophysiology, Laboratory of Neuroendocrinology-Molecular Cell Physiology, Ljubljana, Slovenia, \(^{2}\)Celica Biomedical, Ljubljana, Slovenia
16:45
Function and distribution of the mitochondria in pancreatic ductal epithelial cells (S01-5 (O))
E. Tóth1, J. Maléth1, R. Erdos1, Z. Rázza2, L. Tretter2, G. Horváth2, Z. Rakonczay4, P. Hegyi1,5
1University of Szeged, First Department of Medicine, Szeged, Hungary, 2University of Szeged, Department of Pathology, Szeged, Hungary, 3Semmelweis University, Department of Medical Biochemistry, Budapest, Hungary, 4University of Szeged, Department of Pathophysiology, Szeged, Hungary, 5University of Szeged, MTA-SZTE Momentum Translational Gastroenterology Research Group, Szeged, Hungary

15:00 – 17:00 / Hall C2
Symposium 2: Structure and function in islets of Langerhans in health and disease
Organizer: M. Slak Rupnik (Vienna, Austria); Co-chair: O. Pechanova (Bratislava, Slovakia)

15:00
β cell diversity is required for normal islet function (S02-1)
D. Nasteska1,2, N.H.F. Fine1,2, G.A. Rutter3, Q. Zhou4, D.J. Hodson1,2
1University of Birmingham, Institute of Metabolism and Systems Research (IMSR), Birmingham, United Kingdom, 2Birmingham Health Partners, Centre for Endocrinology, Diabetes and Metabolism, Birmingham, United Kingdom, 3Imperial College London, Section of Cell Biology and Functional Genomics, Department of Medicine, London, United Kingdom; 4Harvard University, Department of Stem Cell and Regenerative Biology, Harvard Stem Cell Institute, Cambridge, United States

15:25
Induction of pancreatic beta-cell neogenesis (S02-2)
P. Collombat
INSERM U1091, Nice, France

15:50
The patterns of synchronicity and functional connectivity in islets of Langerhans (S02-3)
A. Stozer
University of Maribor, Institute of Physiology, Maribor, Slovenia

16:15
Heterogeneity on all levels: insight into pancreatic islet function with modeling (S02-4)
M.G. Pedersen
University of Padova, Information Engineering, Padova, Italy

16:40
Investigating SNAP-25b (Synaptosomal-associated protein 25) function in mouse islet physiology beyond its classical role in membrane fusion (S02-5 (O))
T. Daraio1, L. Krizančič Bombek2, M. Gosak3, I. Valladolid-Acebes1, M. Skelin Klemen2, E. Refai1, P.-O. Berggren1, K. Brismar1, M. Slak Rupnik2,4, C. Bark1
1Karolinska Institutet, The Rolf Luft Research Center for Diabetes and Endocrinology, Department of Molecular Medicine and Surgery, Stockholm, Sweden, 2Institute of Physiology, Faculty of Medicine, University of Maribor, Maribor, Slovenia, 3Department of Physics, Faculty of Natural Sciences and Mathematics, University of Maribor, Maribor, Slovenia, 4Center for Physiology and Pharmacology, Medical University of Vienna, Vienna, Austria
16:45
The role of angiotensin -1 receptors in vasodilator responses of middle cerebral arteries in Sprague-Dawley rats (S03-5 (O))
I. Drenjancevic, A. Cosic, I. Jukic, Z. Mihaljevic, A. Stupin
Faculty of Medicine University of Osijek, Physiology and Immunology, Osijek, Croatia

15:00–17:00 / Hall B
Symposium 4: Current developments in the pulmonary circulation
Organizers: A. Ofschewski (Graz, Austria); G. Kwapiszewski (Graz, Austria); Co-chair: P. Enyedi (Budapest, Hungary)

15:00
Sphingolipids - new players in pulmonary vasoconstriction and lung vascular remodeling (S04-1)
W. Kübler
Charité-Universitätsmedizin Berlin, Institute of Physiology, Berlin, Germany

15:30
FoxO transcription factors in pulmonary hypertension: Pathophysiology and therapeutic implications (S04-2)
S. S. Pullamsetti
1Max-Planck-Institute for Heart and Lung Research, Bad Nauheim, Germany, 2Justus-Liebig University, Department of Internal Medicine, Giessen, Germany

16:00
Adapting to high altitude (S04-3)
M. Gassmann
University of Zurich, Zurich, Switzerland

16:30
Alveolar oxygen respiratory oscillations measured in arterial blood (S04-4 (O))
F. Formenti1,2, N. Bommakanti1, R. Chen1, J. Cronin1, H. McPeak2, D. Holopherne-Doran1, G. Hedenstierna4, C. Hahn1, A. Larsson1, A. Farmery2
1King's College London, London, United Kingdom, 2University of Oxford, Oxford, United Kingdom, 3University of Bristol, Bristol, United Kingdom, 4University of Uppsala, Uppsala, Sweden

16:45
Brain-derived neurotrophic factor mRNA expression in peripheral and cerebral vessels: Impact of physical training (S04-5 (O))
C. Marina, Q. Aurore, M. Christine, P.-T. Anne, G. Philippe
Université de Bourgogne Franche-Comté, Dijon, France

17:00–17:15
Break

17:15–18:15 / Hall C1
FEPS Keynote Lecture
Chair: D. Eisner (Manchester, United Kingdom)

The stressed brain of rodents and humans (KL-01)
M. Joëls
University Medical Center Groningen, Groningen, Netherlands

19:30
Reception at the Vienna City Hall
We invite all conference participants to join us for the Welcome Reception – which will take place at the Vienna City Hall. It states the perfect opportunity to meet colleagues and friends or start new networks in a relaxed atmosphere.

Meeting Point:
Vienna City Hall
Lichtenfelsgasse 2
1010 Vienna
(Public transportation: Subway: Line U2, Station: Rathaus // Tram: Line 1, 2, D, J)
**Thursday, 14 September 2017**

**09:00 – 10:00 / Hall C1**

**Plenary Lecture**

Chair: U. Pohl (Planegg-Martinsried, Germany)

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**Endolysosomal two-pore channels: from genes to function (PL-02)**

**M. Biel**

University of Munich, Pharmacy, Munich, Germany

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**10:00 – 11:00**

**Poster Session A**

**PLEASE NOTE:**

Posters can be mounted from 08:30, should be mounted until 09:30 and have to be removed at the end of the corresponding poster session at 13:15; otherwise they can be removed by the following presenters or by the organizers. Fixing material will be provided and distributed in the poster area. There will be no guided poster tour but presenting authors are requested to stay at their posters during the viewing session for discussions.

### A01: Cardiac physiology

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<th>Title</th>
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<td>Cardiovascular parameters, mood behaviour and atmospheric pressure (A01-1)</td>
<td>S.L. Gotia, C. Borza, A. Roi, E. Zbircea, S.R. Gotia</td>
<td>University of Medicine and Pharmacy Victor Babes, Physiology, Timisoara, Romania</td>
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<tr>
<td>Blood pressure modification and students lifestyle (A01-2)</td>
<td>S.L. Gotia, C. Borza, A. Roi, S.R. Gotia</td>
<td>University of Medicine and Pharmacy Victor Babes, Physiology, Timisoara, Romania</td>
</tr>
<tr>
<td>Reversed ratio of peripheral monocyte subsets in spontaneously hypertensive rats (A01-3)</td>
<td>M. Okuliarova, N. Hodonova, V. Krajcirovicova, M. Zeman</td>
<td>Faculty of Natural Sciences, Comenius University Bratislava, Animal Physiology and Ethology, Bratislava, Slovakia</td>
</tr>
</tbody>
</table>
| Baroreflex sensitivity: an algebraic dilemma (A01-4)                 | A. Taboni1, N. Fagoni2, G. Vinetti3, G. Ferretti2,4                                        | University of Brescia, Department of Clinical and Experimental Sciences, Brescia, Italy, University of Brescia, Department of Medical and Surgical Specialties, Radiological Sciences, and Public Health, Brescia, Italy,  
|                                                                      |                                                                                             | University of Brescia, Department of Molecular and Translational Medicine, Brescia, Italy, University of Geneva, Departments APSI and NEUFO, Geneva, Switzerland |

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**Vasopressin V1a receptors are present in the carotid body and contribute to the control of breathing (A01-5)**

**T. Żera1, J. Przybyski2, T. Grygorowicz2, K. Kasarelo1, D. Mirowska-Guzel1, A. Cudnoch-Jedrzejewska2**

1The Medical University of Warsaw, Department of Experimental and Clinical Physiology, Warsaw, Poland, 2The Medical University of Warsaw, Department of Biophysics and Physiology, Warsaw, Poland

**Effect of voluntary lung hyperinflation on central blood volume (A01-6)**

**T. Mićakić1, K. Khyli1, D. Frestad2, O. Barak1, I. Drvić1, N. Secher1, Z. Dujic1, P. Lav Madsen1**

1University of Split School of Medicine, Department of Integrative Physiology, Split, Croatia, 2University of Copenhagen, Cardiology, Copenhagen, Denmark, 3University of Novi Sad, Physiology, Novi Sad, Serbia, 4University of Zagreb Faculty of Kinesiology, Zagreb, Croatia, 5University of Copenhagen, Anesthesiology, Copenhagen, Denmark

**Sympatho-vagal balance is higher in nurses following night-shift works (A01-7)**

**P. Çakan, C. Ucar, O. Barutcu, S. Yildiz**

Inonu University, Malatya, Turkey

**High blood pressure in spontaneously hypertensive rats is accompanied by altered cardiovascular reflexes and changes in the expression of TNF, interleukin 10, and their receptors in the brainstem (A01-8)**

**P. Smykiewicz, A. Segiet, M. Keag, T. Żera**

Medical University of Warsaw, Department of Experimental and Clinical Physiology, Laboratory of Centre for Preclinical Research, Warsaw, Poland

**Intrabrain administration of TNF and interleukin 10 differently affect arterial blood pressure in normotensive and spontaneously hypertensive rats (A01-9)**

**A. Segiet, P. Smykiewicz, M. Keag, T. Żera**

Medical University of Warsaw, Department of Experimental and Clinical Physiology, Laboratory of Centre for Preclinical Research, Warsaw, Poland

**Disturbances in mitochondrial metabolism of energy substrates in left ventricle of patients with type 2 diabetes (A01-10)**

**M. Ljubkovic1, C. Cavar1, C. Bulat1,2, D. Bakovic1,3, J. Marinovic1**

1University of Split School of Medicine, Physiology, Split, Croatia, 2Split University Hospital, Cardiac Surgery, Split, Croatia, 3University of Split, University Hospital, Cardiology, Split, Croatia

**Amplification of peripheral arterial pressure as a marker of cardiovascular risk (A01-11)**

**N. Belova, N. Stoynev, R. Mileva-Popova**

Medical University of Sofia, Physiology, Sofia, Bulgaria
A02: Vascular physiology

Relationship between peripheral regional blood flow and heart rate recovery at one minute (HRRT1) after constant-load exercise in lower-limb ischaemia (A02-1)
N. Ouédraogo, G. Mahé, P. Abraham
1Institut Supérieur des Sciences de la Santé /Université polytechnique de Bobo-Dioulasso, Bobo-Dioulasso, Burkina Faso, 2Faculté de Médecine, Université d’Angers, Physiology, Angers, France

One week of high salt dietary intake increased peripheral blood monocytes’ intracellular hydrogen peroxide and peroxynitrite level in young women (A02-2)
1Faculty of Medicine Josip Juraj Strossmayer University of Osijek, Department of Physiology and Immunology, Osijek, Croatia, 2Clinical Hospital Center Osijek, Osijek, Croatia, 3Osim University Hospital, Department for Cardiovascular Disease, Osijek, Croatia

Short-term high-salt intake causes increased oxidative stress in young women (A02-3)
L. Rasic, A. Cosic, I. Drenjancevic, M. Stupin, Z. Mihaljević, I. Jukic, A. Stupin
Faculty of Medicine Osijek, Josip Juraj Strossmayer University of Osijek, Department of Physiology and Immunology, Osijek, Croatia

Hyperthyroidism and vascular function: the impact of local and systemic mechanisms (A02-4)
H. Lenasi, N. Bedenjak, S. Gaberšček, K. Zaletel
University Medical Centre Ljubljana, Slovenia, Department of Nuclear Medicine, Ljubljana, Slovenia

Acute exhausting exercise session affects endothelium-dependent, but not endothelium-independent vasodilation in professional rowers (A02-5)
M. Stupin, A. Stupin, L. Rasic, A. Cosic, L. Kolar, H. Lenasi, I. Drenjancevic
1University Hospital Center Osijek, Department of Cardiovascular Medicine, Osijek, Croatia, 2Faculty of Medicine University of Josip Juraj Strossmayer University of Osijek, Department of Physiology and Immunology, Osijek, Croatia, 3Medical Faculty University of Ljubljana, Institute of Physiology, Ljubljana, Slovenia

The effect of a short term high salt diet on cerebrovascular reactivity in response to breath holding test in young healthy subjects (A02-6)
D. Kibel, A. Kibel, K. Steiner, M. Kozul, B. Brix, I. Trozic, N. Goswami, I. Drenjancevic
1Faculty of Medicine Osijek, Department of Physiology and Immunology, Osijek, Croatia, 2Clinical Hospital Center Osijek, Department of Diagnostic and Interventional Radiology, Osijek, Croatia, 3Clinical Hospital Center Osijek, Department of Heart and Vascular Diseases, Osijek, Croatia, 4Medical University Graz, Institute of Physiology, Graz, Austria

Investigation of Relations Between GSTT1 Polymorphism and Lower Extremity Varix (A02-7)
1Istanbul University Cerrahpasa Medical Faculty, Biophysics, Istanbul, Turkey, 2Adnan Menders University Medical Faculty, Biophysics, Aydin, Turkey, 3Ersin Aslan Hospital, Cardiovascular Surgery, Gaziantep, Turkey, 4Istanbul Technical Uni, Molecular Biology and Genetical Research Center, Istanbul, Turkey

The relationship between soluble lectin-like oxidized low-density lipoprotein-1 and carotid intima-media thickness in patients with diabetes mellitus without cardiovascular diseases (A02-8)
1Istanbul Kanuni Sultan Suleyman Education and Research Hospital, Internal Medicine, Istanbul, Turkey, 2Istanbul University, Cerrahpasa Faculty of Medicine, Physiology, Istanbul, Turkey, 3Medicine Hospital, Internal Medicine, Istanbul, Turkey, 4Istanbul University, Cerrahpasa Faculty of Medicine, Internal Medicine, Istanbul, Turkey, 5Istanbul University, Cerrahpasa Faculty of Medicine, Biochemistry, Istanbul, Turkey

1Masaryk university, Physiology, Brno, Czech Republic, 2Faculty Hospital Brno, Pediatric Oncology, Brno, Czech Republic, 3Masaryk university, Pediatric Oncology, Brno, Czech Republic, 4St Ann’s Faculty Hospital Brno, International Clinical Research Centre, Brno, Czech Republic, 5St Ann's Faculty Hospital Brno, Physiotherapy and Rehabilitation, Brno, Czech Republic, 6Masaryk University, Physiotherapy and Rehabilitation, Brno, Czech Republic, 7Children's Medical Institution Miramonti, Spa Luhačovice, Luhačovice, Czech Republic, 8Masaryk University, Hygiene, Preventive Medicine and Epidemiology, Brno, Czech Republic

Vitamin D deficiency impairs geometrical structure and function of cerebral arteries (A02-10)
V. Palić, Z. Fontányi, L. Hadijadi, A. Monori-Kiss, L. Danics, E. Monos, G. Nádasy, Z. Benyó, S. Várbić
1Semmelweis University, Institute of Clinical Experimental Research, Budapest, Hungary, 2Semmelweis University, 2nd Department of Obstetrics and Gynaecology, Budapest, Hungary, 3Semmelweis University, Department of Physiology, Budapest, Hungary

Arterial stiffness in obese adolescents – a relation to vascular resistance and sympathetic nervous system activity (A02-11)
1Comenius University in Bratislava, Jessenius Faculty of Medicine in Martin, Department of Physiology and Biomedical Centre Martin, Martin, Slovakia, 2Comenius University in Bratislava, Jessenius Faculty of Medicine in Martin and University Hospital Martin, Clinic of Children and Adolescents, Martin, Slovakia

1Semmelweis University, Institute of Clinical Experimental Research, Budapest, Hungary, 2Semmelweis University, 2nd Department of Obstetrics and Gynaecology, Budapest, Hungary, 3Semmelweis University, Department of Physiology, Budapest, Hungary

Arterial stiffness in obese adolescents – a relation to vascular resistance and sympathetic nervous system activity (A02-11)
1Comenius University in Bratislava, Jessenius Faculty of Medicine in Martin, Department of Physiology and Biomedical Centre Martin, Martin, Slovakia, 2Comenius University in Bratislava, Jessenius Faculty of Medicine in Martin and University Hospital Martin, Clinic of Children and Adolescents, Martin, Slovakia
A04: Endocrine, neuroendocrine and metabolism

Arginase-II promotes tumor necrosis factor-α release from pancreatic acinar cells causing β-cell apoptosis in aging (A04-1)

Y. Xiong, G. Yepuri, J.-P. Montani, Z. Yang, X.-F. Ming

1University of Fribourg, Fribourg, Switzerland

Effects of melatonin or ghrelin treatment on angiotensin II - induced intestinal motility in diabetic rats (A04-2)

P. Hadzhibozheva1, T. Georgiev1, R. Kalfin2, A. Tolekova1

1Faculty of Medicine/Trakia University, Physiology, Pathophysiology and Pharmacology, Stara Zagora, Bulgaria, 2Institute of Neurobiology, Bulgarian Academy of Sciences, Sofia, Bulgaria

L-Arginine has dual effect on Electrical and Calcium Activity in Mouse Beta Cells in Tissue Slices (A04-3)

L. Križančič Bombek1, M. Gosak1,2, M. Slak Rupnik1,3, A. Stožer1

1University of Maribor, Faculty of Medicine, Institute of Physiology, Maribor, Slovenia, 2University of Maribor, Faculty of Natural Sciences and Mathematics, Maribor, Slovenia, 3Medical University of Vienna, Centre for Physiology and Pharmacology, Vienna, Austria

Metabolic Syndrome among Adult Population in Kirkuk (A04-4)

A. Ahmed, O. Ridha

College of Technology, Medical Laboratory Sciences, Kirkuk, Iraq

Effects of apelin levels, apelin gene polymorphism and apelin receptor gene polymorphism to metabolic control for children with type I diabet (A04-5)

D. Keles1, B. Ozhan1, E. Altintas2, B. Akdağ2

1Pamukkale University Faculty Of Medicine, Pediatrics, Denizli, Turkey, 2Pamukkale University Faculty Of Medicine, Physiology, Denizli, Turkey

Cyclic AMP Enhances Beta Cell Network Activity in Mouse Pancreatic Slices through PKA-dependent pathway (A04-6)

M. Skelin Klemen1, M. Gosak1,2, V. Pohorec1, J. Dolensk1, L. Križančič Bombek1, A. Stožer1, M. Slak Rupnik1,3

1Faculty of Medicine, University of Maribor, Institute of Physiology, Maribor, Slovenia, 2Faculty of Natural Sciences and Mathematics, University of Maribor, Department of Physics, Maribor, Slovenia, 3Medical University Vienna, Center for Physiology and Pharmacology, Vienna, Austria

Western Diet-Induced Early Dysfunction of Mouse Pancreatic Beta Cells (A04-7)

J. Dolensk1, I. Valladolid-Acebes1, M. Gosak1, M. Skelin Klemen1, L. Križančič Bombek1, V. Pohorec1, P.-O. Berggren2, K. Brismar2, A. Stožer1, M. Slak Rupnik1,3

1Medical Faculty, University of Maribor, Maribor, Slovenia, 2Department of Molecular Medicine and Surgery, Karolinska Institute, Stockholm, Sweden, 3Institute of Physiology, Centre for Physiology and Pharmacology, Medical University of Vienna, Vienna, Austria

The metabolic syndrome in hypertensive elderly patients (A04-8)

C. Borza1, S.R. Gotia2, A. Roj1, S.L. Gotia2

1University of Medicine and Pharmacy Victor Babes, Pathophysiology, Timisoara, Romania, 2University of Medicine and Pharmacy Victor Babes, Physiology, Timisoara, Romania

Glucose-Stimulated Beta Cell Calcium Dynamics in Acute Pancreas Tissue Slices from C57BL/6 Mice (A04-9)

V. Pohorec1, J. Dolensk1, M. Gosak1,2, M. Skelin Klemen1, L. Križančič Bombek1, M. Perc1, M. Slak Rupnik1,3, A. Stožer1

1Faculty of Medicine, University of Maribor, Institute of Physiology, Maribor, Slovenia, 2Faculty of Natural Sciences and Mathematics, University of Maribor, Maribor, Slovenia, 3Center for Physiology and Pharmacology, Medical University Vienna, Vienna, Austria

Inhibition of NMDA receptors provokes qualitative changes in intercellular communication patterns among pancreatic beta cells: Novel insights from multilayer network approaches (A04-10)

