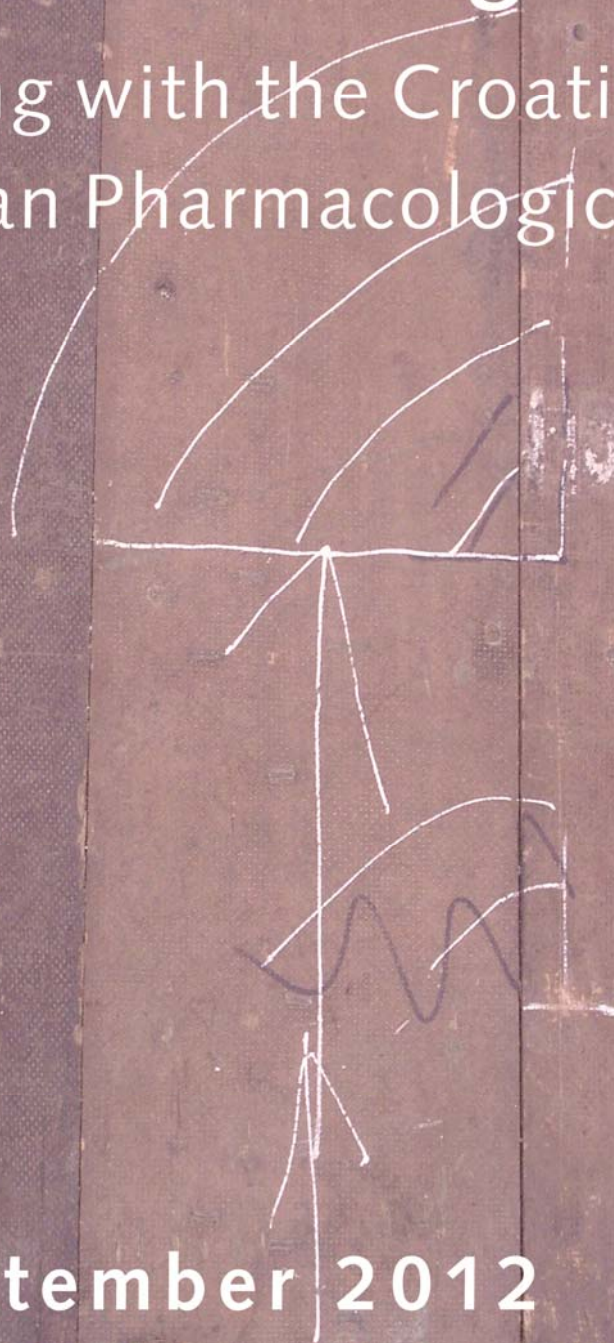


# 18th Scientific Symposium of the Austrian Pharmacological Society

Joint Meeting with the Croatian, Serbian  
and Slovenian Pharmacological Societies

**APHAR  
2012**



20–21 September 2012  
G R A Z



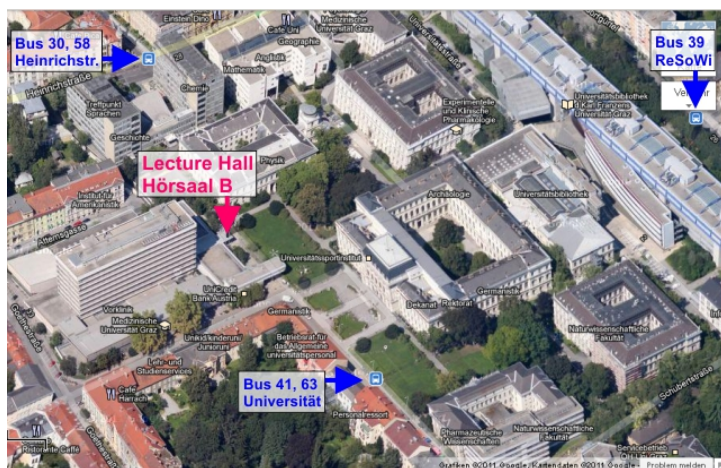
[www.aphar.at](http://www.aphar.at)