M. Gosak1,2, L. Križančič Bombek1, A. Stožer1, J. Dolensk1, M. Slak Rupnik1,3

1Faculty of Medicine, University of Maribor, Institute of Physiology, Maribor, Slovenia, 2Faculty of Natural Sciences and Mathematics, University of Maribor, Department of Physics, Maribor, Slovenia, 3Medical University of Vienna, Center for Physiology and Pharmacology, Vienna, Austria

Metabolic and behavioral consequences of cola intake during pregnancy (A04-11)

V. Bobêlova1, J. Čonka1, J. Hodosy1, P. Cecel1, V. Lokál1, S. Trubačová2

1Institute of Molecular Biomedicine, Bratislava, Slovakia, 2Institute of Pathological Physiology, Bratislava, Slovakia

Effects of Selenium Supplementation on Cytokines in Experimental Hyperthyroidism (A04-12)

A. Yoldas1, N. Bahutyan1, N. Daniyely1, M.C. Akyolcu1, S. Toplan1

1Istanbul University Cerrahpasa Medical Faculty, Biophysics, Istanbul, Turkey, 2Istanbul University Cerrahpasa Medical Faculty, Physiology, Istanbul, Turkey
A06: Respiratory physiology

The effect of ML204, a blocker of TRPC4/5 on cholinergic responses in mouse bronchus (A06-1)
V. Bihun, G. Sergeant, M. Hollywood, K. Thornbury
Dundalk Institute of Technology, Smooth Muscle Research Centre, Dundalk, Ireland

Radon in the exhalation air of patients in radon therapy (A06-2)
M. Gaigerberger1,2, H. Lettnner4, A. Hubner3, W. Hofmann1, J. Landrichinger1,3, M. Ritter2,3, R. Winkler4
1Paracelsus Medical University, Institute of Physiology and Pathophysiology, Salzburg, Austria, 2Paracelsus Medical University, Gastein Research Institute, Salzburg, Austria, 3Ludwig Boltzmann Cluster for Arthritis and Rehabilitation, Department for Radon Therapy Research, Salzburg, Austria, 4University of Salzburg, Department of Chemistry and Physics of Materials, Environmental Physics and Biophysics, Salzburg, Austria

Correlation between Muscle Mass loss and spirometric abnormalities in COPD (A06-3)
K. Ayed, S. Ben Jemaa, I.L. Hadj Khalifa, S. Mokaddem, S. Ben Khamsa Jameleddine
Abderrahman Mami Hospital Ariana Tunisia, Department of Respiratory Functional Explorations, Ariana, Tunisia

BODE index: an interesting survival prediction tool in obesity? (A06-4)
Abderrahman Mami Hospital, Department of Respiratory Functional Explorations, Ariana, Tunisia

Immature lungs exposed to endotoxin: the effect of exogenous surfactant/ polymyxin B (A06-5)
A. Calkovska1,2, M. Haegerstrand-Bjørkman2, B. Linderholm2, T. Curstedt2
1Comenius University in Bratislava, Jessenius Faculty of Medicine in Martin, Department of Physiology and BioMed, Martin, Slovakia, 2Karolinska Institutet at Karolinska University Hospital, Department of Molecular Medicine and Surgery, Laboratory for Surfactant Research, Stockholm, Sweden

Is the p-glycoprotein polymorphism a risk factor for smoking dependence (A06-6)
N. Bozkurt1, F. Altintas2, A.I. Bozkurt1, G. Turgut1, S. Turgut1
1Panukkale University Faculty of Medicine, Pulmonology, Denizli, Turkey, 2Panukkale University Faculty of Medicine, Physiology, Denizli, Turkey

Diagnosis strategy of Asthma-Chronic Obstructive Pulmonary Disease Overlap Syndrome (A06-7)
Abderrahmane Mami Hospital, Pulmonary Lung Function Test Laboratory, Ariana, Tunisia

A07: Gastrointestinal physiology

Sinapic acid heals experimentally induced colitis in rats on behalf of its anti-inflammatory effects (A07-1)
M. Kolgozi1, A.M. Gunal1, B. Yuksel2, B.B. Ozmen1, C. Unal1, E. Kilinc2, M. Ackel-Elmans1, S. Arbak4
1Acibadem University, Physiology, Istanbul, Turkey, 2Acibadem University, Medical School 3rd year student, Istanbul, Turkey, 3Acibadem University, Biophysics, Istanbul, Turkey, 4Acibadem University, Histology and Embryology, Istanbul, Turkey

Evaluating Of Systemic Inflammatory Biomarkers As A Result Of Intermittent Hypoxia In Obstructive Sleep Apnea Syndrome (A06-8)
E. Isiksel, V. Sozer1, E. Atahan2, B. Musellim3, A. Oruc2, G. Simsek2, R. Gelisgen4, H. Uzun4
1Yildiz Technical University, Biochemistry, Istanbul, Turkey, 2Istanbul University, Cerrahpasa Faculty of Medicine, Department of Pulmonary Diseases, Istanbul, Turkey, 3Istanbul University, Cerrahpasa Faculty of Medicine, Physiology, Istanbul, Turkey, 4Istanbul University, Cerrahpasa Faculty of Medicine, Biochemistry, Istanbul, Turkey

Asthma and bronchiectasis: Spirometric features (A06-9)
Abderrahman Mami Hospital, Physiology And Lung Function Tests, Ariana, Tunisia

Spirometric and Six-minute walk test findings in pulmonary sarcoidosis (A06-10)
Abderrahman Mami Hospital, Physiology And Lung Function Tests, Ariana, Tunisia

Increased ragweed exposure and air pollution are associated with subsequent respiratory allergies to indoor and outdoor allergens in children (A06-11)
C. Panaitescu1,2, T.-P. Tamas1,2, M. Buzan2, L. Zbarcea2, L. Marusciac1,2
1University of Medicine and Pharmacy Victor Babes Timisoara, Physiology, Timisoara, Romania, 2Emergency Clinical County Hospital, ‟Pius Branzu” Timisoara, Center for Gene and Cellular Therapies in the Treatment of Cancer (OncoGen), Timisoara, Romania
Chronic lesions in trinitrobenzene-sulfonic acid colitis (A07-2)
L. Zouiten¹, M. Naouar¹, L. Charfi², R. Ben Ali¹, A. Laabidi³, J. Boubaker¹, A. Filali¹
¹Faculté de médecine de Tunis, Tunis, Tunisia, ²Institut national de cancerologie, Tunis, Tunisia, ³Hôpital La Rabta, Service de gastroenterologie, Tunis, Tunisia

Anti-inflammatory effect of Lentisc Oil in experimental colitis (A07-3)
L. Zouiten¹, M. Naouar¹, L. Charfi², A. Laabidi³, J. Boubaker¹, A. Filali¹
¹Faculté de médecine de Tunis, Tunis, Tunisia, ²Institut national de cancerologie, Tunis, Tunisia, ³Hôpital La Rabta, Service de gastroenterologie, Tunis, Tunisia

Esophageal anomalies in chest pain-suffering patients with a normal coronary catheterization (A07-4)
W. Kacem
University of medicine of Tunis, Physiology, Tunis, Tunisia

Stress monitoring on gastrointestinal smooth muscle by electromyography (A07-5)
K.F. Szucs¹, A. Sztokaj-Ivanov¹, E. Ducza¹, A. Kothenz¹, A. Seres-Bokor¹, M. Sülz², G. Grosz², R. Gaspar¹
¹University of Szeged, Department of Pharmacodynamics and Biopharmacy, Szeged, Hungary, ²MDE GmbH, Budapest, Hungary

The relation between helicobacter pylori and Iron deficiency anaemia in Sulaimani city (A07-6)
F. Ahmed, N. Rashid, A. Ahmed
College of Technology, Laboratory Sciences, Kirkuk, Iraq

Transient receptor potential melastatin 2 functional characterization in mouse pancreatic acinar cells (A07-7)
P. Bigyi¹, J. Fanczal¹, T. Madácsy¹, P. Hegyi¹, J. Maléth¹
¹University of Szeged, 1st Department of Medicine, Szeged, Hungary, ²University of Pécs, Institute for Transl. Med. & 1st Dep. of Medicine, Pécs, Hungary

The effect of primary sensory neuron desensitization on experimental acute pancreatitis models (A07-8)
F. R. Bálint¹, Z. Balla¹, L. Kiss¹, A. Molnár¹, C. Marsollier¹, R. Marc¹, V. Venglovecz¹, J. Maléth¹, P. Hegyi¹, Z. Helyes¹, Z. Rakonczay Jr²
¹University of Szeged, First Department of Medicine, Szeged, Hungary, ²University of Szeged, Department of Pathophysiology, Szeged, Hungary, ³University of Angers, Angers, France, ⁴University of Nantes, Nantes, France, ⁵University of Szeged, Department of Pharmacology and Pharmacotherapy, Szeged, Hungary, ⁶University of Pécs, Institute for Translational Medicine, Pécs, Hungary, ⁷University of Szeged, MTA-SZTE Transl. Gastroenterology Research Group, Szeged, Hungary, ⁸University of Pécs, Department of Pharmacology and Pharmacotherapy, Pécs, Hungary

A08: Behavioral and cognitive neuroscience

Physical Exercise Performed to Chronic Social Isolated Rats Regulate Anxiety Behavior Without Improving Learning (A08-1)
O. S. Cevik, L. Sahin
Mersin University, Physiology, Mersin, Turkey

Effect of Riluzole on Social Behavior and Anxiety in Valproic Acid-Induced Autism-Like Rat Model (A08-2)
C. Orak¹, S. Karakoc Demirkaya², F. Sirinyildiz¹, G. Tasli Yesilcayar¹, G. Cesur¹, R.O. Ek¹
¹Adnan Menderes University, Physiology, Aydin, Turkey, ²Adnan Menderes University, Child and Adolescent Psychiatry, Aydin, Turkey

Investigation of the Process of Response Activation by Using a Visual Go-Nogo Task with Varying Task Difficulty (A08-3)
T. Ergenoglu, D. D. Koyuncu, G. Ceylan
Mersin University, Faculty of Medicine, Department of Physiology, Mersin, Turkey

Time-dependent changes in behavioural and molecular parameters after post-weaning social isolation (A08-4)
S. Vrankova¹, Z. Matuskova¹, R. Rehakova¹, M. Cebova¹, J. Murinova¹, I. Rie cansky¹, O. Pechanova¹
¹Institute of Normal and Pathological Physiology Slovak Academy of Sciences, Laboratory of Neuro-cardiovascular Interactions, Bratislava, Slovakia, ²Institute of Normal and Pathological Physiology Slovak Academy of Sciences, Laboratory of Cognitive Neuroscience, Bratislava, Slovakia

Effect of Protein Carbonylation on cognitive Functions in diabetic Rat Model (A08-5)
K. Tanbek, E. Ozerol
Izmir University, Faculty Of Medicine, Malatya, Turkey

Effects of Chronic Caffeine Consumption on Cognitive Performance and Hippocampal Gene Expression on REM Sleep Deprived Rats (A08-6)
L. Sahin, O.S. Cevik, D.D. Koyuncu, N. Ergin
Mersin University, Physiology, Mersin, Turkey

Effects of Treadmill Exercise on Hippocampal Dependent Learning and NMDA Subunit Gene Expression on Social Isolated Rats (A08-7)
S. Musuroglu¹, L. Sahin¹, O. S. Cevik²
¹Amasya University, School of Health, Amasya, Turkey, ²Mersin University Faculty of Medicine, Department of Physiology, Mersin, Turkey
The brain-tumor related protein podoplanin regulates synaptic plasticity and hippocampus-dependent learning and memory (A08–8)
A. Cicvaric1, J. Yang1, S. Krieger1, D. Khan1, E. J. Kim1, M. Dominguez-Rodriguez1, M. Cabatic1, B. Molz2, J. P. Acevedo Aguilar3, R. Milicevic1, T. Smani1, J. M. Breuss4, D. Kerjaschki1, D. D. Pollak1, P. Uhrin1, F. J. Monje1
1Medical University of Vienna, Neurophysiology and Neuropharmacology, Vienna, Austria, 2Medical University of Vienna, Clinical Pathology, Vienna, Austria, 3Inje University College of Medicine, Clinical Research, Busan, South Korea, 4Psychology University of York, Heslington York, United Kingdom, 5Hospital Universitario Virgen del Rocío/ CSIC/Universidad de Sevilla, de Biomedicina de Sevilla, Seville, Spain, 6Medical University of Vienna, Vascular Biology and Thrombosis Research, Vienna, Austria

Properties of Cell Surface P2X_2, Receptors in Chronic Kidney Disease (A10–1)
J. Laidova1, V. Spustova1, A. Oksa1, D. Chorvat1, A. Marceck Chorvattova1,2
1Slovak Medical University, Department of Clinical and Experimental Pharmacotherapy, Bratislava, Slovakia, 2International Laser Centre, Department of Biophotonics, Bratislava, Slovakia, 3University of Ss. Cyril and Methodius, Department of Biotechnology, Tmava, Slovakia

Role of arginase-II in regulation of water balance (A10–2)
J. Huang1, J.-P. Montani1, F. Verrwy1, E. Keraille1, Z. Yang1
1University of Fribourg, Department of Physiopathology, Fribourg, Switzerland, 2University of Zurich, Institute of Physiology, Zurich, Switzerland, 3University of Geneva, Department of Cell Biology and Metabolism, Geneva, Switzerland

Use of electromagnetic field shielding fabric for prenatal care (A10–3)
A. G. Polya1, A. Metin Tellioglu2, M. Bilgen2, S. Karakas1
1Adnan Menderes University Health Sciences Institute, Anatomy, Aydin, Turkey, 2Adnan Menderes University Health Sciences Institute, Biophysics, Aydin, Turkey

CFTR as a regulator of the epithelial–mesenchymal transition (A10–4)
J. Friard1, M. Cougnon1, M. Tauc1, C. Duranton1, I. Rubera2
LP2M UMR CNRS 7370, Faculty of Medicine, Nice, France

Kidney regulation of inorganic pyrophosphate plasma level: Impact of chronic kidney disease (A10–5)
A. Lautrin1, L. Albano1, G. Favre2, C. Duranton1, F. Szeri1, T. Wine1, J. Friard1, G. Leftheriotis1
1LP2M 7370, Cellular Physiology, Nice, France, 2Hospital, Nephrology, Nice, France, 3Institut Of Enzymology, Molecular And Cellular Biology, Budapest, Hungary

Effect of Resveratrol Application on Lipid Peroxidation in Experimental Renal Ischemia-Reperfusion Injury in Rats (A10–6)
A. K. Baltaci1, H. Gokbudak2, R. Mogulkoc2, M. C. Avunduk3, E. Menevse4
1Faculty of Meram Medicine, Necmettin Erbakan University, Pathology, Konya, Turkey, 2Selcuk University Medical School, Physiology, Konya, Turkey, 3Selcuk University Medical School, Biochemistry, Konya, Turkey

The effects of relaxin on myoglobinuric acute kidney injury in rats (A10–7)
A. Ilhan Tanrani, N. Aydoud1, E. Tastekin2, N. Sut3
1Trakya University, Faculty of Medicine Dept Of Physiology, Edirne, Turkey, 2Trakya University, Faculty of Medicine Dept Of Pathology, Edirne, Turkey, 3Trakya University, Faculty of Medicine Dept Of Biostatistics, Edirne, Turkey

Renal proximal tubular cells under the influence of the female hormone cycle (A10–8)
J. Lechner1, S. Prajczer1, M.-M. Doerler1, O. Eiter1, D. Hekl1, M. Nevinniy-Stickel1, I. Skvortsova1, G. Gstraunthaler1, P. Lukas2, T. Seppi2
1Medical University of Innsbruck, Physiological, Innsbruck, Austria, 2Medical University of Innsbruck, Univ.-Clinics of Radiation Oncology, Innsbruck, Austria

Immunosuppressant dosing accuracy. Residual drug concentration versus estimation of the area under the curve (A10 –9)
A. Noreikaite1, F. Saint-Marcoux1,2,3, P. Marquet1,2,3, J. B. Woillard1,2,3, E. Kaduskevičius1, E. Stankievičius1
1Lithuanian University of Health Sciences, Institute of Physiology and Pharmacology, Kaunas, Lithuania, 2Limoges University Hospital, Department of Toxicology, Limoges, France, 3Limoges University Hospital, Department of Pharmacology and Toxicology, Limoges, France, 4University of Limoges, INSERM UMR 850, Limoges, France

Serum fibroblast growth factor-21 is associated with renal sinus fat increment independently of total intraabdominal obesity (A10–10)
G. Krievina1,2, P. Tretjakovs1,2, I. Skuja1, V. Silina1, G. Bafs1
1Riga Stradins University, Human Physiology and Biochemistry, Riga, Latvia, 2University of Latvia, Institute of Cardiology and Regenerative Medicine, Riga, Latvia

Kidney regulation of inorganic pyrophosphate plasma level: Impact of chronic kidney disease (A10–5)
A. Lautrin1, L. Albano1, G. Favre2, C. Duranton1, F. Szeri1, T. Wine1, J. Friard1, G. Leftheriotis1
1LP2M 7370, Cellular Physiology, Nice, France, 2Hospital, Nephrology, Nice, France, 3Institut Of Enzymology, Molecular And Cellular Biology, Budapest, Hungary

The relationship between Saxagliptin and renal ischemia/reperfusion: A morphological approach (A10 –11)
S. Tekin1, A. Beytur1, A. Taslidere2, M. Cakir3, S. Sandal1
1Inonu University, Physiology, Malatya, Turkey, 2Inonu University, Histology and Embryology, Malatya, Turkey, 3Bozok University, Physiology, Yozgat, Turkey

Clinical and urodynamic neurogenic bladder secondary to myelomeningocele (MMC) (A10 –12)
I. Hadi Khalifa1,2, R. Baati1,2, M. Imen3, M. Chebil1, C. Dziri1, Salma Mokaddem Mohsen1
1Medicine Faculty Tunis, Physiology, Tunis, Tunisia, 2Hospital Charles Niccolés, Urology, Tunis, Tunisia, 3Kassab Institute, Physical Medicine, Tunis, Tunisia, 4Abderrahmane Mami Hospital, Physiology and Lung Function Tests, Ariana, Tunisia
A13: Skeletal muscle physiology

The effects of Zinc and Melatonin on Muscle Ischemia-Reperfusion Damage in Rat (A13-1)
M. Celer, R. Moquillon, A.K. Baltaci, D. Dasdelen
Selcuk University, Konya, Turkey

Radon Registry Study (A13-2)
J. Landrichinger1,2,3, B. Höltzli4, J. Untner3, W. Foisner4, S. Edtinger2, M. Knapp4, M. Ritter1,2,3, M. Gaisberger1,2,3
1Paracelsus Medical University, Gastein Research Institute, Salzburg, Austria, 2Paracelsus Medical University, Institute of Physiology and Pathophysiology, Salzburg, Austria, 3Ludwig Boltzmann Cluster for Arthritis and Rehabilitation, Department for Radon Therapy Research, Salzburg, Austria, 4SALK, Paracelsus Medical University, Department of Internal Medicine, Landesklinik St. Veit im Pongau, Salzburg, Austria, 5Gastein Healing Gallery, Bad Gastein, Austria, 6Paracelsus Medical University, Gastein Research Institute, Salzburg, Austria, 7Baerenhof Health Care & Rehabilitation Center, Bad Gastein, Austria, 8Stiftung Kurtherme Badehospiz, Bad Gastein, Austria

The effects of stress on the action potential of skeleton muscles (A13-3)
Y.Z. Dogru
Atatürk University medical School, Department of Physiology Human, Erzurum, Turkey

Functional evaluation in post-viral myositis (A13-4)
C. Borz1, S.R. Gotia2, A. Roj1, S.L. Gotia3
1University of Medicine and Pharmacy Victor Babes, Pathophysiology, Timisoara, Romania, 2University of Medicine and Pharmacy Victor Babes, Physiology, Timisoara, Romania

Cartilage Marker Plots for Monitoring of Osteoarthritis Patients. A Pilot study (A13-5)
M. Winklmayr1,2,3, J. Landrichinger1,2, S. Edtinger2, B. Höltzli4, M. Riedl1, M. Ritter1,2,3, M. Gaisberger1,2,3
1Paracelsus Medical University, Gastein Research Institute, Salzburg, Austria, 2Paracelsus Medical University, Institute of Physiology and Pathophysiology, Salzburg, Austria, 3Ludwig Boltzmann Cluster for Arthritis and Rehabilitation, Department for Radon Therapy Research, Salzburg, Austria, 4SALK, Paracelsus Medical University, Department of Internal Medicine, Landesklinik St. Veit im Pongau, Salzburg, Austria, 5Gastein Healing Gallery, Bad Gastein, Austria, 6Paracelsus Medical University, Gastein Research Institute, Salzburg, Austria, 7Baerenhof Health Care & Rehabilitation Center, Bad Gastein, Austria, 8Stiftung Kurtherme Badehospiz, Bad Gastein, Austria

The Novel Adipokine Vaspin is Associated with Increased Adiposity in Humans and Impacts on Human Skeletal Muscle Insulin Signalling (A13-6)
T. Nicholson1, C. Chruch2, D. Baker3, S. Jones1
1University of Birmingham, Institute of Inflammation and Ageing, Birmingham, United Kingdom, 2Midmune, Cardiovascular and Metabolic Disease (CVMD), Cambridge, United Kingdom

Energy production and transfer in oxidative muscles of mice with deleted wolframin (wfs1) gene (A13-7)
M. Eimre1, K. Paju1, N. Peet1, S. Kasvandik2, E. Orlova1, M. Ivask1, S. Kõks1
1University of Tartu, Institute of Biomedicine and Translational Medicine, Department of Pathophysiology, Tartu, Estonia, 2University of Tartu, Institute of Technology, Tartu, Estonia

Increased proton leak and expression of mitochondrial proteins in white skeletal muscle of mice with deleted wolframin (wfs1) gene. (A13-8)
E. Orlova1, M. Eimre1, K. Paju1, N. Peet1, L. Kadaja1, M. Tarrend1, S. Kasvandik2, M. Ivask1, S. Kõks1
1Institute of Biomedicine and Translational Medicine, University of Tartu, Pathophysiology, Tartu, Estonia, 2Institute of technology University of Tartu, Tartu, Estonia

11:00 – 13:00 / Hall C1
Symposium 5: Exhale negativity-chloride currents in the cardiovascular system

Kindly supported by
Organizer: M. B. Thomsen (Copenhagen, Denmark); Co-chair: N. Khan (Dijon, France)

11:00
What keeps Cl- out of equilibrium in the muscle cells of the cardiovascular system? (S05-1)
C. Aalkjaer
Aarhus University, Biomedicine, Aarhus, Denmark

11:30
Calcium-activated chloride channels and vascular smooth muscle: AN(y)O1 know the answer? (S05-2)
I. Greenwood
St George’s, London, United Kingdom

12:00
Recent advances in research of cardiac calcium-activated chloride channels (S05-3)
N. Szentandrás2, B. Hegyi1, B. Horváth1,2, K. Vácz2, M. Gönczi1,4, B. Dienes1, K. Kistamás1, R. Veress1, F. Ruznowszky1, T. Bányász1, J. Magyar1,2, I. Baczkó6, A. Varró1,6, G. Seprényi8, L. Csernoch1, P. Nánási1,2
1University of Debrecen, Department of Physiology, Debrecen, Hungary, 2University of Debrecen, Department of Dental Physiology and Pharmacology, Debrecen, Hungary, 3University of Debrecen, Faculty of Pharmacy, Debrecen, Hungary, 4MTA-DE Momentum, Laboratory of Protein Dynamics, Department of Biochemistry and Molecular Biology, Debrecen, Hungary, 5University of Debrecen, Department of Physiology, Division of Sport Physiology, Debrecen, Hungary, 6University of Szeged, Department of Pharmacology and Pharmacotherapy, Szeged, Hungary, 7Hungarian Academy of Sciences, MTA-SZTE Research Group of Cardiovascular Pharmacology, Szeged, Hungary, 8University of Szeged, Department of Medical Biology, Szeged, Hungary
12:30
Cardioprotective Action of Intermittent Hypoxia on Left Ventricle Function in Type I Diabetic Rats (S05-4 (O))
F. Aka1, H. Fıçıcılar1, M. Baştuoğ1, E. Tuncay2, A. Durak2, A.D. Dursun1, F. Topal Çelikkan2, B. Sabuncuoğlu1, B. Turan2
1Ankara University Faculty of Medicine, Physiology, Ankara, Turkey, 2Ankara University Faculty of Medicine, Biophysics, Ankara, Turkey, 3Ankara University Faculty of Medicine, Histology and Embriology, Ankara, Turkey

12:45
Cardioprotection of the ischemic myocardium induced by preconditioning in the distant organ: the role of peroxisome proliferator-activated receptors (S05-5 (O))
T. Ravingerová1, V. Farkašová1, L. Griečsová1, M. Muráriková1, L. Lonek1, J. Neckář2, F. Kolář2, A. Lazou3, V. Zohdi4
1Institute for Heart Research, Slovak Academy of Sciences, Bratislava, Slovakia, 2Institute of Physiology, Academy of Sciences of the Czech Republic, Prague, Czech Republic, 3Aristotle University of Thessaloniki, School of Biology, Thessaloniki, Greece, 4Comenius University, Faculty of Medicine, Bratislava, Slovakia

11:00 – 13:00 / Hall C2
Symposium 6: Microvascular mechanisms under different pathophysiological conditions
Organizer: A. Colantuoni (Naples, Italy); Co-chair: G. Leftheriotis (Nice, France)

11:00
Cardiovascular peptides in coronary modulation: focus on Chromogranin-A and its derived peptides (S06-1)
M.C. Cerra, T. Pasqua, R. Mazza, B. Tota, T. Angelone
University of Calabria, Dept. of Biology, Ecology and Earth Science, Arcavacata di Rende (CS), Italy

11:30
High blood pressure-induced cerebrovascular failure leads to dementia (S06-2)
K. Akos
University of Physical Education, Natural Sciences, Budapest, Hungary

12:00
Intestinal microcirculation during hemorrhagic shock and resuscitation (S06-3)
E. Vicaud, N. Libert, N. Oru, E. Laemmel, J. Duranteau
Medical University Diderot, Paris, France

12:30
Acetylsalicylic acid (aspirin) induces endothelium-dependent, cyclic nucleotide-dependent vasodilation of uterine arteries. (S06-4 (O))
M. Mandala1, H. Helgadottir2, L. Barberio1, M. Wang1, G. Osol1, S. Gizurarson2
1University of Calabria, Biology, Ecology and Earth Sciences, Arcavacata di Rende, CS, Italy, 2University of Iceland, Pharmaceutical Sciences, Reykjavik, Iceland, 3University of Vermont, Department of Ob/Gyn and Reproductive Sciences, Burlington, VT, United States

12:45
Salt-sensitive hypertension: role of vascular endothelial growth factor C and lymphangiogenesis (S06-5 (O))
N. Fares1, S. Beaini1, Y. Saliba1, J. Hajaï1, V. Smayra2, J.-J. Bakhos2, D. Chelala2
1Université Saint Joseph - Faculté de Médecine, Laboratoire de Recherche en Physiologie et Physiopathologie, Beirut, Lebanon, 2Université Saint Joseph - Faculté de Médecine, Beirut, Lebanon

11:00 – 13:00 / Hall A
Symposium 7: Recent advances in molecular physiology: metabolomics and beyond
Organizer: Luc Pénicaud (Dijon, France); Co-chair: J. Lechner (Innsbruck, Austria)

11:00
The Role of Metabolic Profiling in Cardiovascular Medicine (S07-1)
E. Holmes
Imperial College, Computational and Systems Medicine, London, United Kingdom

11:30
Gut microbiota and derived metabolites in metabolic disorders (S07-2)
K. Clement
Pitié-Salpêtrière hospital, Nutrition department, Paris, France

12:00
Metabolomics approaches to study NAFLD (S07-3)
M. Oresic
University of Turku, Turku Centre for Biotechnology, Turku, Finland

12:30
Effects of tumor necrosis factor alpha inhibition on streptozotocin-induced mitochondrial damage in pancreatic β-cells (S07-4(O))
C. Guven1, E. Taskin Guven1, P. Yazgan2, A. Rezvani3, Y. Sevgiler4
1Omer Halisdemir University, Biophysics, Nigde, Turkey, 2Omer Halisdemir University, Physiology, Nigde, Turkey, 3Okan University, Physical Medicine and Rehabilitation, Istanbul, Turkey, 4Bezmi Alem University, Physical Medicine and Rehabilitation, Istanbul, Turkey, 5Adiyaman University, Biology, Adiyaman, Turkey
12:45  
Effect of hypoxia on adiponectin pathway in murine and cellular models: which involvement in COPD-associated cardiovascular risk? (S07-5 (O))  
M. Pierard¹, S. Conotte¹, A. Tassin¹, K. Zouaoui Boudjeltia², A. Legrand¹  
¹UMons, Respiratory Physiology and Rehabilitation, Mons, Belgium, ²CHU Charleroi, Experimental Medicine Laboratory (ULB 222 Unit), Montigny-le-Tilleul, Belgium

11:00 – 13:00 / Hall B  
Symposium 8: Pain induced by local acidosis  
Organizer: P. Holzer (Graz, Austria); Co-chair: J. Pokorny (Prague, Czech Republic)

11:00  
Pain induced by tissue acidosis (S08-1)  
M. Fischer  
Medical University of Vienna, Physiology, Vienna, Austria

11:30  
Oligodendrocyte acidification contributes to TRPA1-mediated damage in ischaemia (S08-2)  
N. Hamilton-Whitaker¹, K. Kolodziejczyk¹, E. Kougioumtzidou², D. Attwell¹  
¹King’s College London, Wolfson Centre for Age Related Diseases, London, United Kingdom, ²University College London, Neuroscience, Physiology and Pharmacology, London, United Kingdom

12:00  
Pharmacological modulation of TRPA1 for the treatment of neuropathic pain and neurological disease modification (S08-3)  
A. P. Koivisto  
Orion Corporation, Turku, Finland

12:30  
Pain threshold evaluation requires to record the speed of stimulus intensity variation (S08-5 (O))  
A. Viggiano¹, L. Lorusso¹, M. Monda²  
¹University of Salerno, Dept. Medicine, Surgery and Dentistry, Baronissi, Italy, ²Second University of Naples, Dept. Experimental Medicine, Naples, Italy

14:00 – 16:00 / Hall C1  
Symposium 9: Brute force and signaling: concepts in vascular mechanotransduction  
Kindly supported by

14:00  
Piezo1 mechanical force sensor in the endothelium (S09-1)  
D. Beech  
University of Leeds, Medicine, Leeds, United Kingdom

14:30  
Adjusting G-protein signaling to enable vascular smooth muscle cell phenotype changes during hypertension (S09-2)  
T. Korff  
Heidelberg University, Institute of Physiology and Pathophysiology, Heidelberg, Germany

15:00  
The response of the dysfunctional endothelium to elevated flow – implications for plaque disruption (S09-3)  
S. White  
Manchester Metropolitan University, School of Healthcare Science, Manchester, United Kingdom

15:30  
Endothelial cells are sensitive to shear stress via Wnt/Planar Cell Polarity pathway (S09-4 (O))  
E. Roux¹, G. Cullot¹, P. Dufourcq¹, T. Couffinhal¹, C. Duplaa¹  
¹Univ. Bordeaux, Inserm, UMR1034, Biology of Cardiovascular Diseases, Pessac, France, ²Centre Hospitalier Universitaire de Bordeaux, Service des Maladies Cardiaques et Vasculaires, Pessac, France

15:45  
Investigating the role of Gβγ subunits in Kv7 dependent relaxations (S09-5 (O))  
J. Stott, I. Greenwood  
St George’s University of London, Clinical and Molecular Sciences, London, United Kingdom
<table>
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<tr>
<th>Time</th>
<th>Session/Room</th>
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| 14:00 | Hall C2      | Symposium 10: Intracellular Ca\textsuperscript{2+}-compartments in cardiac physiology and disease | Antonio Zaza (Milan, Italy) | T-tubules in physiological and pathological intracellular Ca\textsuperscript{2+} dynamics (S10-1)  
W. Louch  
University of Oslo, Institute for Experimental Medical Research, Oslo, Norway  
Mitochondrial redox regulation in heart failure (S10-2)  
C. Maack  
University, Deutsches Zentrum für Herzinsuffizienz, Würzburg, Germany  
Effect of Troponin Ca\textsuperscript{2+} Binding Properties on Myofibril Force Kinetics (S10-3)  
N. Piroddi\textsuperscript{1}, B. Scellini\textsuperscript{1}, C. Ferrantini\textsuperscript{1}, C. Tesi\textsuperscript{1}, M. Regnier\textsuperscript{1}, C. Poggesi\textsuperscript{1}  
1University of Florence, Experimental and Clinical Medicine, Florence, Italy, 2University of Washington, Seattle, United States  
Spermidine feeding reduces high blood pressure and improves diastolic function in Dahl salt-sensitive rats (S10-4 (O))  
S. Sedej\textsuperscript{1}, M. Abdellatif\textsuperscript{1}, T. Eisenberg\textsuperscript{2}, U. Primessnig\textsuperscript{1,3}, T. Pend\textsuperscript{2}, M. von Frieling-Salewsky\textsuperscript{4}, C. Magnes\textsuperscript{5}, V. Herbst\textsuperscript{5}, A. Kirsch\textsuperscript{5}, A. Meinitzer\textsuperscript{5}, W.A. Linke\textsuperscript{5}, S. Kiechl\textsuperscript{5}, G. Kroemer\textsuperscript{5}, M. von Frieling-Salewsky\textsuperscript{4}, C. Maleth\textsuperscript{5}, B. Ebenbauer, C. Kaun, M. Prager, J. Wojta, G. Rega-Kaun  
1Medical University of Graz, Graz, Austria, 2University of Graz, Graz, Austria, 3Charité—University Medicine Berlin, Berlin, Germany, 4Ruhr University Bochum, Bochum, Germany, 5Joanneum Research/ Health, Graz, Austria, 6Medical University of Graz, Graz, Austria, 7Medical University of Innsbruck, Innsbruck, Austria, 8INSERM, Paris, France  
Towards the role of store-operated Ca\textsuperscript{2+} entry in skeletal muscle physiology (S10-5 (O))  
Y. Koenig\textsuperscript{1}, B.S. Launikonis\textsuperscript{1}  
1Medical University of Vienna, Vienna, Austria, 2University of Queensland, Brisbane, Australia |
14:00 – 16:00 / Hall B
Short Talks 1: High-rated abstracts
Chairs: N. Goswami (Graz, Austria); N. Vardian (Ljubljana, Slovenia)

14:00
G-protein mediated regulation of TRPM3 channel activity (ST1-1)
M. Behrendt, S. Dembla, F. Mohr, C. Goecke, J. Oberwinkler
Philips University Marburg, Department of Physiology and Pathophysiology, Marburg, Germany

14:15
Role of KCa3.1 channels in glioblastoma induced angiogenesis (ST1-2)
B. Fioretti1, S. Cataldi1, F. Ragonese2, L. Mancinelli1, L. Barberini1, E. Albi3, T. Beccari3
1University of Perugia, Department of Chemistry, Biology and Biotechnology, Perugia, Italy, 2University of Perugia, Department of Experimental Medicine, Perugia, Italy, 3University of Perugia, Department of Pharmaceutical Science, Perugia, Italy

14:30
Model of brain cellular edema in the study of neuroprotection by methylprednisolon (ST1-3)
J. Pokorny, D. Marešová, P. Kozler
Charles University, 1st Faculty of Medicine, Institute of Physiology, Prague 2, Czech Republic

14:45
The role of hyaluronan-based brain extracellular matrix (bECM) in stabilization of neural network activity via regulation of GluR1-containing AMPA receptor synaptic pool (ST1-4)
A. Balashova1, R. Sokolov1, V. Pershin1,2, S. Korotchenko1,2, E. Guryev1,2, M. Gainullin1,2, I. Mukhina1,2
1Lobachevsky State University of Nizhni Novgorod, Nizhny Novgorod, Russian Federation, 2Nizhny Novgorod State Medical Academy, Nizhny Novgorod, Russian Federation

15:00
Identification of the biomarkers for low and high grade astrocytoma patients outcome prognosis based on the analysis of gene activity and function (ST1-5)
G. Steponaitis, D. Skiriute, P. Vaitkiene, K. Skauminas, A. Tamasauskas, A. Kazlauskas
Lithuanian University of Health Sciences, Neuroscience Institute, Kaunas, Lithuania

15:15
Does the activity of the proteasome decline during human ageing and in the brains of Parkinson’s disease patients? (ST1-6)
D. Wayne1, K. Lawler1, L. Bedford1, L. Callado2, W. Carter1
1University of Nottingham, School of Medicine, Derby, United Kingdom, 2University of the Basque Country, Basque Country, Spain

15:30
Kynurenic acid and its amid analogue could be possible drug candidates for controlling the activity of opioid system (ST1-7)
R. Samavati
Medical University of Szeged, Neurology, Szeged, Hungary

15:45
A relation between mitochondria and epileptiform discharges (ST1-8)
M. Hotka1, M. Cagalinec2, H. Kubista1
1Medical University of Vienna, Department of Neurophysiology and Neuropharmacology, Centre of Physiology and Pharmacology, Vienna, Austria, 2Centre of Biosciences, Slovak Academy of Sciences, Department of Muscle cell research, Bratislava, Slovakia

16:00 – 17:00
Poster Session B

PLEASE NOTE:
Posters can be mounted from 13:45, should be mounted until 15:30 and have to be removed at the end of the corresponding poster session at 18:30; otherwise they can be removed by the following presenters or by the organizers.
Fixing material will be provided and distributed in the poster area. There will be no guided poster tour but presenting authors are requested to stay at their posters during the viewing session for discussions.

B01: Cardiac physiology

Chronobiological aspects of general anesthesia in rat myocardial electrophysiology (B01-1)
P. Svorc1, I. Bacova1, J. Stimelova1, S. Gresova1, D. Petrasova1, P. Svorc, Jr.1,2
1Medical Faculty, Safarik University, Department of Physiology, Kosice, Slovakia, 2Medical Faculty Ostrava University, Department of Physiology and Pathophysiology, Ostrava, Czech Republic

Physiological and biochemical alterations of experimental systolic heart failure in mice overexpressing a serotonin receptor in the heart (B01-2)
N. Joachim, T. Gerigk, D. Mahnkopf, H. Edler, U. Gergs
Univ Hospital, Pharmacology and Toxicology, Halle, Germany

Uniaxial strain of cardiac tissue parallel to impulse propagation slows conduction more than in the perpendicular direction: untangling the effects of stretch on tissue resistance (B01-3)
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The selective late sodium current inhibitor GS967 reduces modifications of ventricular fibrillation activation complexity induced by mechanical stretch (B01-4)

P. Genoves1, I. del Canto1,2, O. Arias-Mutis1, L. Santamaria1, C. Soler2, M. Zarzoso2, L. Such-Miquel1, J.S. Cuñat1, M. Muñoz2, Y. Lopez2, A. Alberola2, L. Such2, F.J. Chorro1

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Role of the late sodium current on ventricular refractoriness and electrophysiological heterogeneity modifications induced by acute local stretch. A study in isolated rabbit heart. (B01-5)

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The effects of paced breathing on heart rate variability parameters (B01-6)

D. Dimitrievi, E. Saperova, A. Ivanova
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Mechanisms of beta-adrenergic regulation of bioelectric activity in murine pulmonary veins myocardium (B01-7)

V. Karimova, V. Kuzmin
Lomonosov Moscow State University, Moscow, Russian Federation

Effect of mesenchymal stem cells administration on electrophysiological and contractile properties of ventricular myocardium in clinically relevant porcine model of sepsis (B01-8)

D. Jarkovska1,2, J. Sviglerova1,2, F. Bartak1,2, L. Nalos1,2, J. Horak1,2, J. Benes1,2, M. Matejovic1,2, M. Stengl1,2

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Heart-rate variability did not affect subsequent night sleep parameters and cortisol awakening response (B01-9)

C. Uçar, T. Özgücer, S. Yıldız
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Simultaneous electro-optical endocardial and epicardial mapping of mechanoelectric feedback by left ventricular stretch in the isolated rabbit heart. An experimental validation of a custom-made endocardial balloon array with volume control. (B01-10)

C. J. Calvo1,2, A. Tormos1, E. Roses1, L. Such-Miquel2, M. Zarzoso2, S. Jimenez2, L. Such1, J. Millet2, J. Chorro2, A. Guill3

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The effect of CHAMBER-REST on electrophysiology of the heart in young people (B01-11)

T. Ertová1, V. Jarkulíš2, M. Maluží2, Z. Vavřínská1, D. Škrdla1, M. Kempný1, T. Michalčák1, P. Švec Jr.1

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SYSTOLIC time intervals: effect of mental arithmetics (B01-12)

J. Krohova, B. Czippelova, Z. Turianikova, Z. Lazarova, R. Wiszt, M. Javorka
Comenius University, Jessenius Faculty of Medicine, Department of Physiology and Biomedical Centre Martin, Martin, Slovakia

Heart rate variability of premature neonates from 28 weeks of amenorrhoea to term equivalent as responses to painful or stressful cares in Neonatal Intensive Care Unit. (B01-13)

T. Jeanne1, F. Jouen2, M. Molina1, C. Alexandre2, J. Leveneur1, B. Guillouz1

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B02: Vascular physiology

Effect of sexual dimorphism on the role of perivascular adipose tissue-derived chemerin in regulation of vascular tone of porcine coronary artery (B02-1)

A. Ahmad, R. Roberts, M. Randall
University of Nottingham, Nottingham, United Kingdom

Modulation of meningeal and medullary blood flow upon noxious stimulation of rat cranial dura mater (B02-2)