Medical University of Graz &  
Karl Franzens University Graz

# 18th APHAR Symposium Graz, Austria, 20–21 September 2012

## GENERAL INFORMATION

**Date:** 20–21 September 2012  
**Location:** Graz  
**Lecture Hall B** (HS 06.02)  
 Universitätsplatz 6, 8010 Graz, Austria



Nearest bus stop:

**Universität/Halbärthgasse** (No. 41, 63)  
**Attemsgasse/Goethestraße** (No. 41, 63)  
**Mozartgasse/Heirichstraße** (No. 30, 31)  
**Uni-ReSoWi/Geidorfgürtel** (No. 39)

**Registration:** Please pay the registration fee directly at the conference desk.

**Registration fees:**

Regular: EUR 30.00  
 Reduced: \* EUR 15.00\*

\*Reduced registration fees are applicable to students upon presentation of confirmation of student status (for confirmation form see website: <http://www.aphar.at/aphar2012.html>). Participation is free of charge for APHAR Honorary Members.

**Information for Presenting Authors:** All presentations shall be given in **English**.

**Short oral communications:**

The duration of the presentation should be 10 minutes, followed by a 5 min discussion. The lecture room is equipped for presentations with PowerPoint (PC format): Double projections are not possible.

**Poster presentations:**

The dimensions of the poster boards are: width: 98 cm, height: 170 cm. Presenting authors are requested to attend their posters during the designated poster sessions.

**Abstracts:** Abstracts are published in *BMC Pharmacology & Toxicology, 2012; 13 (Suppl. 1)*



**Presentation Prizes:** There will be prizes for **Best Oral and Best Poster presentations**. The prizes will be awarded at the end of the meeting.

**Internet Access:** **WLAN internet** access will be provided for free at the meeting location. Please bring your own laptop equipped for wireless internet connection.

**Local Organisers:** **Department of Experimental and Clinical Pharmacology** (Medical University of Graz): Peter Holzer, Thomas Griesbacher  
**Department of Pharmacognosy** (Institute of Pharmaceutical Sciences, Karl-Franzens University of Graz): Rudolf Bauer  
**Department of Pharmacology and Toxicology** (Institute of Pharmaceutical Sciences, Karl-Franzens University of Graz): Klaus Groschner

**Contact:** **Local organisation:** [thomas.griesbacher@medunigraz.at](mailto:thomas.griesbacher@medunigraz.at)  
**Austrian Pharmacological Society (APHAR):** [fischer-colbrie@i-med.ac.at](mailto:fischer-colbrie@i-med.ac.at)

# 18th APHAR Symposium Graz, Austria, 20–21 September 2012

## OPENING OF THE MEETING

- 09:00–09:15** *Opening of the Meeting*  
**Peter Holzer** (President, APHAR)

## SHORT COMMUNICATIONS 1

- 09:15–10:30** Chairs: **Klaus Groschner** (Graz)
- 09:15–09:30 **Uremia alters HDL composition and cholesterol efflux capacity**  
A15 *Michael Holzer, Ruth Birner-Grünberger, Tatjana Stojaković, Dalia El-Gamal, Veronika Binder, Christian Wadsack, Ákos Heinemann and Gunther Marsche* (Graz)
- 09:30–09:45 **Tolerance to nitroglycerin through proteasomal degradation of aldehyde dehydrogenase-2 in a genetic mouse model of ascorbate deficiency**  
A36 *Astrid Schrammel, Gerald Wölkart, Matteo Beretta, Heike Stessel, Kurt Schmidt, Nobuyo Maeda and Bernd Mayer* (Graz, Chapel Hill)
- 09:45–10:00 **A TRPC3 blocker, Pyr3, prevents stent-induced arterial remodeling**  
A85 *Sarah König, Sara Browne, Heinrich Mächler, Gerald Höfler, C. Oliver Kappe, Toma N. Glasnov, Marlen Braune, Eric Wittchow and Klaus Groschner* (Graz, Erlangen)
- 10:00–10:15 **The anti-addiction drug ibogaine inhibits cardiac ion channels: a study to assess the drug's proarrhythmic potential**  
A38 *Xaver Koenig, Michael Kovar, Lena Rubi, Ágnes K Mike, Péter Lukács, Vaibhavkumar S. Gawali, Hannes Todt, Walter Sandtner and Karlheinz Hilber* (Vienna)
- 10:15–10:30 **A mouse model to study the C-terminal regulation of Cav1.3 L-type calcium channels**  
A50 *Anja Scharinger, Florian Hechenblaikner, Gabriella Bock, Mathias Gebhart, Kai Schönig, Dusan Bartsch, Anupam Sah, Nicolas Singewald, Martina J. Sinnegger-Brauns and Jörg Striessnig* (Innsbruck, Mannheim)