M. Due1, K. Messlinger2
1University of Szeged, Institute of Physiology, Szeged, Hungary, 2University of Erlangen-Nürnberg, Institute of Physiology & Pathophysiology, Erlangen, Germany
The vasoactive role of nitric oxide and hydrogen sulphide in adult spontaneously hypertensive rats (B02-3)
A. Berenyiova1, A. Puozserova1, M. Grman2, F. Kristek1, S. Cacanyiova1
1Institute of Normal and Pathological Physiology SAS, Bratislava, Slovakia, 2Institute of Clinical and Translational Research, BMC, SAS, Bratislava, Slovakia

Expression of cellular machinery responsible for acetylcholine synthesis, transport and degradation in rat aorta (B02-4)
Z. Kilianova, K. Krajcovicova, K. Szmicekova, A. Hrabovska
Faculty of Pharmacy, Department of Pharmacology and Toxicology, Bratislava, Slovakia

The role of NO-H2S interaction in vasoactive responses of rat and human isolated arteries (B02-5)
S. Cacanyiova1, A. Berenyiova1, F. Kristek1, K. Ondrias1, M. Grman2, J. Breza Sr.1, J. Breza Jr.1
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Effect of melatonin on blood pressure and fibrosis enlargement in the heart and aorta in experimental metabolic syndrome (B02-6)
O. Pechanova, M. Cebova, R. Rehakova, M. Kosutova, S. Vrankova, A. Barta
Institute of Normal and Pathological Physiology, Slovak Academy of Sciences, Department of Neuro-cardiovascular Interactions, Bratislava, Slovakia

Protective role of melatonin against caspase dependent apoptosis in thoracic aorta tissue of pinealectomised rat. (B02-7)
Z.B. Doğanlar1, O. Doğanlar1, M. Uzun2, M.A. Ovalı2, G. Ongoren1
1Trakya University, Faculty of Medicine, Medical Biological, Edirne, Turkey, 2Dicle University Faculty of Medicine, Department of Biophysics, Diyarbakir, Turkey

Acute exposure to hyperbaric oxygenation impaires endothelial nitric oxide production in Sprague-Dawley healthy male rats (B02-8)
Faculty of Medicine Osijek, Dept of Physiology and Immunology, Osijek, Croatia

Hydrogen sulfide restores redox status of heart tissues, diastolic heart function and endothelium dependent vasorelaxation in old animals (B02-9)
V. Saranch, K. Drachuk, N. Dorofeyeva
Bogomolez Inst.of Physiology NAS of Ukraine, Department of Blood Circulation, Kiev, Ukraine

The role of nitric oxide in endothelium-dependent control of murine basilar artery under conditions of acidosis (B02-10)
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1M.V. Lomonosov Moscow State University, Faculty of Biology, Department of Human and Animal Physiology, Moscow, Russian Federation, 2SRC RF Institute for Biomedical Problems RAS, Moscow, Russian Federation

Premature senescence of endothelial cells upon chronic exposure to TNFα can be prevented by N-acetyl cysteine and plumericin (B02-11)
S.Y. Khan1, E. Awad1, A. Oszwald1, M. Mayr1, X. Yin2, B. Waltenberger3, H. Stuppner2, M. Lipovac4, P. Uhrin1, J.M. Breuss1
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Obesity impairs vascular reactivity and Ca2+ homeostasis in in situ endothelial cells from rat aorta (B02-12)
R. Berre-Romani1, B. Mani-Zaica1, V.A. Vargaz-Guadarama1, F. Moccia2, F. Tanzi2, A. Trujillo-Hernandez1, O. Doğanlar1, M. Uzun2, G. Ongoren1
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B03: Molecular & cellular physiology

Radiofrequency Radiation Emitted from Cell Phone induces DNA Damage and Oxidative Stress in Rat Brain Tissue (B03-1)
M.E. Alksj1, M.Z. Akdağ1, H. Bilgin1, V. Akpolat3, S. Daşdağ4
1Muş Alpaslan University, Faculty of Engineering, Department of Electrical & Electronics Engineering, Muş, Turkey, 2Dicle University Faculty of Medicine, Department of Biophysics, Diyarbakir, Turkey, 3Dicle University Faculty of Medicine, Department of Physiology, Diyarbakir, Turkey, 4Istanbul Medeniyet University Faculty of Medicine, Department of Biophysics, Istanbul, Turkey

Decreased inward rectifier potassium current IK1 in dystrophin-deficient ventricular cardiomyocytes (B02-2)
L. Rubi, X. Koenig, H. Kubista, H. Todt, K. Hilber
Medical University of Vienna, Center for Physiology and Pharmacology, Vienna, Austria

Effect of Glycine on Microglia during oxidative stress (B03-3)
F. Egger1,2,3, M. Gaissberger1,2, M. Ritter1,2, M. Jakab1,2, H. Kerschbaum4
1Paracelsus Medical University, Institute of Physiology and Pathophysiology, Salzburg, Austria, 2Paracelsus Medical University, Gastein Research Institute, Salzburg, Austria, 3Ludwig Boltzmann Cluster for Arthritis and Rehabilitation, Department for Radon Therapy Research, Salzburg, Austria, 4University of Salzburg, Department of Cell Biology, Salzburg, Austria
Oxidative stress in the liver and heart induced by thioacetamide in male and female rats – effect on heart innervation (B03-4)
M. Chottova Dvorakova1, 2, D. Jarkovska1, 2, E. Mistrova1, 2, V. Krizkova1, 2, J. Slavikova1, 2, M. Bludovska1, 2
1Charles University, Medical Faculty in Pilsen, Dep. of Physiology, Pilsen, Czech Republic, 2Charles University, Biomedical Center, Pilsen, Czech Republic

Role of TASK-3 channels in the mitochondria of melanoma cells (B03-5)
M. Gönczi1, D. Nagy2, P. Baii, 2, B. Pál1, G. Kis5, M. Antal5, L. Csernoch4
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Effects of Different Timing in Clamping of Umbilical Cord on Oxidative Markers (B03-6)
N. Bahtiyar1, D. Saribal Kanber1, T.B. Bildaci2, M.C. Akyolcu1, S. Toplan1
1Istanbul University Cerrahpasa Medical Faculty, Biophysics, Istanbul, Turkey, 2Baskent University Medical Faculty, Gynecology and Obstetrics Services, Istanbul, Turkey

Prevention of doxorubicin-induced cardiotoxicity through atp sensitive potassium channel opening (B03-7)
C. Guven1, 2, Taskin Guven2, O. Aydin3, Y. Sevgiler4
1Omer Halisdemir University, Biophysics, Nigde, Turkey, 2Omer Halisdemir University, Physiology, Nigde, Turkey, 3Adiyaman University, Biology, Adiyaman, Turkey

Effects of melatonin on acute pancreatitis induced by doxorubicin in human pancreatic cell lines (B03-8)
C. Guven1, 2, Taskin Guven2, Y. Sevgiler4
1Omer Halisdemir University, Biophysics, Nigde, Turkey, 2Omer Halisdemir University, Physiology, Nigde, Turkey, 3Adiyaman University, Biology, Adiyaman, Turkey

Effect of Trans-3 Hydroxycinnamic Acid Against Liver Damage Induced-Methotrexate: An Experimental Study (B03-9)
O. Arslan, F.N. Ekinci Akdemir
Ağrı İbrahim Çeçen University, Department of Nutrition and Dietetics, Ağrı, Turkey

The role of p-Coumaric acid in methotrexate-induced neurotoxicity (B03-12)
F.N. Ekinci Akdemir1, C. Bingöl1, Y. Bayr1, M. Gül1
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The effects of chronic intraperitoneally infusion of irisin on liver antioxidant balance in rats (B03-13)
S. Tekin1, M. Cakir2, A. Beytur1, S. Sandal1
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B04: Endocrine, neuroendocrine and metabolism

Energy homeostasis in a hypovitaminosis D-hypoirisinemic rat model (B04-1)
S. Mansour1, M. Abulmeaty1, 2, A. Almajwal2, M. ElSadek1, S. Razak1
1Zagazig University, Medical Physiology, Zagazig, Egypt, 2King Saud University, Riyadh, Saudi Arabia

Effects of oxidative stress and insulin on (pro)renin receptor expression in cultured human breast cancer cells (B04-2)
K. Takahashi, K. Tajima, S. Sato, K. Ohba
Tohoku University Graduate School of Medicine, Department of Endocrinology and Applied Medical Science, Sendai, Japan

An Experimental Rat Model for the Effects of High Fat Diet-Induced Obesity on Spatial Learning (B04-3)
F. Sirinyildiz, C. Orak, G. Tasli Yesilcayir, R. O. Ek, G. Cesur
Adnan Menderes University, Physiology, Aydın, Turkey

Traumatic brain injury induces plasma resistin levels in rat (B04-4)
M. Tunc-Ata, F. Altintas, G. Turgut, S. Turgut
Pamukkale University Faculty Of Medicine, Physiology, Denizli, Turkey

Identification of potential biomarkers for autism spectrum disorders using urinary metabolomics (B04-5)
G. Repiska1, K. Babinska1, L. Siklenkova1, H. Celusakova1, A. Kovac1, S. Katina1, J. Galba2, D. Ostatnikova1
1Comenius University in Bratislava, Faculty of Medicine, Institute of Physiology, Bratislava, Slovakia, 2Slovak Academy of Sciences, Institute of Neuroimmunology, Bratislava, Slovakia, 3Masaryk University, Faculty of Science, Institute of Mathematics and Statistics, Brno, Czech Republic
Ghrelin prevents skeletal muscle damage in septic rats (B04-6)
G. Ates Ulucay1,2, H. Yorulmaş1, G. Unverengiili, E. Özkok1, S. Tamer3
1Istanbul Yele Yuzul University, Faculty of Medicine, Department of Physiology, Istanbul, Turkey, 2Istanbul University, Istanbul Medical Faculty, Department of Physiology, Istanbul, Turkey, 3Halic University, Medical Faculty, Department of Physiology, Istanbul, Turkey, 4Istanbul University, Istanbul Medical Faculty, Department of Pathology, Istanbul, Turkey, 5Istanbul University, Aziz Sancar Institute of Experimental Medicine, Department of Neuroscience, Istanbul, Turkey

Effects of intracerebroventricular fgf21 infusion on the energy metabolism (B04-7)
U. Yılmaz1, S. Tekin1, M. Demir1, Y. Cigremis1, S. Sandal1
1Inonu University, Department of Physiology, Malatya, Turkey, 2Inonu University, Department of Medical Biology and Genetics, Malatya, Turkey

 Effects of short-term and long-term of obesity on RETN, IAPP, and DRD5 mRNA levels (B04-8)
O. Timirci Kahraman1, U. Yılmaz1, C. Horozoglu1, A. Cevik1, F. Celik1, M.O. Gokce1, A. Ergen1, A. Melekoglu4, U. Zeybek1
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Comparison of Methods for Alpha-Amylase Measurement in Saliva (B04-9)
Z. Baruşçu1, T. Özgöçer, P. Cakan, C. Ucar, S. Yildiz
Inonu University, Malatya, Turkey

Late-night eating increased cortisol awakening response but did not affect heart rate variability in the next morning (B04-10)
C. Ucar, T. Özgöçer, S. Yildiz
Inonu University, Faculty of Medicine, Physiology, Malatya, Turkey

Afamin, a potential marker of metabolic syndrome associated with lipid accumulation in liver, is not affected by 3-months exercise intervention (B04-11)
T. Kurdiova1, S. Tvrjakova1, V. Jackova1, V. Belan2, R. Berberich1, D. Gasperikova1, G. Schmitz1, H. Diepinger2, B. Ukropcova1, J. Ukropc1
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Effects of Zinc and Melatonin Supplements on Immunity Parameters of Rats with Breast Cancer (B04-12)
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B05: Sports & exercise physiology

Concurrent exercise training improves anthropometric measures in schizophrenic individuals by engaging epigenetic mechanism and inflammatory modulation (B05-1)
Y. Elsen1, C. Lavratti1, G. Dorneles1, D. Pochmann1, A. Peres1,2, A. Bard1, L.D.L. Schipper3, P. Dal Lago4, L. Wagner1
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How the walking dynamics of obese individuals change by low vs fast walking speed with respect to the normal-weight counterparts? (B05-2)
D. D. Kovuncu, U. Dal, Z. Altinkaya
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No hemodynamic effects after one-month ischemic training during the muscle metaboreflex activation (B05-3)
A. Crisafull1, G. Mulliri1, R. Oliveira1, R. Farias2, K. Lopes3, R. Millia4, G. Sainas5, V. Pinna5, G. Palaz-zolo1, A. Donnedu1, P. Ghianni1, S. Magnani1, P. Farinatti2, S. Roberto1
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Influence of exercise on aging process (B05-4)
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Medical Faculty Skopje, Institute of Physiology, Skopje, Macedonia, The former Yugoslav Republic of Macedonia

Time Course of Hemorheological Alterations Following an Acute Bout of Isokinetic Exercise in Active Male Subjects (B05-5)
E. Kilic-Topsak1, F. Unver1, O. Kilic-Erkek1, H. Korkmaz1, Y. Ozdemir2, B. Oymak1, A. Oskay1, M. Bor-Kucukatay1
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A 12-week vigorous exercise protocol in a healthy group of persons over 65: Study of physical function by means of the Senior Fitness Test (B05-6)
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Hemorheological Alterations Following an Acute Bout of Nordic Hamstring Exercise in Active Male Subjects (B05-7)
A. Oskay1, H. Korkmaz2, Y. Ozdemir3, B. Óymak4, E. Kilic-Toprak2, O. Kilic-Erkek2, F. Unver2, M. Bor-Kucukatay2
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Comparatively Determination of Ventilatory Efficiency from Constant Load and Incremental Exercise Tests (B05-8)
S. Al Campbell, O. Ozcelik, F.a. Uğur, A. Ayar
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Cardiopulmonary test parameters in patients with coronary artery disease (B05-9)
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Cardioprotective Effects of Exercise on the Experimental Type 1 Diabetes Mellitus; Investigating the Oxidative and Antioxidative Status (B05-10)
A. Dursun, H. Colaker, G. Omercioglu, Y. Tata, F. Akat, H. Ficicilar, M. Bastug
Ankara University School of Medicine, Department of Physiology, Ankara, Turkey

Effect of Progressive Resistance Exercise, Targeting Muscles with High Type 1 Fiber, on Aerobic Capacity of Young Sedentary Individuals (B05-11)
E. Sahin, A. Ayar
Karadeniz Technical University, Physiology, Trabzon, Turkey

Influence of Rhodiola Rosea product and physical training, on acute physical stress (B05-12)
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The Impact of Physical Exercise Performed at Different Times of Day on Serum Nesfatin-1 and Irisin Levels in Trained and Untrained Young Male Subjects (B05-13)
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B09: Neurobiology

The relationship between global acetylation histone H4 levels and spinal cord injury: an experimental study (B09-1)
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The role of P2X7 receptors in penicillin-induced epileptiform activity* (B09-2)
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The effect of hemopressin on ECoG activity of absence epilepsy model in WAG/Rij rats* (B09-3)
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The difference of gastrointestinal microbiota of children with and without autism in Slovakia (B09-4)
A. Tomova, K. Babinska, A. Kubranska, P. Kemenyova, J. Radosinska, D. Ostatnikova
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The effect of melatonin on the experimentally produced alzheimer in rats and relationship with FEZ1 gene expression (B09-5)
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Role of alpha-adrenoceptor agonists in meningeal nociception (B09-6)
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The Evidences of Electrophysiological Symptoms of Acute Toxoplasmosis in Rats (B09-7)
E. Ayaz1, H.S. Orallar1, S.A. Türkoglu1, A. Çetinkaya1, S. Demir1,2
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Dynamics of changes in heart rate variability after prolonged exposure to dark (B09-8)
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Muscarinic acetylcholine receptors activation enhances neurite outgrowth in cultured hippocampal neurons and exerts anxiolytic-like effects by modulating BDNF and FGF2 in the rat hippocampus (B09-9)
N. Belluardo1, V. Di Liberto1, M. Frinchi1, V. Verdi1, A. Vitale1, D.O. Borroto Escuela1, K. Fuxe1, G. Mudò1
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Muscarinic acetylcholine receptors activation enhances neurite outgrowth in cultured hippocampal neurons and exerts anxiolytic-like effects by modulating BDNF and FGF2 in the rat hippocampus (B09-9)
N. Belluardo1, V. Di Liberto1, M. Frinchi1, V. Verdi1, A. Vitale1, D.O. Borroto Escuela1, K. Fuxe1, G. Mudò1
1University of Palermo, Department of Experimental Biomedicine and Clinical Neurosciences, Palermo, Italy, 2Karolinska Institute, Department of Neurosciences, Stockholm, Sweden

Neurospecific proteins determination in plasma of newborns with perinatal hypoxic lesion of the central nervous system (B09-10)
P. Pchelin1, N. Shchelchkova2, T. Mishchenko1,2, E. Mitroshina1, O. Khaletskaya1, M. Vedunova1
1Lobachevsky State University of Nizhny Novgorod, Institute of Biology and Biomedicine, Nizhny Novgorod, Russian Federation, 2Nizhny Novgorod State Medical Academy, Nizhny Novgorod, Russian Federation

Do the activities of redox regulating enzymes decline during ageing and in the brains of Parkinson’s disease patients? (B09-11)
L.-N. Schaffert1, C. Schupfer1, A.-C. Raulin1, M. Periera2, L. Callado3, W. Carter1
1University of Nottingham, School of Medicine, Derby, United Kingdom, 2Federal University of Rio, Rio de Janeiro, Brazil, 3University of the Basque Country, Basque Country, Spain

Chemogenetics modulation of kisspeptin neuron activity and its role in anxiety behavior in mice (B09-12)
S. Eyuboglu1, S. Agus1, O. Baser1, D. Atasoy2, B. Yilmaz1
1Yeditepe University, Medical School, Physiology, Istanbul, Turkey, 2Istanbul Medipol University, Medical School, Physiology, Istanbul, Turkey

B12: Sensory and motor neurophysiology

Intrinsic discharge patterns of flocular Purkinje cells in rats (B12-1)
C.-H. Kim, Y.-G. Kim
Konkuk University School of Medicine, Seoul, Republic of Korea

The intra-limb anticipatory postural adjustments and their role in movement performance (B12-2)
P. Cavallari, F. Bolzoni, C. Bruttini, R. Espositi
Università degli Studi di Milano, Section Human Physiology - Dep. Pathophysiology and Transplantation, Milan, Italy

Impact of photoreceptor failure on inner retinal function (B12-3)
S. Di Marco
Università degli studi dell’Aquila, Dipartimento di Scienze cliniche applicate e biotecnologiche, L’Aquila, Italy

Dynamic weight bearing test for assessing effects of acute intramuscular administration of botulinum neurotoxin type A1 in the rat (B12-4)
S. Cornet1, C. Périer1, L. Gorji1, S. Wagner2, E. Andriambeloson2, B. Pouzet1, M. Kalinichev1
1Ipsen-Innovation, Neurology, Les Ulis, France, 2Neurofit SAS, Illkirch, France, BeVivo GmbH, Reinach (BL), Switzerland

Are psychogenic startles anxiety-enhanced physiological startles? A latencies-based answer (B12-5)
W. Kacem
University of Medicine of Tunis, Physiology, Tunis, Tunisia

Shared neural input between muscles activated during shoulder abduction and adduction (B12-6)
T. Richards, P. Sriya, S. Astill, S. Chakrabarty
University of Leeds, Faculty of Biological Sciences, Leeds, United Kingdom

On genito-urological pathophysiology I (B12-7)
E. Neu1, M.C. Michailov1, U. Welscher1, U. Härlin1, H.W. Bauer1, A. Hofstetter1, G. Hohlbrugger1,4, M. Adersbacher1, G. Weber1,2
1Inst. Umweltmedizin (IUM) c/o ICSD/IAS e.V., Munich, Germany, 2FU Berlin & Univ. Munich, Munich, Germany, 3Univ. Munich, Klinik Großhadern, Munich, Germany, 4Med. Univ. Innsbruck, Innsbruck, Austria, 5Fac. Psychol. (Dean), Univ. Luxembourg & Vienna, Vienna, Austria

Changes in static perimetry during chamber-rest: a pilot study (B12-8)
D. Škrda1, T. Michalčák1, M. Malušič1, Z. Vavrina1, T. Ektova1, M. Kempny1, V. Jarkulis1, P. Švorc Jr.1
1Faculty of Medicine, University of Ostrava, Department of Physiology and Pathophysiology, Ostrava, Czech Republic, 2Faculty of Arts, University of Ostrava, Department of Psychology, Ostrava, Czech Republic
B17: Stem cells

Development of a multi-layer scaffold for artificial tissue with mesenchimal stem cells (B17-1)
V. Mikalayeva¹, I. Antanavičiūtė¹, T. Tamulevičius², V.A. Skeberdis¹, E. Stankevičius¹
¹Lithuanian University of Health Sciences, Institute of Cardiology, Kaunas, Lithuania, ²Kaunas University of Technology, Institute of Materials Science, Kaunas, Lithuania

Synergistic effects of TGF-ß and IGF-1 on chondrogenic potential of adipose tissue derived stem cells (B17-2)
D. Taskiran¹, E. Taskiran²
¹Ege University School of Medicine, Physiology, Izmir, Turkey, ²Ege University School of Medicine, Orthopaedics and Traumatology, Izmir, Turkey

Friday, 15 September 2017
09:00 – 10:00 / Hall C1
Plenary Lecture
Chair: W.E. Louch (Oslo, Norway)

Targeting Brain Circuits to Reverse Obesity and Type 2 Diabetes (PL-04)
L. Heisler
University of Aberdeen, Rowett Institute, Aberdeen, United Kingdom

10:00 – 11:00
Poster Session C

PLEASE NOTE:
Posters can be mounted from 08:30, should be mounted until 09:30 and have to be removed at the end of the corresponding poster session at 13:15; otherwise they can be removed by the following presenters or by the organizers.
Fixing material will be provided and distributed in the poster area. There will be no guided poster tour but presenting authors are requested to stay at their posters during the viewing session for discussions.

C01: Cardiac physiology

The cardioprotective remote ischemic preconditioning in SHR rats: role of age and activation of RISK signaling pathway (C01-1)
V. Farkašová¹, L. Griecsová¹, M. Muráriková¹, S. Čarnická¹, U. Lonek¹, M. Ferko¹, A. Adameová¹, T. Ravingerová¹
¹Institute for Heart Research, Slovak Academy of Sciences, Department of Cardiovascular Physiology and Pathophysiology, Bratislava, Slovakia, ²Faculty of Pharmacy, Comenius University, Department of Pharmacology and Toxicology, Bratislava, Slovakia

Remote ischemic preconditioning: protection of myocardial energetics (C01-2)
M. Ferko¹, I. Kancirová¹, M. Jašová¹, J. Kučharská¹, O. Uličná¹, O. Vančová¹, M. Muráriková¹, T. Ravingerová¹, I. Waczulíková²
¹Institute for Heart Research, Slovak Academy of Sciences, Biochemistry, Bratislava, Slovakia, ²Pharmacobiocentral Laboratory, Third Department of Internal Medicine, Faculty of Medicine, Comenius University, Bratislava, Slovakia, ³Division of Biomedical, Physics, Department of Nuclear Physics, Biophysics, Faculty of Mathematics, Physics and Informatics, Comenius University, Bratislava, Slovakia

17:00 – 18:00/ Hall C1
Public Lecture
Chair: B. Yilmaz (Istanbul, Turkey)

Exercise as Medicine – the role of myokines mediating muscle-organ cross-talk (PL-03)
P.K. Pedersen
Rigshospitalet and University of Copenhagen, Centre of Inflammation and Metabolism (CIM) and Centre for Physical Activity Research (CFAS), Copenhagen, Denmark

20:00
Congress Dinner

The congress dinner will take place at the Heuriger "Schuebel-Auer".

Meeting Point:
Heuriger Schuebel-Auer
Kahlenberger Str. 22
1190 Wien-Nussdorf

Please refer to page 10 for further information about public transportation.
Hypertension and oxidative stress: Effects of angiotensin II receptor antagonists and calcium-channel antagonists on oxidant status in hypertensive men. (C01-3)
N. Malić, C. El Hassar, H. Merzouk, S.A. Merzouk, A. Meziane
Laboratory of PPABIONUT, University of Tlemcen, Tlemcen, Algeria

Role of altered Ca²⁺ homeostasis during adverse cardiac remodeling after ischemia and reperfusion (C01-4)
¹Institute of Biomedicine of Seville, Seville, Spain, ²CABIMER, Department of Stem Cells, Seville, Spain, ³UMR S1180, Inserm, Univ. Paris-Sud, Université Paris-Saclay, Châtenay-Malabry, France

Fluoxetine Attenuates Remote Myocardial Ischemia Reperfusion Injury (C01-5)
M.O. Yaman¹, I. Guner¹, H. Erman², O.E. Tok¹, M. Pala¹, M. Esrefoglu¹, R. Gelisgen², H. Uzun¹, N. Yelmen¹, G. Sahin¹⁴
¹University of Istanbul, Cerrahpasa Medical Faculty, Physiology, Istanbul, Turkey, ²Medeniyet University, Istanbul, Turkey, ³Bogomoletz Institute of Physiology, Circulation, Kyiv, Ukraine, ⁴Biruni University, Physiology, Istanbul, Turkey, ⁵University of Istanbul, Cerrahpasa Medical Faculty, Biochemistry, Istanbul, Turkey

Beneficial effect of molecular hydrogen and hypoxic postconditioning on ischemia reperfusion injury of isolated rat hearts (C01-6)
M. Zálešák, J. Graban, B. Kura, D. Pancza, T. Ravingerová, J. Sležák
Institute for Heart Research, SAS, Department of Cardiovascular Physiology and Pathophysiology, Bratislava, Slovakia

The effects of zofenopril on cardiac function and pro-oxidative parameters in the streptozotocin-induced diabetic rat heart (C01-7)
V. Zivkovic¹, P. Ristic¹, I. Stojic¹, N. Jeremic¹, J. Jeremic¹, D. Djuric¹, V. Jakovljevic¹
¹Faculty of Medical Sciences, University of Kragujevac, Physiology, Kragujevac, Serbia, ²Military Medical Academy, Belgrade, Endocrinology, Belgrade, Serbia, ³Faculty of Medical Sciences, University of Kragujevac, Pharmacy, Kragujevac, Serbia, ⁴Military Medical Academy, Belgrade, Ophthalmology, Belgrade, Serbia

The long-term effects of atorvastatin on oxidant/antioxidant status of hyperhomocysteinemic rats (C01-8)
T. Nikolic¹, V. Zivkovic¹, N. Jeremic¹, J. Jeremic¹, I. Stojic¹, I. Srejovic¹, D. Djuric¹, V. Jakovljevic¹
¹Faculty of Medical Sciences, University of Kragujevac, Pharmacy, Kragujevac, Serbia, ²Faculty of Medical Sciences, University of Kragujevac, Physiology, Kragujevac, Serbia, ³School of Medicine, University of Belgrade, Institute of Medical Physiology Richard Burian, Belgrade, Serbia

The effects of chronic administration of cisplatin on oxidative stress in isolated rat heart (C01-9)
J. Jeremic¹, I. Stojic¹, T. Nikolic¹, J. Smigic², V. Zivkovic², I. Srejovic², T. Sabo², V. Jakovljevic²
¹Faculty of Medical Sciences, University of Kragujevac, Department of Pharmacy, Kragujevac, Serbia, ²Faculty of Medical Sciences, University of Kragujevac, Department of Physiology, Kragujevac, Serbia, ³Faculty of Chemistry, University of Belgrade, Department of General and Inorganic Chemistry, Belgrade, Serbia

The effects of modulation of N-methyl-D-aspartate receptors on oxidative stress in isolated rat heart (C01-10)
I. Srejovic¹, V. Zivkovic¹, N. Jeremic¹, I. Stojic¹, T. Nikolic¹, D. Djuric¹, V. Jakovljevic¹
¹Faculty of Medical Sciences University of Kragujevac, Department of Physiology, Kragujevac, Serbia, ²Faculty of Medical Sciences University of Kragujevac, Department of Pharmacy, Kragujevac, Serbia, ³Institute of Medical Physiology "Richard Burian," Faculty of Medicine, University of Belgrade, Belgrade, Serbia

Effect of maturation on resistance of rat hearts to ischemia and effects of classical and remote ischemic preconditioning. study of potential molecular mechanisms (C01-11)
I. Griecsova¹, V. Farkasova¹, L. Lonek¹, I. Gablovska¹, I. Bernatova¹, T. Ravingerova¹
¹Institute for Heart Research SAS, Department of Cardiovascular Physiology and Pathophysiology, Bratislava, Slovakia, ²Institute of Normal and Pathological Physiology SAS, Bratislava, Slovakia

EMAP II provides restoration of heart function in Langendorff ischemia-reperfusion model. (C01-12)
R. Fedichkina¹, V. Goshovska¹, A. Korneyuk¹, V. Sagach¹
¹Bogomoletz Institute of Physiology, Circulation, Kyiv, Ukraine, ²Institute of Molecular Biology and Genetics, Kyiv, Ukraine

Oxidative stress and deficient of nitric oxide synthesis as possible reasons of impaired Frank-Starling low in rat heart due to prolonged lighting (C01-13)
V. Goshovska¹, V. Sagach¹
Bogomoletz Institute of Physiology, Circulation, Kyiv, Ukraine

C02: Vascular physiology

Impaired expression of voltage-gated K⁺ channel during early phase of diabetes in the rat mesenteric arterial smooth muscle (C02-1)
W.S. Park
Kangwon National University School of Medicine, Department of Physiology, Chuncheon, Republic of Korea

The vasodilatory effect of repaglinide, a member of meglitinide class antidiabetic drugs, via activation of PKG and PKA in aortic smooth muscle (C02-2)
M.S. Seo, W.S. Park
Kangwon National University School of Medicine, Physiology, Chuncheon, Republic of Korea
Inhibitory effect of nortriptyline, a tricyclic antidepressant, on voltage-dependent K^+ channels in coronary arterial smooth muscle cells (C02-3)
S.E. Shin, W.S. Park
Kangwon National University School of Medicine, Department of Physiology, Chuncheon, Republic of Korea

The vasorelaxant effect of nateglinide, a member of meglitinide class of anti-diabetic drugs, via activation of voltage-gated K^+ channels in aortic smooth muscle (C02-4)
H. Li, W.S. Park
Kangwon National University School of Medicine, Department of Physiology, Chuncheon, Republic of Korea

The inhibitory effect of dapoxetine, a selective serotonin reuptake inhibitor on voltage-gated K^+ channels in rabbit coronary arterial smooth muscle cells (C02-5)
J.R. An, W.S. Park
Kangwon National University School of Medicine, Department of Physiology, Chuncheon, Republic of Korea

Direct inhibition of the class III anti-arythmic agent, amiodarone on voltage-dependent K^+ channels in coronary arterial smooth muscle cells from rabbit (C02-6)
H. Li, S.E. Shin, M.S. Seo, J.R. An, W.S. Park
Kangwon National University School of Medicine, Department of Physiology, Chuncheon, Republic of Korea

CaV1.2 L-type Ca^2+ channel form a signal complex with Orai1 and TRPC1 in vascular smooth muscle cells: Role in vascular tone regulatio (C02-7)
J. Avila-Medina1,2,3, E. Calderon-Sanchez2,3, P. Callejo-García2, J.A. Rosado4, T. Smani1,2,3
1University of Seville/Institute of Biomedicine of Seville, Medical Physiology and Biophysic, Sevilla, Spain, 2Institute of Biomedicine of Seville, Grupo de Fisiopatología Cardiovascular, Sevilla, Spain, 3CiberCV, Madrid, Spain, 4University of Extremadura, Physiology, Caceres, Spain

Effects of PCSK9 inhibitor in obese Zucker (fa/fa) rats. (C02-8)
M. Kositova, R. Rehakova, M. Cebová, Z. Matuskova, O. Pechanova
Institute of Normal and Pathological Physiology Slovak Academy of Sciences, Bratislava, Slovakia

Protective effects of nanoparticle-loaded renin inhibitor in experimental hypertension (C02-9)
O. Pechanova, M. Cebová, R. Rehakova, S. Vranikova, A. Barta
Institute of Normal and Pathological Physiology Slovak Academy of Sciences, Department of Neuro-cardiovascular Interactions, Bratislava, Slovakia

Ranolazine improves vascular sensitivity to insulin in rabbit femoral arteries. (C02-10)
C. Aldasoro1, S. Guerra Ojeda1, A. Jordà2, P. Marchio2, M. Gimeno-Raga2, M.D. Mauricio2, S. Valles2, M. Aldasoro3, J.M. Vila3
1Hospital General de Castellon, Medicina Familiar y Comunitaria, Castellon, Spain, 2University of Valencia, Physiology, Valencia, Spain

Renal vascular Kv7.1 channels – potential targets for renoprotection (C02-11)
R. Schubert, F. Stocker, S. Braun, N. Schmidt
Medical Faculty Mannheim, Heidelberg University, Mannheim, Germany

The Effects of Nifedipine in Heart Injury Induced by Renal Ischemia Reperfusion (C02-12)
A. Tanyeli1, E. Eraslan1, E. Polat2, E. Polat3, N. Kurt4
1Atatürk University, Physiology, Erzurum, Turkey, 2Atatürk University, Biochemistry, Erzurum, Turkey, 4Atatürk University, Histology and Embryology, Erzurum, Turkey

C03: Molecular & cellular physiology

Iron oxide nanoparticles increase nuclear textural entropy in buccal epithelial cells (C03-1)
I. Pantic1,2
1University of Belgrade, Faculty of Medicine, Institute of Medical Physiology, Belgrade, Serbia, 2University of Haifa, Haifa, Israel

Gender-dependent expression of miRNA in human colorectal cancer and adjacent colonic tissues (C03-2)
K. Voglova1, J. Bezakova1, R. Reis1, M. Vician1, M. Zeman1, I. Herichova1
1Faculty of Natural Sciences Comenius University in Bratislava, Department of Animal Physiology and Ethology, Bratislava, Slovakia, 2University Hospital, Comenius University Bratislava, First Surgery Department, Bratislava, Slovakia

Nanoparticles at the neurovascular unit: in vitro and in vivo studies to assess the blood-brain barrier permeability and function (C03-3)
G. Forcaia1, R. Dal Magro1, E. Cesana1, B. Albertini2, P. Blasi2, F. Re1, G. Sancini1
1University of Milan Bicocca, School of Medicine and Surgery, Monza, Italy, 2University of Perugia, Department of Pharmaceutical Sciences, Perugia, Italy

In Vitro Cell Death Discrimination and Screening Method by Simple and Cost-Effective Viability Analysis. (C03-4)
K. Helm1, M. Beyreis1, C. Mayr1,2, M. Ritter1
1Paracelsus Medical University Salzburg, Institute of Physiology and Pathophysiology, Salzburg, Austria, 2Salzburger Landeskliniken - SALK, Paracelsus Medical University, Department of Internal Medicine I, Salzburg, Austria, 3University of Salzburg, Department of Materials Science and Physics, Salzburg, Austria
Progesterone and selective membrane progesterone receptor ligands as immunomodulators in human T-lymphocytes (C03-5)

A. Polikarpova1, I. Levina2, L. Kulikova2, I. Morozov2, P. Rubtsov2, I. Zavarzin2, A. Guseva2, O. Smirnova2, T. Shchelkunova1

1Lomonosov Moscow State University, Faculty of Biology, Moscow, Russian Federation, 2Zelinsky Institute of Organic Chemistry Russian Academy of Sciences, Moscow, Russian Federation, 3Engelhardt Institute of Molecular Biology Russian Academy of Sciences, Moscow, Russian Federation

Tolftenamic Acid Induces Apoptosis by Increasing TNF-alpha Gene Expression in rat hepatocellular carcinoma cells (C03-6)

S. Akın, M. Özkurt, R. Uyar1, S. Kabadere

Eskişehir Osmangazi University, Physiology, Eskisehir, Turkey

The apoptotic effect of quercetin in human hepatoma cell line HEP3B that NF-KB pathway suppressed by CAPE (C03-7)

M. Kasit, O. Doğanlar

Trakya University, Faculty of Medicine, Medical Biology, Edirne, Turkey

Trancriptional regulation of metabolic reactions in breast cancer cells (C03-8)

I. Česlevičienė, I. Antanavičiūtė, V. Mikalaitytė, V.A. Skeeperdis, S. Bordel Velasco

Lithuanian University of Health Sciences, Institute of Cardiology, Kaunas, Lithuania

Synthesis of New 1,1,3,3-Tetra(4′-oxy-3-substituted-chalcone)-5,5-diphenylcyclotriphosphazene Derivatives and Investigation of Their Anti-Cancer Activities (C03-9)

S. Tekin1, I. Tekin2, K. Koran3, A.O. Gorgulu2, S. Sandal1

1Inonu University, Physiology, Malatya, Turkey, 2Inonu University, Public Health, Malatya, Turkey, 3Fırat University, Chemistry, Elazığ, Turkey

Effects of N-(p-amylcinnamoyl) anthranilic acid (ACA) on various human cancer cell lines (C03-10)

S. Tekin1, M. Cakir2, A. Beytur1, S. Sandal1

1Inonu University, Physiology, Malatya, Turkey, 2Bozok University, Physiology, Yozgat, Turkey

Effects of saxagliptin on human prostate and breast cancer: An in vitro study (C03-11)

S. Tekin1, A. Beytur1, M. Cakir2, S. Sandal1

1Inonu University, Physiology, Malatya, Turkey, 2Bozok University, Physiology, Yozgat, Turkey

The influence of enzyme matrix metalloproteinase-9 and innate immune cells in the pathogenesis of tumor response (C03-12)

I. Mrakovcic-Sutic1, M. Petkovic2, A. Bulović1, V. Micovic3,4, I. Sutic1, P. Mughic1, S. Dukic2

1Medical Faculty, Department of Physiology and Immunology, Rijeka, Croatia, 2Medical Faculty, Department of Oncology and Radiotherapy, Rijeka, Croatia, 3Medical Faculty, Rijeka, Croatia, 4Medical Faculty, Department of Public Health, Rijeka, Croatia, 5Medical Faculty, Department of Family Medicine, Rijeka, Croatia

Investigation of the effects of a sulfite molecule on human neuroblastoma cells via a novel oncogene URG4/URGCP (C03-13)

Y. Dodurga1, M. Şçemel2, C. Ergöl3, G. Gündoğdu1, C. Biray Avcr1, G. Başç4, V. Küçükatay5, N.L. Şartoğlu-Tufan1, C. Biray Avcr1

1Pamukkale University Medical Faculty, Denizli, Turkey, 2Necmettin Erbakan University Medical Faculty, Konya, Turkey, 3Atatürk University Medical Faculty, Erzurum, Turkey, 4Ege University Medical Faculty, Izmir, Turkey, 5Ankara University Medical Faculty, Ankara, Turkey

C04: Endocrine, neuroendocrine and metabolism

The Effects of Thyroid Dysfunction on Nesfatin-1 Levels in Rats (C04-1)

E. Atici1, E. Menevse2,1, A.K. Baltaci2, R. Mogulkoc2

1Baskent University, Ankara, Turkey, 2Selcuk University, Konya, Turkey

Experimental Hypothyroidism and Hyperthyroidism Have Similar Affects on Cardiac Irisin Levels in Rats (C04-2)

E. Atici1,2, E. Menevse1, A.K. Baltaci1, R. Mogulkoc2, M.C. Avunduk3

1Selcuk University, Konya, Turkey, 2Baskent University, Ankara, Turkey, 3Faculty of Meram Medicine, Necmettin Erbakan University, Pathology, Konya, Turkey

Effect of bisphenol a and diethylhexyl phthalate on progesterone secretion by luteal cells (C04-3)

R. Kabakci, A.A. Yigit

Kirikkale University, Faculty of Veterinary Medicine, Department of Physiology, Kirikkale, Turkey

c-AMP during oestrus cycle in rats (C04-4)

V. Antevska

Medical Faculty Skopje, Institute of Physiology, Skopje, The Former Yugoslav Republic of Macedonia

Effect of Zinc and Melatonin on Oxidative Stress and Serum Inhibin-B Levels in a Rat Testicular Torsion-Detorsion Model (C04-5)

A. Semercioz1, A.K. Baltaci1, R. Mogulkoc1, M.C. Avunduk2

1Bagcilar Training and Research Hospital, Urology, Istanbul, Turkey, 2Selcuk University Medical School, Physiology, Konya, Turkey, 3Faculty of Meram Medicine, Necmettin Erbakan University, Pathology, Konya, Turkey
Combined Effects of Flavonoid Fisetin and Endocrine Disruptor Bisphenol A on Progesterone Production by Granulosa Cells (C05-6)
A. Bujnakova Mlynarcikova, S. Scsukova
Biomedical Research Center SAS, Institute of Experimental Endocrinology, Bratislava, Slovakia

Determining the Correlation between Thyroid Hormone and Adropine Hormone in Rats which received Cold Restraint Stress (C04-7)
M.C. Guler1, A. Tanyeli1, E. Eraslan1, T. Nacar1, E. Polat1
1Ataturk University, Physiology, Erzurum, Turkey, 2Ataturk University, Biochemistry, Erzurum, Turkey

Thyroid axis functioning is associated with health status and shorter survival of brain tumor patients (C04-8)
A. Bunевич, S. Tamasauskas, V. Deltuva, A. Tamasauskas
Lithuanian University of Health Sciences, Kaunas, Lithuania

Pregnancy induced changes in innate immunity during autoimmune thryeoid disease (C04-9)
I. Mrakovcic-Sutic1, T. Bogovic Crncic1, S. Grbac Ivankovic1, V. Pavsic2, I. Sutic2
1Medical Faculty, Department of Nuclear Medicine, Rijeka, Croatia, 2Medical Faculty, Department of Physiology and Immunology, Rijeka, Croatia

Comparison of extraction methods for measurement of hair cortisol (C04-10)
T. Atçali1, S. Yildiz2, A. Uçar2, S. Uğraş2
1Bingöl University, Bingöl, Turkey, 2İnönü University Faculty of Medicine, Physiology, Malatya, Turkey

Lengths of the menstrual cycle and menstruation are positively correlated with general tiredness in long-term entrained students (C04-11)
S. Uğraş, C. Uçar, T. Atçali, S. Yildiz
İnönü University Faculty of Medicine, Physiology, Malatya, Turkey