## COFFEE BREAK & POSTER SESSION

- 10:30–11:00** *Coffee Break & Poster Session*  
• *Poster Tours for Poster Groups 1 / 5 / 9 / 13*

## PLENARY LECTURE I

- 11:00–11:45** Chairs: **Rudolf Bauer** (Graz), **Ljiljana Gojković-Bukarica** (Beograd)

**Alexandra K. Kiemer**  
(Department of Pharmaceutical Biology, Saarbrücken)  
*Targeting inflammatory pathologies – redress the balance of pro- and anti-inflammatory mediators*



## SHORT COMMUNICATIONS 2

- 11:45–12:30** Chairs: **Rudolf Bauer** (Graz), **Ljiljana Gojković-Bukarica** (Beograd)
- 11:45–12:00 **Influence of different *Hypericum perforatum* L. preparations on pharmacokinetic and pharmacodynamic properties of pentobarbital, diazepam and paracetamol**  
A11 *Aleksandar Rašković, Nebojša Stilinović and Momir Mikov* (Novi Sad)
- 12:00–12:15 *Last minute change:*  
*see also* **Naturally-occurring cyclic peptides with immunosuppressive properties**  
P22 (A31) *Christian W. Gruber et al.* (Vienna)
- 12:15–12:30 *Last minute change:*  
*see also* **Plant cyclotides as peptide templates for GPCR drug discovery**  
P55 (A89) *Johannes Koebach et al.* (Vienna)

*Thursday Programme continues on next page*

# 18th APHAR Symposium Graz, Austria, 20–21 September 2012

## LUNCH BREAK

12:30–14:00 *Lunch Break*

## PLENARY LECTURE II

14:00–14:45 Chairs: **Ákos Heinemann** (Graz), **Melita Šalković-Petrišić** (Zagreb)

**Eva Kostenis**

(Department of Pharmaceutical Biology, Bonn)

*Biased seven-transmembrane receptor ligands: a way to safer medicines?*



## SHORT COMMUNICATIONS 3

14:45–16:00 Chairs: **Nicolas Singewald** (Innsbruck), **Dubravka Švob Štrac** (Zagreb)

14:45–15:00 **Antidepressant-like effects of benzodiazepine site inverse agonists in the rat forced swim test**  
A1

*Janko Samardžić and Dragan I. Obradović* (Beograd)

15:00–15:15 **Histone deacetylase inhibitors, glutamatergic drugs and deep brain stimulation rescue resistance to fear extinction in a genetic mouse model**  
A42

*Nigel Whittle, Claudia Schmuckermair, Ozge Gunduz-Cinar, Markus Hauschild, Francesco Ferraguti, Andrew Holmes and Nicolas Singewald* (Innsbruck, Bethesda)

15:15–15:30 **Dopamine transporter phosphorylation site threonine 53 regulates substrate reuptake and amphetamine-stimulated efflux**  
A45

*Jae-Wong Yang, James D. Foster, Amy E. Moritz, Sathyavathi ChallaSivaKanaka, Margaret A. Smith, Marion Holy, Kyle Wilebski, Roxanne A. Vaughan and Harald H. Sitte* (Vienna, Grand Forks)

15:30–15:45 **The galanin system in depression and antidepressant treatment: focus on the locus coeruleus**  
A75

*Simone B. Sartori, Anupam Sah, Baosheng Zhao, Inga Neumann, Rainer Landgraf and Nicolas Singewald* (Innsbruck, Regensburg, Munich)

15:45–16:00 **Neuropeptide Y modulates fear and fear extinction in distinct nuclei of the amygdala**  
A87

*Ramon Tasan, Dilip Verma, Mario Mietzsch, Regine Heilbronn, Herbert Herzog and Günther Sperk* (Innsbruck, Berlin, Darlinghurst)

## COFFEE BREAK & POSTER SESSION

16:00–16:30 *Coffee Break & Poster Session*

• *Poster Tours for Poster Groups 2 / 6 / 10 / 14*

## PLENARY LECTURE III (EPHAR LECTURE)

16:30–17:15 Chairs: **Peter Holzer** (Graz), **Thomas Griesbacher** (Graz)

**Gero Miesenböck**

(Waynefleete Professor of Physiology, Oxford)

*Optogenetics and its potential for pharmacology*



The EPHAR Lecture is sponsored by the European Federation of Pharmacological Societies (with support from the British Pharmacological Society)

# 18th APHAR Symposium Graz, Austria, 20–21 September 2012

## GENERAL ASSEMBLY OF APHAR (*parallel session*)

**17:15–18:30** *General Assembly of APHAR*  
(members of APHAR only)



Teilnahmeberechtigt sind alle ordentlichen Mitglieder, sowie Vertreter der außerordentlichen Mitglieder. Stimmberechtigt sind nur die ordentlichen Mitglieder. Gem. § 9 der Statuten wird den Mitgliedern die vorläufige Tagesordnung spätestens vier Wochen vor der Generalversammlung zugeschickt. Weitere Anträge sind mindestens sieben Tage vor dem Termin der Versammlung beim Vorstand schriftlich einzureichen.

## YOUNG SCIENTISTS CAREER WORKSHOP (*parallel session*)

**17:15–18:30** Location: **Lecture Room C** (HS 06.03)

Representatives from the Pharmaceutical Industry will give an overview of job opportunities for young pharmacologists outside the classical academic setting.

Coordination and Chair: **Maria Waldhoer** (Copenhagen)

*Round Table Workshop*

*Keynotes:*

**Andrew J. Brown** (GlaxoSmithKline, Harlow, Essex, UK):  
*"Sailing out into the perfect storm"*

**Maria Waldhoer** (NovoNordisk A/S, Copenhagen, Denmark):  
*"From academia to industry – a late-in-career transition"*

**Thomas Pfeifer** (Merck Group, Austria):  
*"Science, what else...?"*

*Open questions/Answers*

*Sum up*

## RECEPTION BY THE GOVERNOR OF STYRIA

**19:00–21:30** **Reception by the Governor of Styria**

Location: **Orangerie, Burggarten**

Entrance: Erzherzog-Johann-Allee or Hofgasse 15 (Grazer Burg)



The historic Orangerie is within walking distance of the meeting venue of the 18th Scientific Symposium of APHAR:

Pass the main buildings of the university on your left and walk along Halbärthgasse, then turn right into Zinzendorfsgasse and follow it until you reach the Stadtpark. Cross Glacisstraße and enter the park, taking the path diagonally to the left (behind the bus stop), and follow this way until you reach Erzherzog-Johann-Allee. You can enter the Burggarten either through the gate in the garden wall between the Burgtor and Café Promenade (until 8pm) or from the third courtyard of the Grazer Burg (entrance Hofgasse 15).