C05: Sports & exercise physiology

The Effect of Resveratrol Supplementation on Element Metabolism in Bone Tissue of Rats with Acute Swimming Exercise (C05-7)
A.K. Baltaci1, D. Cinarli1, R. Mogulkoc1, S. Patlar1, S.B. Baltaci1
1Selcuk University Medical School, Physiology, Konya, Turkey, 2Selcuk University, Sport Sciences, Konya, Turkey

Cardiorespiratory fitness effect on cerebral oxygenation in chronic obstructive pulmonary disease (C05-12)
O. Dupuy1, O. Bretonneau1, J.-C. Meurice2, F. Caron1, C. de Bisschop1
1Université de Poitiers, Laboratoire MOVE EA 6314, Poitiers, France, 2Service de Pneumologie, Centre Hospitalier Universitaire de Poitiers, Poitiers, France, 3Centre de réadaptation du Moulin Vert, Nieul l’Espoir, France

Effects of Acute Exhaustive Exercise on Oxidant and Antioxidant System Parameters in Rats with Streptozotocin Induced Diabetes Mellitus (C05-3)
A.M. Sahin1, O.F. Sonmez2, M. Mengi1, M. Altan1, M.S. Toprak2, H. Ekmekci2, G. Metin3, L. Cakar3
1Istanbul University Cerrahpaşa Faculty of Medicine, Physiology, Istanbul, Turkey, 2Istanbul University Cerrahpaşa Faculty of Medicine, Biochemistry, Istanbul, Turkey, 3Sanko School of Medicine, Physiology, Gaziantep, Turkey

Diving response after a one-week diet and overnight fasting (C05-4)
A. Di Giacomo, G. Ghiani, G. Palazzolo, S. Roberto, F. Tocco
University of Cagliari, Cagliari, Italy

Relationship between regular exercise-induced cardiac hypertrophy and microRNA (C05-5)
M. Pala1, M. Altan2, O.F. Sonmez2, M. Mengi2, S. Dincer3, F. Akbas1, M. Yildiz1, M. Kumaş2, M. Esrefoğlu1, G. Metin1
1Biruni University Faculty of Medicine, Physiology, Istanbul, Turkey, 2Istanbul University Cerrahpaşa Faculty of Medicine, Physiology, Istanbul, Turkey, 3Istanbul University Istanbul Medical Faculty, Sports Medicine, Istanbul, Turkey, 4Bezmialem Vakif University Medical Faculty, Medical Biology, Istanbul, Turkey, 5Istanbul University, Institute of Cardiology, Istanbul, Turkey, 6Bezmialem Vakif University Medical Faculty, Histology, Istanbul, Turkey

Prognostic Value of 6-Minute Walk Test in children with congenital anaemia (C05-6)
K. Ayed1, S. Yahyaoui2, S. Mohkadem1, S. Ben Jemaa1, I. L. Hadji Khalifa1, S. Ben Khamsa Jamaleddine3
1Abderrahman Mami Hospital, Department of Respiratory Fonctionnal Explorations, Ariana, Tunisia, 2Bechir Hamza Children's Hospital, Service of Infantile Medicine, Bab Saadoun, Tunisia

Case Study of a Male Ocean Racer: body composition and nutritional intake during world solo sailing record attempt (C05-7)
G. Ghiani, S. Magnani, Y. Pinna, A. Doneddu, G. Sainas, F. Tocco, A. Crisafulli
Università Cagliari, Scienze mediche e sanità pubblica, Cagliari, Italy

Vitamin C supplementation mitigates diving-induced changes in cerebral circulation (C05-8)
O. Barak1, K. Caljić1, K. Roč1, S. Thom1, P. Jovanov1, T. Mijacić1, Z. Dujć1
1Faculty of Medicine University of Novi Sad, Department of Physiology, Novi Sad, Serbia, 2University of Split School of Medicine, Split, Croatia, 3University of British Columbia, Okanagan Campus, Kelowna, Canada, 4University of Maryland, School of Medicine, Baltimore, Maryland, Baltimore, United States, 5Institute of Food Technology in Novi Sad, Novi Sad, Serbia
The contraction-induced hypertrophic response of myostatin suppression is intrinsically impaired in myotubes from obese individuals. (C05-10)
T. Nicholson1, H. Palfrey1, C. Church2, D. Baker2, S. Jones1
1University of Birmingham, Institute of Inflammation and Ageing, Birmingham, United Kingdom, 2MedImmune, Cardiovascular and Metabolic Disease (CVMD), Cambridge, United Kingdom

The Effects of Voluntary Physical Activity in Female Rats Fed with Fructose Rich Diet (C05-11)
P. Tayfur1, K. Gokce2, S. Yilmaz2, O. Barutcu2, E.O. Ozgu2, N. Sut3, S.A. Vardar1
1Trakya University Medical Faculty, Physiology, Edirne, Turkey, 2Trakya University Medical Faculty, Biostatistics, Edirne, Turkey, 3Trakya University Medical Faculty, Edirne, Turkey

Effects of Exercise on ADAMTS-4 and ADAMTS-5 Levels in Sport Horses (C05-12)
S. Kanduy1, G. Tekin2, C. Er3, S. Karakurt4
1Cukurova University, Ceyhan Faculty of Veterinary Medicine, Physiology, Adana, Turkey, 2Selcuk University, Faculty of Science, Biochemistry, Konya, Turkey, 3Petibör Veterinary Clinic, Internal Medicine, Istanbul, Turkey

Eight-weeks of treadmill exercise ameliorates neuropathic pain in diabetic rats (C05-13)
O. F. Kalkan, Y. E. Surmeneli, O. Aktas, B. P. Yucel, A. Ayar
Karadeniz Technical University, Physiology, Trabzon, Turkey

C07: Gastrointestinal physiology

Effect of Pinealectomy and Melatonin Supplementation on Metallothionein, Zinc Transport Protein Levels in the Small Intestine Sections of the Rat (C07-1)
O. Ulu1, A. K. Baltaci1, R. Mogulkoc1, M.C. Avunduk2
1Selcuk University Medical School, Physiology, Konya, Turkey, 2Necmettin Erbakan University, Pathology, Konya, Turkey

Comparative study between esophageal hypomotility and inefficient esophagus about 420 cases (C07-2)
W. Kacem
University of Medicine of Tunis, Physiology, Tunis, Tunisia

Investigation of anticancer mechanism of isoorientin isolated from eremurus spectabilis leaves in HT-29 human colorectal adenocarcinoma cells (C07-3)
G. Gundogdu1, Y. Dodurga1, L. Elmas2, S. Yilmaz Taşci3, E. S. Karaoglan3
1Atatürk University, Physiology, Erzurum, Turkey, 2Pamukkale University, Medical Biology, Denizli, Turkey, 3Atatürk University, Department of Pharmaceutical Botany, Faculty of Pharmacy, Erzurum, Turkey

Association between chromatin fractal lacunarity and nuclear envelope circularity in mice hepatocytes (C07-4)
J. Pavlovic1, D. Vucevic1, T. Radosavljevic1, L. Pantic2,3
1University of Belgrade, Faculty of Medicine, Institute of Pathological Physiology, Belgrade, Serbia, 2University of Belgrade, Faculty of Medicine, Institute of Medical Physiology, Belgrade, Serbia, 3University of Haifa, Haifa, Israel

VX-809 restores the alcohol-induced expression defect of cystic fibrosis transmembrane conductance regulator in Capan-1 cells (C07-5)
A. Grassalkovich1, J. Maléth1, T. Madácsy1, P. Pallagi1, V. Venglovecz1, Z. Rakonczay Jr1, P. Hegyi1
1University of Szeged, 1st Department of Medicine, Szeged, Hungary, 2University of Szeged, Department of Pharmacology and Pharmacotherapy, Szeged, Hungary, 3University of Pécs, Institute for Translational Medicine and 1st Department of Medicine, Szeged, Hungary

The cytotoxic and genotoxic effects of daidzein in MIA PaCa-2 human pancreatic carcinoma cells (C07-6)
G. Gundogdu1, Y. Dodurga1, M. Cetin2, M. Secme1, B. Cicek1
1Atatürk University, Physiology, Erzurum, Turkey, 2Selcuk University, Department of Biostatistics and Medical Informatic, Mersin, Turkey

Mechanism of glutamate secretion on the pancreatic juice by acinar cells (C07-7)
D. Gluch, S. Camargo
University of Zurich, Physiology, Zurich, Switzerland

Investigation of the pancreatic ductal ion secretion in pancreatic ductal organoid cultures (C07-8)
R. Molnár, L. Alsardih, J. Fanczal, T. Madácsy, P. Hegyi, J. Maléth
University of Szeged, First Department of Internal Medicine, Szeged, Hungary

Role Of Vagal Afferents On High Fat Diet Induced Alterations in Rat Behaviour And Gut Motility (C07-9)
Y. Öztürk1, B. Akgün1, O. Çetin1, H. Karataş1, B. Güney1, Z.N. Özdemir Kumral1, D. Öz beyli2, S. Arabacı1, H. Zortul3
1Marmara University, Medicine, Istanbul, Turkey, 2Marmara University, Physiology, Istanbul, Turkey, 3Marmara University, Pharmacy, Istanbul, Turkey

Investigation of the Effects of Mask and Mouthpiece Types with Different Dead Space Volumes on the Energy Expenditure Measurements (C05-9)
Z. Altinkaya1, H. Dal1, N. Ozeli2
1Mersin University, Faculty of Medicine, Department of Physiology, Mersin, Turkey, 2Mersin University, Faculty of Medicine, Department of Biostatistics and Medical Informatic, Mersin, Turkey

The Investigation of the Effects of Mask and Mouthpiece Types with Different Dead Space Volumes on the Energy Expenditure Measurements (C05-9)
C14: Ion channels

Different modulation of the excitability of hippocampal and cerebellar neurons by a fibrotic scar model (C14-1)

L. Lacinova¹, K. Ondacova¹, L. Lapinova¹, D. Jurkovicova²

¹Center of Biosciences, Institute of Molecular Physiology and Genetics, Bratislava, Slovakia, ²Biomedical Research Center, Cancer Research Institute, Bratislava, Slovakia

Glycine Uptake via Sodium/Neutral Amino Acid Transporters Activates a Swelling-Dependent Anion Conductance in Microglial Cells (C14-2)

M. Jakab¹, M. Kittl³,², M. Beyreis¹, H. Dobias³, M. Gaisberger³,², M. Ritter³,², H. Kerschbaum⁷

¹Paracelsus Medical University, Institute of Physiology and Pathophysiology, Salzburg, Austria, ²University of Salzburg, Department of Cellular Biology, Division of Molecular and Cellular Neurobiology, Salzburg, Austria, ³Paracelsus Medical University, Gaston Research Institute, Salzburg, Austria, ⁴Ludwig Boltzmann Cluster for Arthritis and Rehabilitation, Department for Radon Therapy Research, Salzburg, Austria

Noradrenaline Suppresses a Cl⁻ Current as well as Phagocytosis in Murine Microglia (C14-3)

K. Michael¹,², M. Jakab³, T.S. Steininger², M. Beyreis¹, M. Ritter³,², H.H. Kerschbaum⁷

¹Paracelsus Medical University, Institute of Physiology and Pathophysiology, Salzburg, Austria, ²University of Salzburg, Department of Cellular Biology, Division of Molecular and Cellular Neurobiology, Salzburg, Austria, ³Paracelsus Medical University Salzburg, Institute of Physiology and Pathophysiology, Salzburg, Austria, ⁴Ludwig Boltzmann Cluster for Arthritis and Rehabilitation, Department for Radon Therapy Research, Salzburg, Austria

C15: Other

Evaluation of estradiol level and serum lipids in white wistar rats of female gender during their generative life (C15-1)

S. Petrovska, B. Dejanova, S. Mancevska, J. Pluncevic-Gligorovska

Faculty of Medicine, Department of Physiology, Skopje, Macedonia, The Former Yugoslav Republic of Macedonia

Discovery of a new voltage-gated proton channel (C15-2)

G. Chaves¹,², C. Derst³, A. Franzén⁴, Y. Mashimo⁴, R. Machida⁴, B. Musset¹

¹PMU Nürnberg, Institut für Physiologie, Nürnberg, Germany, ²Forschungszentrum Jülich, ICS-4, Jülich, Germany, ³Universität zu Köln, Zoologisches Institut, Köln, Germany, ⁴University of Tsukuba, Sugadaira Montane Research Center, Ueda, Japan

The determination of interaction between naringin and different chemotherapy agents in neuroblastoma and astrocyte cell lines (C15-3)

N.P. Turker¹, Z.B. Doganlar²

¹Trakya University, Technology Research and Application Center (TUTAGEM), Edirne, Turkey, ²Trakya University, Medicinal Biology, Edirne, Turkey

Critical analysis of dietary habits in people with type 2 diabetes (C15-4)

K. Inchirah

Faculty of Sciences of Bizerte, Biology, Bizerte, Tunisia

C16: Neuro-immunology

Association of TNFAIP3 and TRAF1 polymorphisms with susceptibility to systemic lupus erythematosus and rheumatoid arthritis in Egyptian Population. (C16-1)

A. Ismail

Faculty of Medicine, Physiology Department, Sinnar, Sudan

Antibodies against vimentin – an early biomarker of ischemia? (C16-2)

S.A. Türköğlu, M.N. Öğün, E. Karabörk, H.S. Orallar, S. Yıldız

Abant Izzet Baysal University, Bolu, Turkey
C18: Teaching & e-learning

Near-Peer Teaching Program in Medical Physiology at Comenius University (C18-1)
S. Hnilicova1, A.I. Daponte1, P. Vitović2, A. Dal Grande1, F. Schmitt1, Y. Senoo1, P. Hnilica2, D. Ostatnikova3
1Comenius University in Bratislava, Institute of Physiology, Bratislava, Slovakia, 2Faculty of Medicine, Comenius University, Department of Simulations and Virtual Medical Education, Bratislava, Slovakia, 3SI Medical, Bratislava, Slovakia

Team-Based Learning in Medical Physiology (C18-2)
M. Geiger
Medical University Vienna, Department of Vascular Biology and Thrombosis Research, Vienna, Austria

11:00 – 13:00 / Hall C1
Symposium 12: Current trends in cell therapy for functional recovery of the diseased heart
Kindly supported by
Organizer: N. D. Ulrich (Heidelberg, Germany); Co-chair: B. Yilmaz (Istanbul, Turkey)

11:00
Cardiac Bone Marrow-Derived Cell-based Therapy associated with scaffold for Heart Repair (S12-1)
M.-N. Giraud
University of Fribourg, Cardiology, Fribourg, Switzerland

11:30
Excitation-Contraction Coupling Plasticity in Pluripotent Stem Cell-Derived Cardiac Myocytes (S12-2)
C. Terracciano
University, Medicine, London, United Kingdom

12:00
Generation and functional characterization of human induced pluripotent stem cell-derived pacemaker cell clusters (S12-3)
P. Schweizer1, E. Darche1, M. Koenen2, H. Katus3, D. Thomas1
1University Hospital Heidelberg, Cardiology, Heidelberg, Germany, 2Max-Planck Institute for Medical Research, Neurobiology, Heidelberg, Germany

12:30
Monomeric adiponectin modulates nitric oxide release and calcium movements in porcine aortic endothelial cells in normal/high glucose conditions (S12-4 (O))
E. Grossini
University East Piedmont, Novara, Italy

12:45
TRPC – NFAT signaling inhibition mediates the cardiac anti-fibrotic effect of polyphenols (S12-5 (O))
Y. Saliba1, J. Hajal1, S. Chacar1,2, R. Maroun3, V. Smayra3, N. Faï1
1Université Saint Joseph - Faculté de Médecine, Laboratoire de Recherche en Physiologie et Physiopathologie, Beirut, Lebanon, 2Université Saint Joseph - Faculté des Sciences, Centre d’Analyses et de Recherche, Unité de Recherche Technologie et Valorisation Alimentaire, Beirut, Lebanon, 3Université Saint Joseph - Faculté de Médecine, Beirut, Lebanon

11:00 – 13:00 / Hall C2
Symposium 13: Place navigation in dynamic world in healthy and disordered brain: focus on cognitive coordination and behavioral flexibility
Kindly supported by
Organizer: J. Svoboda (Prague, Czech Republic); Co-chair: A. Balashova (Nizhny Novgorod, Russian Federation)

11:00
Spatial memory and cognitive control and flexibility deficits in animal models of schizophrenia and obsessive-compulsive disorder (S13-2)
S. Kubik1, A. Stuchlík1,2
1Institute of Physiology, Czech Academy of Sciences, Prague, Czech Republic, 2National Institute of Mental Health, Klecany, Czech Republic

11:30
Impaired cognitive coordination and behavioral flexibility in first episode schizophrenia patients: navigation in dynamic environment (S13-3)
L. Fajnerová1, M. Rodriguez1, D. Levčík2, J. Horáček3, A. Stuchlík3, K. Vlček3
1National Institute of Mental Health, Klecany, Czech Republic, 2Institute of Physiology, The Czech Academy of Sciences, Prague, Czech Republic
12:00
The relationship between heart rate variability and symptoms severity in children with autism spectrum disorders (S13-4 (O))
D. Filciková1, A. Kubranska1, H. Celusakova1, D. Ostatnikova1, B. Mravec1,2
1Comenius University in Bratislava, Institute of Physiology, Bratislava, Slovakia, 2Slovak Academy of Sciences, Institute of Experimental Endocrinology, Bratislava, Slovakia

12:15
Interacting Networks for Time Perception and Working Memory (S13-5 (O))
S. Üstün1, E.H. Kale2, M. Çiçek1,2
1Ankara University Faculty of Medicine, Physiology, Ankara, Turkey, 2Ankara University Brain Research Center, Ankara, Turkey

11:00 – 13:00 / Hall A
Symposium 14: Cardiovascular oscillations: from signal to physiological interpretation
Organizer: M. Javorka (Martin, Slovakia); Co-chair: E. Stankevicius (Kaunas, Lithuania)

11:00
Simultaneous characterization of sympathetic and cardiac arms of the baroreflex during incremental head-up tilt (S14-1)
A. Porta1,2, V. Barili2, B. De Maria3, G. Ranuzzi2, M. Esler4, E. Lambert4, M. Baumert5
1University of Milan, Department of Biomedical Sciences for Health, Milan, Italy, 2IRCCS Policlinico San Donato, Department of Cardiothoracic, Vascular Anesthesia and Intensive Care, San Donato Milanese, Milan, Italy, 3IRCCS Istituti Clinici Scientifici Maugeri, Istituto di Milano, Milan, Italy, 4Baker IDI Heart and Diabetes Institute, Human Neurotransmitter Laboratory, Melbourne, Australia, 5University of Adelaide, School of Electrical and Electronic Engineering, Adelaide, Australia

11:30
Cardiorespiratory interactions are responsible for both mechanical and nervous cardiovascular oscillations (S14-2)
M. Elstad
Institute of Basic Medical Sciences, University of Oslo, Oslo, Norway

12:00
Beat-to-beat QT interval variability and autonomic activity. (S14-3)
M. Baumert
The University of Adelaide, Adelaide, Australia

12:30
Light at night increases blood pressure response to norepinephrine in hypertensive rats (S14-4 (O))
L. Molcak, H. Sutovska, M. Zeman
Comenius University, Department of Animal Physiology and Ethology, Bratislava, Slovakia

12:45
Angiotensin II promotes K7.4 channels degradation through reduced interaction with HSP90 (S14-5 (O))
V. Barrese, J. Stott, H. Figueiredo, I. Greenwood
St George’s University of London, London, United Kingdom

11:00 – 13:00 / Hall B
Symposium 15: The cellular and molecular mechanisms controlling skeletal muscle plasticity
Organizer: R. Bottinelli (Pavia, Italy); Co-chair: K. Hilber (Vienna, Austria)

11:00
Cellular and molecular mechanisms controlling muscle mass and metabolism (S15-1)
M. Sandri
Venetian Institute of Molecular Medicine, Biomedical Science, Padova, Italy

11:30
The control of skeletal muscle insulin sensitivity and protein turnover in disuse and inflammation (S15-2)
P. Greenhaff
University of Nottingham, Life Sciences, Nottingham, United Kingdom

12:00
Skeletal muscle cell populations and regeneration (S15-3)
A. Mackey1,2
1University of Copenhagen, Dept of Biomedical Sciences, Copenhagen, Denmark, 2Bispebjerg Hospital, Institute of Sports Medicine, Copenhagen, Denmark
12:30
Functional state of muscle mitochondria in patients with preclinical cognitive deficiency (S15-4 (O))
M. Nemec1, D. Máderová1, P. Krumpolec1, Z. Sumbalová1, M. Vician2, L. Slobodová1, M. Schön1, B. Ukorpec1
1Slovak Academy of Sciences, Institute of Experimental Endocrinology, Bratislava, Slovakia, 2Faculty of Medicine Comenius University, Pharmacobiochecmical Laboratory, Bratislava, Slovakia, 3Medical University of Innsbruck, Daniel Swarovski Research Laboratory, Innsbruck, Austria, 4Slovak Medical University, Department of Surgery, Bratislava, Slovakia, 5Faculty of Medicine Comenius University, Institute of Pathological Physiology, Bratislava, Slovakia