*Participation is free of charge for registered participants of the meeting.*

*Friday Programme begins on next page*

# 18th APHAR Symposium Graz, Austria, 20–21 September 2012

## SHORT COMMUNICATIONS 4 (CLINICAL PHARMACOLOGY)

- 09:00–10:30** Chairs: **Markus Zeitlinger** (Vienna), **Darko Modun** (Split)
- 09:00–09:15 A17 **A PET microdosing study with the P-glycoprotein inhibitor tariquidar**  
*Martin Bauer, Markus Zeitlinger, Cécile Philippe, Johann Stanek, Wolfgang Wadsak, Markus Mitterhauser, Georgios Karanikas, Markus Müller and Oliver Langer* (Vienna, Seibersdorf)
- 09:15–09:30 A74 **Characterization of colistin tissue pharmacokinetics by microdialysis**  
*Peter Matzneller, William Couet, Patrice Gobin, Markus Müller and Markus Zeitlinger* (Vienna, Poitiers)
- 09:30–10:45 A62 **Does pulmonary surfactant generally affect antimicrobial activity?**  
*Richard Schwameis, Sabine Strommer, Markus Zeitlinger and Robert Saueremann* (Vienna)
- 09:45–10:10 A88 **Plasma nitrite concentration decrease after hyperoxia-induced oxidative stress in healthy humans**  
*Dark Modun, Mladen Krnić, Jonatan Vuković, Višnja Kokić, Lea Kukoč-Modun, Dimitrios Tsikas and Zeljko Dujic* (Split, Hannover)
- 10:00–10:15 A28 **The role of nitric oxide and endothelin on optic nerve head blood flow autoregulation**  
*Doreen Schmidl, Agnes Boltz, Semira Kaya, René Werkmeister, Reinhard Told, Stefan Palkovits, Gabriele Fuchsjäger-Mayrl, Gerhard Garhöfer and Leopold Schmetterer* (Vienna)
- 10:15–10:30 A82 **NKP-1339, a first-in-class anticancer drug showing mild side effects and activity in patients suffering from advanced refractory cancer**  
*Robert Trondl, Petra Heffeter, Michael A. Jakupec, Walter Berger and Bernhard K. Keppler* (Vienna)

## COFFEE BREAK & POSTER SESSION

- 10:30–11:00** Coffee Break & Poster Session  
• Poster Tours for Poster Groups 3 / 7 / 11 / 15

## PLENARY LECTURE IV

- 11:00–11:45** Chairs: **Bernd Jilma** (Vienna), **Mojca Kržan** (Ljubljana)

**Gerd A. Kullak-Ublick**  
(Division of Clinical Pharmacology and Toxicology, Zurich)

*Role of hepatic transporters in drug-induced and cholestatic liver injury*



## SHORT COMMUNICATIONS 5

- 11:45–12:15** Chairs: **Thomas Stockner** (Vienna), **Mojca Kržan** (Ljubljana)
- 11:45–12:00 A19 **Characteristics of low affinity high capacity histamine uptake into neonatal rat astrocytes**  
*Mojca Kržan, Maša Novak, Sergej Pirkmajer and Katja Perdan-Pirkmajer* (Ljubljana)
- 12:00–12:15 A84 **Axonal transport of botulinum toxin A from periphery to CNS in sensory and motor nerves**  
*Ivica Matak, Lidija Bach-Rojecky, Boris Filipović, Peter Riederer and Zdravko Lacković* (Zagreb, Würzburg)

## BUFFET LUNCH RECEPTION

- 12:15–13:30** Buffet Lunch Reception

Hosted by the Mayor of the City of Graz

Location: Foyer of ABC Lecture Hall wing (meeting venue)



# 18th APHAR Symposium Graz, Austria, 20–21 September 2012

## ASSEMBLY OF THE APHAR CLINICAL PHARMACOLOGY SECTION

**12:15–12:45** *Assembly of the Clinical Pharmacology Section of APHAR*  
(members of clinical section only)

Location: *Lecture Hall B (HS 06.02) (meeting venue)*



## PLENARY LECTURE V

**13:30–14:15** Chairs: **Ákos Heinemann** (Graz), **Katarina Černe** (Ljubljana)

**Gerd Geisslinger**

(Department of Clinical Pharmacology, Frankfurt am Main)

*Lipid signaling during nociceptive processing*



## SHORT COMMUNICATIONS 6

**14:15–15:00** Chairs: **Alexandra Koschak** (Innsbruck)

**14:15–14:30** **The atypical cannabinoid O-1602 shows antitumorigenic effects in colon cancer cells and reduces tumor growth in a colitis-associated colon cancer model**

A23

*Julia Kargl, Johannes Haybäck, Angela A. Stančić, Gunther Marsche, Ákos Heinemann and Rudolf Schicho (Graz)*

**14:30–14:45** **Which conformation does the ABC transporter P-glycoprotein adopt in the physiological membrane environment?**

A68

*Thomas Stockner, Yaprak Dönmez, Zahida Parveen and Peter Chiba (Vienna)*

**14:45–15:00** **Biophysical characterization of CaV1.4 L-type calcium channel mutants causing congenital stationary night blindness type 2 in humans**

A69

*Klaus W. Schicker, Verena Burtscher, Dagmar Knoflach, Anamika Singh, Thomas Stockner and Alexandra Koschak (Vienna, Innsbruck)*