12:45
Effects of eccentric and concentric trainings on brain-derived neurotrophic factor (BDNF) signaling in cognition-related brain regions (S15-5 (O))
M. Pedard1,2, G. Ennequin3, C. Marie1
1U1093 Cognition, action et plasticité sensorimotrice, Dijon, France, 2CHU François Mitterrand, Neurologie, Dijon, France, 3EA4257 Fonctions et dysfonctions épithéliales, Besançon, France

13:00 – 14:00
Lunch break

14:00 – 16:00 / Hall C1
Symposium 16: Exciting mechanisms of neuroglial excitability
Organizer: R. Zorec (Ljubljana, Slovenia); Co-chair: M. Fischer (Vienna, Austria)

14:00
Ionic signalling and astroglial function (S16-1)
A. Verkhratsky
The University of Manchester, Manchester, United Kingdom

14:30
Adrenergic activation of astrocytes shapes calcium and camp signalling affecting cell morphology and glycolysis (S16-2)
N. Vardjan1,2, A. Horvat1, R. Zorec1,2
1University of Ljubljana, Faculty of Medicine, Institute of Pathophysiology (LN-MCP), Ljubljana, Slovenia, 2Celica Biomedical, LCI, Ljubljana, Slovenia

15:00
Protein astrogliopathies in human neurodegenerative diseases and aging (S16-3)
G. Kovacs
Medical University Vienna, Vienna, Austria

15:30
Lysophosphatidic acid activates peripheral glial cells (S16-4 (O))
L. Gebhardt1, J. Robering1, A. Kremer2, M. Fischer3
1Friedrich-Alexander-University of Erlangen-Nürnberg, Institut for Physiologie and Pathophysiologie, Erlangen, Germany, 2Friedrich-Alexander-University of Erlangen-Nürnberg, Department of Medicine 1, Erlangen, Germany, 3Medical University of Vienna, Center for Physiology and Pharmacology, Vienna, Austria

15:45
Pharmacological modulation of the fusion pore of exo- and endocytotic vesicles in cultured rat astrocytes (S16-5 (O))
E. Lasic1, M. Stenovec1, B. Rituper1, J. Jorgačevski1, M. Kreft1, P. Robinson2, R. Zorec1
1Institute of Pathophysiology, Medical Faculty, University of Ljubljana, Ljubljana, Slovenia, 2University of Sydney, Sydney Medical School, Sydney, Australia

13:00 – 14:00
Lunch break

14:00 – 16:00 / Hall C2
Symposium 17: Monocyte subsets in cardiovascular biology
Kindly supported by

Organizer: J. Wojta (Vienna, Austria); Co-chair: C. Bunu (Timisoara, Romania)

14:00
Monocyte subsets in man and mice (S17-1)
L. Ziegler-Heitbrock
Monocytomics Research, Herrsching, Germany

14:30
The role of monocyte subsets in atherosclerosis (S17-2)
W. Speidl
Medical University of Vienna, Vienna, Austria

15:00
Monocyte subsets in cardiac disease and repair (S17-3)
E. Shantsila
University of Birmingham Institute of Cardiovascular Sciences, City Hospital, Birmingham, United Kingdom
15:30
Injured renal epithelium cell fate and inflammation are controlled by de novo expressed Notch3 (S17-4 (O))

P. Kavvadas, Z. Keuylian, J. C. Dussaule, N. Prakoura, S. Placier, C. Chadjichristos, C. Chatziantoniou

1University UPMC, Paris, France, 2AP-HP Paris, Physiology, Paris, France

15:45
Endothelial IkB Kinase 2 in Atherosclerosis (S17-5 (O))

M. Mussbacher, M. Salzmann, M. Kuttke, U. Resch, J. Basilio, B. Hoesel, A. Assinger, J. Schmid

Medical University Vienna, Vascular Biology and Thrombosis Research, Vienna, Austria

14:00 – 16:00 / Hall A
Symposium 18: Retina Degeneration: New technologies for the bionic retina
Organizer: F. Benfenati (Genova, Italy); Co-chair: L. Hunyady (Budapest, Hungary)

14:00
The new Retina Implant Alpha AMS: How does it work and what can blind patient see? (S18-1)


1University of Tuebingen, Center for Ophthalmology, Tuebingen, Germany, 2University of Oxford John Radcliffe Hospital, Dept. of Ophthalmology, Oxford, United Kingdom, 3Katharinen Hospital, Dept. of Ophthalmology, Stuttgart, Germany, 4University of Kiel, Dept. of Ophthalmology, Kiel, Germany, 5Klinikum Friedrichstadt, Dept. of Ophthalmology, Dresden, Germany

14:30
Subretinal prosthesis and optogenetic therapy: Functional validation on the primate retina (S18-2)

S. Picaud

Institut de la vision, Paris, France

15:00
A fully organic retinal prosthesis restores vision in a rat model of degenerative blindness (S18-3)


1Italian Institute of Technology, Synaptic Neuroscience and Technologies, Genova, Italy, 2Italian Institute of Technology, Nanoscience and Technology, Milan, Italy, 3Sacro Cuore Hospital Don Calabria, Ophthalmology Center, Negrar, Italy, 4University of Genova, Nuclear Medicine, Genova, Italy, 5University of L’aquila, Biotechnology and Applied Clinical Science, Aquila, Italy, 6IRCNS AOU San Martino-IST, National Institute Cancer Research, Genova, Italy, 7Consiglio Nazionale Della Ricerca, Institute of Molecular Bio-imaging and Physiology, Genova, Italy, 8Innovhub-SSI, Silk Division, Milan, Italy

15:30
Chromatin Shannon entropy in peripheral blood lymphocytes increases after UV-induced DNA damage (S18-4 (O))

I. Pantic, P. Vukanovic, A. Petkovic, S. Pantic

1University of Belgrade, Faculty of Medicine, Institute of Medical Physiology, Belgrade, Serbia, 2University of Haifa, Haifa, Israel, 3University of Belgrade, Faculty of Medicine, Belgrade, Serbia

15:45
Data Driven Graph-Theoretical Reconstruction and Quantification of 2D and 3D Tree-Like Biological Structures (S18-5 (O))

R. Markovič, M. Gosak, E. Roux, M. Marhl

1University of Maribor, Faculty of Natural Sciences and Mathematics, Department of Physics, Maribor, Slovenia, 2The Faculty of Energy Technology, Krško, Slovenia, 3University of Maribor, Faculty of Medicine, Institute of Physiology, Maribor, Slovenia, 4Université de Bordeaux, Biology of Cardiovascular Diseases U1034, Pessac, France, 5INSERM, Biology of Cardiovascular Diseases U1034, Pessac, France, 6University of Maribor, Faculty of Education, Department of Elementary Education, Maribor, Slovenia

14:00 – 16:00 / Hall B
Short Talks 2: High-rated abstracts

14:00
Reduction of fractal complexity in lymphocyte chromatin architecture during oxidopamine - induced apoptosis (ST2-1)

I. Pantic, P. Vukanovic, J. Paunovic, D. Vucevic, T. Radosavljevic, S. Pantic

1University of Belgrade, Faculty of Medicine, Institute of Medical Physiology, Belgrade, Serbia, 2University of Belgrade, Faculty of Pathological Physiology, Belgrade, Serbia

14:15
Streptozotocin-induced diabetic rats the effect of Ganoderma Lucidum polysaccharides on oxidative damage in the liver. (ST2-2)

H. A. Eroglu, E. Beytut

1Kafkas University, Medicine Faculty, Kars, Turkey, 2Erzincan University, Erzincan, Turkey

14:30
Podocyte-expressed stat5 confers protection during experimental glomerulonephritis and adriamycin nephropathy in mice (ST2-3)

K. Louis, Y. Luque, A. Corchia, S. Placier, Y. C. Xu-Dubois, S. Vandermeersch, E. Rondeau, L. Mesnard

Inserm UMR 1155 Hospital Tenon, Paris, France
14:45  
**Exercise restores diabetes-mediated contractile dysfunction of isolated rat seminal vesicle (ST2-4)**  
Y. E. Surmeneli¹, A. Kurt¹, O. F. Kalkan², B. P. Yucel¹, V. Keles¹, A. Ayar²  
¹Karadeniz Technical University/Institute of Health Sciences, Department of Physiology, Trabzon, Turkey, ²Karadeniz Technical University Faculty of Medicine, Department of Physiology, Trabzon, Turkey

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15:00  
**High intensity interval training in cardiac rehabilitation: A randomized controlled trial investigating platelet function (ST2-5)**  
S. Heber¹, A. Assinger¹, B. Fischer¹, R. Pokan², I. Wolf³  
¹Medical University of Vienna, Institute for Physiology, Vienna, Austria, ²University of Vienna, Department of Sport Science, Vienna, Austria

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15:15  
**Partial Loss of A20 exacerbates IFNγ dependent Transplant Arteriosclerosis through De-Regulation of IFNβ. (ST2-6)**  
H. Moll⁴, A. Lee⁵, E. Casanova², C. Ferran²  
⁴Medical University of Vienna, Center for Physiology and Pharmacology, Vienna, Austria, ²Beth Israel Deaconess Medical Center - Harvard Medical School, Center for Vascular Biology Research, Boston, United States

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15:30  
**Regulation of Two-pore Domain K+ Channels by Natural Effectors and Pharmacological Agents (ST2-7)**  
M. Schewe¹, F. Schulz¹, U. Mert¹, H. Sun², H. Belabed¹, M. Musinszki¹, T. Köhler¹, M. Tegtmeier¹, M. Nazare², E.P. Carpenter³, S.J. Tucker³, T. Baudowicz⁴  
¹Christian-Albrechts-University of Kiel, Institute of Physiology, Kiel, Germany, ²Leibniz-Institute for Molecular Pharmacology (FMP), Computational Chemistry / Drug Design, Berlin, Germany, ³Leibniz-Institute for Molecular Pharmacology (FMP), Medicinal Chemistry, Berlin, Germany, ⁴University of Oxford, Nuffield Department of Medicine, Oxford, United Kingdom, ⁵University of Oxford, Department of Physics, Oxford, United Kingdom

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15:45  
**The Effects of Adropine Application in Rats on Nutrient Intake and Water Consumption (ST2-8)**  
E. Eraslan¹, M.C. Güler¹, A. Tanyeli¹, T. Nacar¹, E. Polat¹  
¹Atatürk University, Physiology, Erzurum, Turkey, ²Atatürk University, Biochemistry, Erzurum, Turkey

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16:00 – 17:00  
**Poster Session D**

**PLEASE NOTE:**  
Posters can be mounted from 13:45, should be mounted until 15:30 and have to be removed at the end of the corresponding poster session at 18:30; otherwise they can be removed by the organizers. Fixing material will be provided and distributed in the poster area. There will be no guided poster tour but presenting authors are requested to stay at their posters during the viewing session for discussions.

**D01: Cardiac physiology**

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**Serotonergic 5-HT2B receptors in mitral valvulopathy: bone marrow mobilization of endothelial progenitors (D01-1)**  
R. Lawson¹, E. Ayme-Dietrich¹, L. Maroteaux², L. Monassier³  
¹University of Strasbourg, Department of Pharmacology, Strasbourg, France, ²University Pierre Marie Curie, Paris, France

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**Cardioprotective effect of Aqueous Viscum album extract on isoproterenol induced myocardial infarction in rats (D01-2)**  
E. Suveren¹, H.y. Cinpolat², F. Yilmaz³  
¹Abant Izzet Baysal University, Healthcare Sciences, Nursing Dept., Bolu, Turkey, ²Abant Izzet Baysal University, Clinical Biochemistry, Bolu, Turkey, ³Abant Izzet Baysal University, Clinical Pathology, Bolu, Turkey

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**Effects of the nitric oxide donor s-nitrosoglutathione and acute local ventricular stretch on isolated rabbit heart. (D01-3)**  
L. Such-Miquel¹, I. Del Canto², M. Zarzoso³, L. Brines³, C. Soler³, G. Parra³, A. Tormos³, A. Alberola³, L. Such⁴, F.J. Chorro⁵  
¹Universitat de València, Physiotherapy, Valencia, Spain, ²INCLIVA, Valencia, Spain, ³Universitat de València, Physiology, Valencia, Spain, ⁴Universitat Politécnica de València, Electronics Engineering, Valencia, Spain, ⁵Universitat de València, Medicine, Valencia, Spain

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**Extracellular diadenosine tetraphosphate affects contractility and cytoplasm calcium level via protein kinase C pathway (D01-4)**  
K. Postovsk³, N. Pakhomov³, V. Kuzmin³  
³Lomonosov Moscow State University, Department of Human and Animal Physiology, Moscow, Russian Federation, ²Pirogov Russian National Research Medical University, Department of Physiology, Moscow, Russian Federation
**Cerebral oxygenation in Metabolic Syndrome patients during mental task and muscles metaboreflex activation: a preliminary study (D01-12)**


University of Cagliari, Department of Medical Sciences and Public Health, Cagliari, Italy

**A method for isolation of functional human ventricular myocytes from fresh epicardial biopsies (D01-13)**

J. Marinovic, C. Balat1, M. Cavar1, D. Bakovic3, M. Ljubkovic1

1University of Split School of Medicine, Physiology, Split, Croatia, 2Split University Hospital, Cardiac Surgery, Split, Croatia, 3Split University Hospital, Cardiology, Split, Croatia

**D02: Vascular physiology**

**Crowding stress results in long-term vascular and behavioral alterations of in prehypertensive rats (D02-1)**

I. Bernatova, A. Puzserova, P. Balis, N. Sestakova, M. Kluknavsky

Institute of Normal and Pathological Physiology, Slovak Academy of Sciences, Bratislava, Slovakia

**Enhanced inhibition of endothelial cell proliferation and migration by multikinase inhibitor and blocking of metabolism (D02-2)**

J. Horvathova, R. Moravcik, M. Zeman

Faculty of Natural Sciences, Comenius University, Department of Animal Physiology and Ethology, Bratislava 4, Slovakia

**Cholinesterases in rat aorta (D02-3)**


Faculty of Pharmacy of Comenius University, Dpt. of Pharmacology and Toxicology, Bratislava, Slovakia

**Levamisole, a cocaine adulterant, impairs acetylcholine dependent relaxation in the rabbit renal artery (D02-4)**

S. Guerra-Ojeda, P. Marchio, M. Gimeno-Raga, M. Aldasoro, S.L. Valles, A. Jordá, C. Aldasoro, M.D. Mauricio, J.M. Vila

University of Valencia, Department of Physiology, Valencia, Spain

**Acute adrenergic effects of levamisole, a cocaine adulterant, in rabbit carotid artery (D02-5)**

S. Guerra-Ojeda, P. Marchio, M. Gimeno-Raga, M. Aldasoro, S.L. Valles, M.D. Mauricio, C. Aldasoro, A. Jordá, J.M. Vila

University of Valencia, Department of Physiology, Valencia, Spain

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**Impact of simvastatin on lipid and non-lipid biochemical risk factors in diet-induced hyperhomocisteinemia in wistar albino rats (D01-6)**

V. Jakovljevic1, T. Nikolic2, V. Zivkovic1, N. Jeremic1, J. Jeremic1, I. Stojicic1, I. Srejovic1, D. Djuric1

1Department of Physiology, Faculty of Medical Sciences, University of Kragujevac, Serbia, Kragujevac, Serbia, 2Faculty of Medical Sciences, University of Kragujevac, Deptarment of Pharmacy, Kragujevac, Serbia, 3School of Medicine, University of Belgrade, Department of Physiology, Belgrade, Serbia

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**Association of α-adrenoeceptor Polymorphisms with Cardiac Autonomic Control (D01-8)**

Z. Turianikova1, B. Czippevela1, J. Krohova1, Z. Lazarova1, Z. Snahnicanova1, Z. Lasabova1, M. Javorka1

1Comenius University, Jessenius Faculty of Medicine in Martin, BioMed, Department of Physiology, Martin, Slovakia, 2Comenius University, Jessenius Faculty of Medicine in Martin, Biomed, Department of Molecular Biology, Martin, Slovakia

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**Influence of thioacetamide administration on autonomic control of the heart atria in rats (D01-9)**

E. Mistrova1, D. Jarkovska1, M. Bludovska1, D. Kotyzova1, V. Krizkova1, T. Kubikova1, M. Chottova Dvorakova1

1Faculty of Medicine in Pilsen, Charles University, Biomedical Center, Pilsen, Czech Republic, 2Faculty of Medicine in Pilsen, Charles University, Department of Pharmacology and Toxicology, Pilsen, Czech Republic, 3Faculty of Medicine in Pilsen, Charles University, Department of Histology and Embryology, Pilsen, Czech Republic

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**Effects of Sertraline in Healthy and Damaged Rat Aorta (D01-10)**


Necmettin Erbakan University, Physiology, Konya, Turkey

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**Possible Effects of Sertraline on Human Heart Muscle Contractility: An in vitro experimental study (D01-11)**


Necmettin Erbakan University, Meram Faculty of Medicine, Physiology Department, Konya, Turkey
Protein expression of HIF-1 alpha, VEGF and cyclooxygenases in cerebral blood vessels of Sprague-Dawley rats on a short-term high salt diet (D02-6)
Z. Mihaljević1, A. Cosić1, N. Bilić-Dujmušić1, L. Prenek2, P. Engelmann2, M. Baus Lončar1, I. Drenjančević1
1Faculty of Medicine, Josip Juraj Strossmayer University of Osijek, Department of Physiology and Immunology, Osijek, Croatia, 2University of Pécs, Institute of Immunology and Biotechnology, Pécs, Hungary, 1Ruđer Bošković Institute, Department of Molecular Medicine, Zagreb, Croatia

Remodeling of coronary artery network during quercetin supplementation (D02-7)
F. Lonyi1, A. Monori-Kiss1, G. Pasti1, E. Monos1, G. Nadasy2
1Semmelweis University, Institute of Clinical Experimental Research, Budapest, Hungary, 2Semmelweis University, Department of Physiology, Budapest, Hungary

Age-related changes in endothelial function of pulmonary arteries in an experimental model of essential hypertension (D02-8)
A. Puzserova1, A. Zemancikova1, P. Balis1, J. Radosinska1, I. Bernatova1, M. Kluknavsky1, M. Kvardova1, J. Torok1
1Institute of Normal and Pathological Physiology SAS, Bratislava, Slovakia, 2Institute of Physiology, Faculty of Medicine, Comenius University, Bratislava, Slovakia, 3Institute for Heart Research SAS, Bratislava, Slovakia

Tissue oxygenation modulates muscle compression-induced hyperaemia (D02-9)
A. Messere1, W. Franco1, D. Maffiodo2, G. Ceravolo2, C. Ferraresi2, S. Roatta1
1University of Turin, Neuroscience, Turin, Italy, 2Politecnico di Torino, Mechanical and Aerospace Engineering, Torino, Italy

Different structural alterations in conduit arteries of spontaneously hypertensive rats compared to Wistar rats from the prehypertensive period to late adulthood (D02-10)
P. Kristek, M. Drobna, S. Cacanyiova
Institute of Normal and Pathological Physiology, Slovak Academy of Sciences, Bratislava, Slovakia

Quercetin supplementation moderates hypertension induced remodeling of coronary artery network (D02-11)
A. Monori-Kiss1, F. Lonyi1, L. Danics1, E. Monos1, G. Nadasy2
1Semmelweis University, Institute of Clinical Experimental Research, Budapest, Hungary, 2Semmelweis University, Department of Physiology, Budapest, Hungary

Exploring the murine microvascular response variability to hyperoxia with the wavelet transform (D02-12)
H. Silva1,2, H. Ferreira1, A.-P. Gadeau1, L. Monteiro Rodrigues1,2
1CBIOS / Universidade Lusófona, Lisboa, Portugal, 2Universidade de Lisboa / Faculty of Pharmacy, Pharmacol. Sc. Dep., Lisboa, Portugal, 3Universidade de Lisboa / Faculdade de Ciências, IEBE, Lisboa, Portugal, 4Université de Bordeaux & INSERM, U11034, Adaptation cardiovasculaire à l’ischémie, Pessac, France

D03: Molecular & cellular physiology

The Role of Palmitoylation in Glutamate-Mediated Excitotoxicity in Neurodegenerative Diseases (D03-1)
S. Wordie
University of Edinburgh, Centre for Integrative Physiology, Edinburgh, United Kingdom

Cellular Calcium Balance in Chronic Kidney Disease (D03-2)
I. Lajdovič1, V. Spustova1, A. Oksa1, D. Chorvat2, M. Morvova Jr.3, L. Sikurova1, A. Marceck Chorvatova1,4
1Slovak Medical University, Department of Clinical and Experimental Pharmacotherapy, Bratislava, Slovakia, 2International Laser Centre, Department of Biophotonics, Bratislava, Slovakia, 3Comenius University, Department of Nuclear Physic and Biophysics, Bratislava, Slovakia, 4University of Ss. Cyril and Methodius, Department of Biotechnology, Trnava, Slovakia

An Investigation into the Effects of Extracellular Acidification on Mouse Uterine Contractions; Are ASICs involved? (D03-3)
A. Almohanna, S. Wray
University of Liverpool, ITM, Liverpool, United Kingdom

The effects of the luteal cells cocultured with islet cells on cell viability and functionality in rats* (D03-4)
A. A. Yigit, G. Boyuk
Kirikkale University/Faculty of Veterinary Medicine, Physiology, Kirikkale, Turkey

Role and transcription profiles of a1 and b2 adrenergic receptors in tissues of yellow and silver European eels (D03-5)
E. Fabbrì1, P. Valoroso1, A. Kiwan, S. Franzellitti1
1University of Bologna, Bigea, Bologna, Italy, 2Univ of Bologna, Ciri, Ravenna, Italy

A new animal model for epithelial ion transport modeling (focusing on CFTR) – wild type ferrets (D03-6)
E. Tóth1, J. Maléth1, P. Pallagi1, V. Venglovecz2, Z. Rakonzay3, P. Hegyi1,5
1University of Szeged, First Department of Medicine, Szeged, Hungary, 2University of Szeged, Department of Pharmacology and Pharmacotherapy, Szeged, Hungary, 3University of Szeged, Department of Pathophysiology, Szeged, Hungary, 4University of Szeged, MTA-SZTE Momentum Translational Gastroenterology Research Group, Szeged, Hungary, 5University of Pécs, Institute for Translational Medicine/1st Department of Medicine, Pécs, Hungary

Interactions of cyclic adenosine monophosphate production and store operated Ca2+ entry (D03-7)
J. Fancza1, T. Madacsyi1, P. Hegyi2, S. Muellem, J. Maléth1
1University of Szeged, 1st department of medicine, Szeged, Hungary, 2University of Pécs, Institute for Transl. Med. & 1st Dep. of Medicine, Pécs, Hungary, 3NIDCR, NIH, Epithelial Signaling and Transport Section, Molecular Physiology and Therapeutics Branch, Bethesda, Maryland, United States
**Program / Friday**

**GENERAL INFORMATION**

**Thur:**

- Investigation of protective effect of parietin against glutamate excitotoxicity in primary cortical neuron culture (D03-8)

  G. Gundogdu1, A. Taghizadehghalehjoughi2, O. Senol3, B. Cicek4, K. A. Nalci5, A. Hacimutfuoglu4

  1Atatürk University, Medical Science / Physiology, Erzurum, Turkey, 2Atatürk University, Veterinary Medicine, Erzurum, Turkey, 3Atatürk University, Faculty of Pharmacy - Analytical Chemistry, Erzurum, Turkey, 4Atatürk University, Medical Science - Pharmacology, Erzurum, Turkey

- Association analysis between A163G and T245G gene polymorphisms of osteoprotegerin and bone mineral density in Turkish postmenopausal women (D03-9)

  O. Palabiyik1, F. Ozdemir2, B. Tokuc3, T. Sipahi4, D. Demirbag Kabayel4

  1Trakya University Faculty of Medicine, Department of Biophysics, Edirne, Turkey, 2Biruni University Faculty of Medicine, Department of Physical Medicine and Rehabilitation, Istanbul, Turkey, 3Trakya University Faculty of Medicine, Public Healthy, Faculty of Medicine, Edirne, Turkey, 4Trakya University Faculty of Medicine, Department of Physical Medicine and Rehabilitation, Edirne, Turkey

- Cell penetrating protein C inhibitor (PCI): Internalization, nuclear translocation, and potential intracellular targets (D03-10)

  M. Geiger, H. Yang, M. Furtmuller, B. Sokolikova, F. Wahnmueller

  Medical University Vienna, Department of Vascular Biology and Thrombosis Research, Vienna, Austria

- Significance of co-expression of transient receptor potential vanilloid 4 and aquaporin5 in pregnant uterine contractility in rats (D03-11)

  F. Ducza1, A. Csanyi1, V. Szoke1, Z. Tiszai1, R. Gaspar1

  1University of Szeged, Szeged, Hungary, 2University of Pécs, Pécs, Hungary

- Sex, age and weight as determinants of plasma DNA: a cross-sectional study (D03-12)

  B. Konecna1, V. Lenka1, L. Janovicova1, B. Vlkova, P. Celec1

  Comenius University, Bratislava, Slovakia

- The role of aquaporin-4 e isoform in the regulation of rapid cell volume changes in astrocytes (D03-13)

  M. Lisjak1, M. Potokar1,2, B. Rituper1, J. Jorgačevski1,2, R. Zorec1,2

  1Laboratory of Neuroendocrinology – Molecular Cell Physiology, Institute of Pathophysiology, University of Ljubljana, Faculty of Medicine, Ljubljana, Slovenia, 2Celica BIOMEDICAL, Ljubljana, Slovenia

**Program / Friday**

**D06: Respiratory physiology**

**Exogenous surfactant enriched with anti-IL-8 antibody additionally improved lung functions in experimental meconium-induced lung injury (D06-1)**

P. Mikolka, J. Kopincova, P. Kosutova, M. Kolomaznik, A. Čalkovska, D. Mokra

Comenius University, Jessenius Faculty of Medicine, Department of Physiology and Biomedical Center Martin, Martin, Slovakia

**Effects of inhaled roflumilast and tadalafil on airway reactivity and inflammation in ovalbumin-sensitized guinea pigs (D06-2)**

J. Mokry1, A. Urbanova1, M. Kertys1, I. Medvedova1, P. Mikolka2, P. Kosutova2, D. Mokra2

1Jessenius Faculty of Medicine, Comenius University, Biomedical Center Martin and Department of Pharmacology, Martin, Slovakia, 2Jessenius School of Medicine, Comenius University, Biomedical Center Martin and Department of Physiology, Martin, Slovakia

**Comparison of three types of lung-protective ventilation in an experimental model of meconium aspiration syndrome (D06-3)**

D. Mokra1, P. Mikolka1, P. Kosutova1, M. Kolomaznik1, K. Matasova2, M. Zibolen2, A. Čalkovska1

1Jessenius Faculty of Medicine, Comenius University, Biomedical Center Martin and Department of Physiology, Martin, Slovakia, 2Jessenius Faculty of Medicine, Comenius University and University Hospital Martin, Clinics of Neonatology, Martin, Slovakia

**Oxidative and inflammatory modifications in the extra-pulmonary organs associated with primary acute lung injury (D06-4)**


Comenius University, Jessenius Faculty of Medicine, Department of Physiology and Biomedical Center Martin, Martin, Slovakia

**Exogenous superoxide dismutase in the surfactant treatment of experimental meconium aspiration syndrome (D06-5)**

J. Kopincova, P. Mikolka, P. Kosutova, M. Kolomaznik, A. Čalkovska, D. Mokrá

Comenius University, Jessenius Faculty of Medicine, Department of Physiology and Biomedical Center Martin, Martin, Slovakia

**Effects of a phosphodiesterase-4 inhibitor on the inflammation and oxidative stress in an experimental model of acute lung injury (D06-6)**

P. Košútová, P. Mikolka, M. Kolomazník, A. Čalkovská, D. Mokrá

Comenius University, Jessenius Faculty of Medicine, Department of Physiology and Biomedical Center Martin, Martin, Slovakia
Exogenous surfactant reduces endotoxin-induced inflammation and oxidative stress in rat lungs (D06-7)
M. Kolomazník, I. Žila, P. Kosutova, J. Kopincová, P. Mikolka, D. Mokra, A. Calkovska
Comenius University, Jessenius Faculty of Medicine, Department of Physiology and Biomedical Center Martin, Martin, Slovakia

The effects of Simvastatin on Galectin-3 and TBARS in Lung Tissue during Endotoxemia (D06-8)
H. Yorulmaz1, G. Ates Ulucay2,3, E. Kaptan4, E. Özkök5, S. Tamer3
1Hacettepe University, Medical Faculty, Department of Physiology, Istanbul, Turkey, 2Istanbul Yeni Yuzul University, Faculty of Medicine, Department of Physiology, Istanbul, Turkey, 3Istanbul University, Istanbul Medical Faculty, Department of Physiology, Istanbul, Turkey, 4Istanbul University, Faculty of Sciences, Department of Biology, Istanbul, Turkey, 5Istanbul University, Aziz Sancar Institute of Experimental Medicine, Department of Neuroscience, Istanbul, Turkey

The Effect of Splenectomy on Lung Inflammation in Rats: The Protective Role of Curcumin (D06-9)
G. Simsek1, Y. Altmel1, V. Sozer1, P. Uysal1, M. Altan1, O.F. Sonmez1, A. Oruc1, A. Caglar1, R. Gelisgen1, C. Simsek1, H. Uzun1
1Istanbul University, Cerrahpaşa Faculty of Medicine, Physiology, Istanbul, Turkey, 2Bogazici University, Research Hospital, Surgery, Istanbul, Turkey, 3Izmir University of Technology, Biochemistry, Istanbul, Turkey, 4Acibadem University, Faculty of Medicine Atakent Hospital, Chest Diseases, Istanbul, Turkey, 5S.B.B. Bogazici University, Research Hospital, Cerrahpaşa Faculty of Medicine, Biochemistry, Istanbul, Turkey

Effect of lipopolysaccharide on alveolar epithelial type II cells (D06-10)
Z. Nová1,2, D. Mokrá1,2, E. Vidomana1, M. Kolomazníka1, H. Škovierova1, E. Halašova1, A. Calkovská1,2
1Jessenius Faculty of Medicine, Comenius University, Department of Physiology, Martin, Slovakia, 2Biomedical Center Martin, Martin, Slovakia, 3Jessenius Faculty of Medicine, Comenius University, Department of Medical Biology, Martin, Slovakia

D08: Behavioral and cognitive neuroscience

How the Emotional Status of the Emoji Characters Affect the Process of Response Activation? (D08-1)
D. D. Kovuncu, T. Ergenoglu, G. Ceylan
Mersin University, Faculty of Medicine, Department of Physiology, Mersin, Turkey

The Effects of Preceding Context on the Processes of Response Inhibition in Healthy Adults (D08-2)
G. Ceylan, D. D. Kovuncu, T. Ergenoglu
Mersin University, Faculty of Medicine, Department of Physiology, Mersin, Turkey

The efficacy of autism-risk screening of young children in slovak population sample (D08-3)
Comenius University Faculty of Medicine, Institute of Physiology, Bratislava, Slovakia

Levels of Faecal Calprotectin Correlate With Behavioural Markers in a Sample of Individuals with Autism Spectrum Disorders from Slovakia (D08-4)
Comenius University, Faculty of Medicine, Institute of Physiology, Bratislava, Slovakia

Study of Acylcarnitine Profile in Dry Blood Sample of Children with Autism Spectrum Disorders (D08-5)
M. Vidosovicova1, K. Babinska1, S. Hnilicova1, G. Addova2, R. Gorova2, I. Waczulikova2, L. Siklenkova1, G. Lakostikova1, D. Ostatnikova1
1Comenius University, Faculty of Medicine, Institute of Physiology, Bratislava, Slovakia, 2Comenius University, Faculty of Natural Sciences, Institute of Chemistry, Bratislava, Slovakia

Low dose caffeine protects from psychological stress and improves cognitive function (D08-6)
O. Kasimay Cakir1, N. Ellek1, N. Salehin1, R. Hamamci1, H. Keles1, D.G. Kayali2, D. Akakin2, M. Yuksel3, D. Orzvey3
1Marmara University, Physiology Department, Istanbul, Turkey, 2Marmara University, Histology Department, Istanbul, Turkey, 3Marmara University, Istanbul, Turkey

Long shift hours was associated with increased attention performance in pediatric registrars (D08-7)
P. Çakan1, S. Yıldız2
1Izmir University, Malatya, Turkey, 2Izmir University, Malatya, Turkey

Influence of Green tea extract and Passiflora, on heart rate and fatigue sensation, in intense mental stress (D08-8)
R.-N. Jurcau1, I.-M. Jurcau2, N.-A. Colceriu3
1“Iuliu Hatieganu” University of Medicine and Pharmacy, Pathophysiology, Cluj-Napoca, Romania, 2Emergency Clinical Hospital for Children, Pathology, Cluj-Napoca, Romania, 3University of Agricultural Sciences and Veterinary Medicine, Viticulture, Cluj-Napoca, Romania
Evaluation of the influence of Romanian product "Emotional comfort" on facial expressions impact, in acute physical stress (D08-9)
R.-N. Jurcau1, I.-M. Jurcau2, N.-A. Colceriu2
1"Iuliu Hatieganu" University of Medicine and Pharmacy, Pathophysiology, Cluj-Napoca, Romania, 2Emergency Clinical Hospital for Children, Pathology, Cluj-Napoca, Romania

D11: Blood

The effects of long-term and short-term water and food deprivation on blood antioxidant defense system (D11-1)
I. Matiulko, E. Khirazova, A. Baychumanov
Lomonosov Moscow State University, Biology, Moscow, Russian Federation

Investigation of the effects of major autohemotherapy ozone application on erythrocyte deformability and aggregation (D11-3)
I.H. Akbudak, V. Kucukatay, O. Kilic-Erkek, Y. Ozdemir, M. Bor-Kucukatay
Panukkale University Faculty of Medicine, Physiology, Denizli, Turkey

Enhancement of erythrocyte deformability after dark chocolate ingestion in healthy humans. (D11-4)
J. Radosinska1,2, M. Horvathova1, K. Frimmel1, J. Muchova1, M. Vidosovicova1, R. Vazan1, I. Bernatova1
1Faculty of Medicine, Comenius University in Bratislava, Institute of Physiology, Bratislava, Slovakia, 2Institute for Heart Research, Slovak Academy of Sciences, Bratislava, Slovakia

The effects of hyperbaric oxygen therapy on the erythrocyte osmotic deformability (Osmoscan) parameters in patients with various disorders. (D11-5)
N. Erten1, B. Mirasoglu1, M. Sinan2, M. Koc3, O. Yalcin1
1Istanbul University, Istanbul Faculty of Medicine, Physiology, Istanbul, Turkey, 2Aydin University, Faculty of Medicine, Physiology, Istanbul, Turkey, 3Istanbul University, Istanbul Faculty of Medicine, Department of Underwater and Hyperbaric Medicine, Istanbul, Turkey

In Vitro Effects of Some Pesticides on Some Human Carbonic Anhydrases (D11-6)
M. C. Guler1, E. Eraslan1, A. Tanyeli1, M. Senturk2
1Ataturk University, Physiology, Erzurum, Turkey, 2Ibrahim Cechen University, Chemistry, Agri, Turkey

Investigation of the Effects of Gossypin on in vivo, in vitro and Ischemia / Reperfusion Injured Rat Erythrocytes Carbonic Anhydrase Enzyme (D11-7)
A. Tanyeli1, E. Eraslan1, M. C. Guler1, M. Senturk2, L. Katagöz1
1Ataturk University, Physiology, Erzurum, Turkey, 2Ibrahim Cechen University, Chemistry, Agri, Turkey, 3Marmara University, Biochemistry, Istanbul, Turkey

Investigation of the Effect of Carbonic Anhydrase of Ischemia/Reperfusion Injured Rat (D11-8)
E. Eraslan1, M. C. Guler1, A. Tanyeli1, M. Senturk2
1Ataturk University, Physiology, Erzurum, Turkey, 2Ibrahim Cechen University, Chemistry, Agri, Turkey

Nurses have higher blood leucocyte counts following night-shift works (D11-9)
P. Cakan, S. Yildiz
Inonu University, Malatya, Turkey

Evaluation of effects of hyperthermic intraperitoneal chemotherapy treatment on erythrocyte deformability (D11-10)
D. Kalaycı1, A. Küçük2, F. M. Çomu3, M. Arslan4, Y. Ünal4
1Abdurrahman Yurtaslan Oncology Training and Research Hospital, Department of Anaesthesiology and Reanimation, Ankara, Turkey, 2Dumlupınar University, Medical Faculty, Department of Physiology, Kütahya, Turkey, 3Kırıkkale University, Medical Faculty, Department of Physiology, Kırıkale, Turkey, 4Gazi University, Medical Faculty, Department of Anaesthesiology and Reanimation, Ankara, Turkey

The effects of HES 130 / 0,4 application on erythrocyte deformability in ureteral obstructed rats (D11-11)
I. Günes1, A. Küçük2, F. M. Çomu3, M. Alkan4, M. Arslan4, Y. Ünal4
1Erciyes University, Medical Faculty, Department of Anesthesiology and Reanimation, Kayseri, Turkey, 2Dumlupınar University, Medical Faculty, Department of Physiology, Kütahya, Turkey, 3Kırıkkale University, Medical Faculty, Department of Physiology, Kırıkale, Turkey, 4Gazi University, Medical Faculty, Department of Anaesthesiology and Reanimation, Ankara, Turkey

IkB Kinase 2 impairs Platelet Activation (D11-12)
M. Salzmann1, M. Mussbacher1, W.C. Schrottmaier1-2, J.B. Kral-Pointner1, B. Hosel1, A. Assinger1, J.A. Schmid1
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D15: Other

The physiological reaction by interaction of human body anatomical axes results in tissue function normalization - a feature of human body axis sensa (D15-1)

M.C. Ou1,2, D. Ou3, C.C. Pang4

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Hypoglycemic and hypolipidemic effects of apple cider vinegar in Tunisian type 2 diabetic patients. (D15-2)

H. Ben Hmad1, S. Khelifi1, H. Ben Jemaa1, H. Jemmoussi1,2, F. Ben Slama1, A. Abdallah1

1Research Unit on Nutrition, Regulation of Metabolic Systems and Atherosclerosis, High School of Health Sciences, University of Tunis, Tunisia, 2Institute of Nutrition and Alimentary Technology, Obesity, Tunis, Tunisia

The BMI1 inhibitor PTC-209 is a potential compound to halt cellular growth in biliary tract cancer cells (D15-3)

C. Mayr1, A. Wagner2, M. Löffelberger2, D. Bruckner2, M. Jakab1, F. Ben3, P. Di Fazio1, M. Ocker1, D. Neureiter4, M. Pichler2, T. Kiesslich1,2

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The effect of Napabucasin on cancer stem cells in biliary tract cancer (D15-4)

M. Beyreis1, K. Hel1, H. Dobias1, M. Jakab1, M. Ritter1, D. Neureiter2, T. Kiesslich1,2, C. Mayr1,3

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The histone-modification complex G9a and its role in biliary tract cancer/ cholangiocarcinoma (D15-5)

K. Hel1, C. Mayr1,2, M. Beyreis1, M. Ritter1, M. Jakab1, E. Kieser1, T. Kiesslich1,2, D. Neureiter2

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Development and validation of body composition prediction equations for the prediction of total body water and fat-free mass in North African Arabic children (D15-7)

H. Ben Jemaa1, A. Mankai1, S. Khelifi1, R. Minaoui4, D. Ghozzi1, B. Kortobi1, F. Ben Slama1, A. Bentzari1, H. Aguenou1, K. El Kari3, A. Aouidet1

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The effect of kisspeptin fragments in late pregnant uterine function in vitro (D15-8)

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A. Kothencz, J. Hajagos-Tóth, R. Gáspár

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The effects of the amoxicillin, fosfomycin and doxycycline on the aquaporin 5 expression in rat uterus before delivery. (D15-10)

A. Csányi1, E. Ducza, J. Hajagos-Tóth, R. Gáspár

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Uterine expressions and pharmacological influences of RhoA and Rho-kinases during pregnancy in rats (D15-11)

D. Domokos1, E. Ducza2, R. Gáspár

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The Relation between Heavy Metals and Lipid Peroxidation Marker in Laryngeal Cancer (D15-12)

A. Yoldas1, S. Toplan1, D. Saribal Kanber1, O. Aslan2, B. Aydemir1

1Istanbul University Cerrahpasa Medical Faculty, Biophysics, Istanbul, Turkey, 2Istanbul University Istanbul Medical Faculty, Head and Neck Surgery, Istanbul, Turkey, 3Sakarya University Medical Faculty, Biophysics, Sakarya, Turkey

Can projects-based learning in medical biophysics create precondition for better understanding clinical teaching subjects? (D15-13)

E. Králová, M. Trnka, E. Ferencova, Z. Balazsiová

Faculty of Medicine, Comenius University, Institute of Medical Physics, Biophysics, Informatics and Telemedicine, Bratislava, Slovakia
Prevalence of underweight, thinness, overweight and obesity according to WHO standards, in a group of 100 female Tunisian students (D15-14)

R. Serairi1,2, K. Ayed2, D. Sahnoun1,2, S. Ennaifer2, S. Jameleddine2, R. Ksouri1,2

1LPAM, Tunis, Tunisia; 2Tunis El Manar, Nutrition, Tunis, Tunisia

Treatment with estrogen receptor agonist ERß, but not ERα, improves torsion-induced oxidative testis injury in rats (D15-15)


Marmara University, Istanbul, Turkey

17:00 – 18:00 / Hall C1
Plenary Lecture
Chair: S. Wray (Liverpool, United Kingdom)

Thyroid hormone determination of neural stem cell fate (PL-05)

B. Demeneix
Muséum National d'Histoire Naturelle/CNRS, Paris, France

18:00 – 18:15 / Hall C1
Closing Session

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