## COFFEE BREAK & POSTER SESSION

**15:00–15:30** *Coffee Break & Poster Session*

• *Poster Tours for Poster Groups 4 / 8 / 12 / 16*

## PLENARY LECTURE VI

**15:30–16:15** Chairs: **Peter Holzer** (Graz), **Ana Sabo** (Novi Sad)

**Pierangelo Geppetti**

(Department of Preclinical and Clinical Pharmacology, Florence)

*TRPA1 and pain*



## AWARDS & PRIZES

**16:15–17:00** Chair: **Peter Holzer** (Graz)



**Hans Horst Meyer Award**  
**Heribert Konzett Award**  
**Best Oral Communication and**  
**Best Poster Presentation Prizes**  
**Travel Scholarships**

sponsored by Pfizer Austria  
sponsored by AstraZeneca Austria

sponsored by Mundipharma  
sponsored by AMGEN, Stadt Graz, GerotLannach

*End of Scientific Program*

## APHAR FAREWELL PARTY

**20:00–22:00** **APHAR Farewell Party**

Location: **De Gustibus**  
Zinzendorfsgasse 6

*Free of charge for all registered participants*



# 18th APHAR Symposium Graz, Austria, 20–21 September 2012

## POSTER PRESENTATIONS

Posters will be on display for the entire period of the meeting (Thursday–Saturday). Presenting authors are requested to attend their posters during the designated poster session and tours.

**Thursday, 20 Sept, 10:30–11:00:** Poster Groups/Tours **1 / 5 / 9 / 13**

**16:00–16:30:** Poster Groups/Tours **2 / 6 / 10 / 14**

**Friday, 21 Sept, 10:30–11:00:** Poster Groups/Tours **3 / 7 / 11 / 15**

**15:00–15:30:** Poster Groups/Tours **4 / 8 / 12 / 16**

## POSTER PRESENTATIONS

### → Group 1: Poster tour on **Thursday, 20 Sept, 10:30–11:00**

P1 (A13) **The role of CB<sub>2</sub> receptor ligands in human eosinophil function**

*Robert Frei, Eva Sturm and Ákos Heinemann (Graz)*

P2 (L7) **Title to be announced**

*Gerald P. Parzmair, Iris Red, Johanna Heinemann, Ákos Heinemann and Rudolf Schicho (Graz)*

P3 (A18) **Role of perivascular adipose tissue in endothelial dysfunction of adipose triglyceride lipase-deficient mice**

*Karoline Pail, Sarah Winkler, Gerald Wölkart, Günter Hämmerle, Rudolf Zechner, Alois Lametschwandner, Bernd Mayer and Astrid Schrammel (Graz)*

P4 (L3) **Title to be announced**

*Dalia El-Gamal, Michael Holzer, Martin Gauster, Veronika Binder and Gunther Marsche (Graz)*

### → Group 2: Poster tour on **Thursday, 20 Sept, 16:00–16:30**

P5 (A3) **Use of ACE inhibitors in Serbia in 2010**

*Boris Milijašević, Zdenko Tomić, Ana Sabo, Aleksandar Rašković and Momir Mikov (Novi Sad)*

P6 (A4) **Differences in the use of medicines for peptic ulcer and gastro-esophageal reflux disease between Serbia, Croatia and Sweden**

*Bojan Stanimirov, Karmen Stankov, Nebojša Pavlović, Milica P. Kusturica, Maja Stojančević, Ana Sabo and Momir Mikov (Novi Sad)*

P7 (A5) **Remarkably lower consumption of antidepressants in Serbia in comparison with Finland**

*Maja Stojančević, Milica P. Kusturica, Bojan Stanimirov, Nebojša Pavlović, Zdenko Tomić, Ana Sabo and Momir Mikov (Novi Sad)*

P8 (A6) **Considerable differences in the utilisation of antidiabetics between Serbia and Scandinavian countries**

*Nebojša Pavlović, Milica P. Kusturica, Bojan Stanimirov, Maja Stojančević, Ana Sabo and Momir Mikov (Novi Sad)*

P9 (A86) **Consumption of serum lipid-reducing drugs in Serbia compared with Scandinavian countries: a population-based study, 2004–2008**

*Ana Sabo, Zdenko Tomić, Nebojša Stilinović, Boris Milijašević, Momir Mikov, Saša Vukmirović and Olga Horvat (Novi Sad)*

### → Group 3: Poster tour on **Friday, 21 Sept, 10:30–11:00**

P10 (A2) **Methadone-drugs interactions: possible causes of methadone-related deaths**

*Vesna Mijatović, Isidora Samojlik, Stojan Petković and Nikša Ajduković (Novi Sad)*

P11 (A10) **Drug Information Unit – Medical faculty of Novi Sad**

*Saša Vukmirović, Ana Sabo, Zdenko Tomić, Nebojša Stilinović, Aleksandar Rašković, Boris Milijašević and Olga Horvat (Novi Sad)*

P12 (A35) **Potentially inappropriate medication use in the elderly in Montenegro**

*Marta Rolevski, Berina Kučević, Gordana Boljević, Snežana Mugoša and Momir Mikov (Podgorica, Novi Sad)*



# 18th APHAR Symposium Graz, Austria, 20–21 September 2012

## POSTER PRESENTATIONS

Posters continued:

- P13 (A39) **Adverse drug reactions and polypharmacy in cardiac patients**  
*Snežana Mučoša, Zoran Todorović and Majda Šahman-Zaimović (Podgorica, Beograd)*

→ **Group 4:** Poster tour on **Friday, 21 Sept, 15:00–15:30**

- P14 (A41) **Impaired L-type Ca<sup>2+</sup> channel function in the dystrophic heart**  
*Xaver Koenig, Xuan B. Dang, Lena Rubi, Ágnes K. Mike, Péter Lukács, René Cervenka, Vaibhavkumar S. Gawali<sup>1</sup>, Hannes Todt, Reginald E. Bittner and Karlheinz Hilber (Vienna)*
- P15 (A49) **Regulation of Cav1.3 Ca<sup>2+</sup> channels in cochlear inner hair cells**  
*Alexandra Pinggera, Niels Brandt, Gurjot Kaur, Jutta Engel and Jörg Striessnig (Vienna, Homburg)*
- P16 (A60) **A conformational change of the domain IV S6 segment of the voltage-gated sodium channel during inactivation**  
*Vaibhavkumar S. Gawali, René Cervenka, Péter Lukács, Xaver Koenig, Lena Rubi, Ágnes K. Mike, Karlheinz Hiber and Hannes Todt (Vienna)*
- P17 (A61) **Functional and physical interactions between P2Y receptors and ion channels**  
*Hend Gafar, Giri K. Chandaka and Stefan Boehm (Vienna)*
- P18 (A46) **Functional implications of K<sub>v</sub>7 channel phosphorylation**  
*Isabella Salzer, Wei-Qiang Chen, Helmut Kubista, Gert Lubec, Stefan Boehm and Jae-Won Yang (Vienna)*
- P19 (A70) **New structural determinants of charged local anaesthetic block of voltage-gated sodium channels**  
*Péter Lukács, René Cervenka, Vaibhavkumar S. Gawali, Xaver Koenig, Ágnes K. Mike, Lena Rubi, Karlheinz Hilber and Hannes Todt (Vienna)*

→ **Group 5:** Poster tour on **Thursday, 20 Sept, 10:30–11:00**

- P20 (A7) **The bile acid membrane receptor TGR5: a novel pharmacological target in the metabolic syndrome**  
*Vanesa Stepanov, Karmen Stankov and Momir Mikov (Novi Sad)*
- P21 (A47) **Environmental enrichment and visceral inflammation regulate stress-induced c-Fos and NPY expression within the dentate gyrus**  
*Florian Reichmann, Evelin Painsipp and Peter Holzer (Graz)*
- P22 (A31) **Pharmacological applications of natural peptide libraries**  
*Johannes Koehbach, Markus Muttenthaler, Carsten Gründemann and Christian W. Gruber (Vienna, La Jolla, Freiburg)*
- P23 (L9) **The role of pharmacokinetic/pharmacodynamic parameters in the optimization of antibiotic dosing**  
*Zdenko Tomić, Ana Sabo, Momir Mikov, Svetlana Goločorbin Kon and Boris Milijašević (Novi Sad)*
- P24 (A71) **Bacterial peptidoglycan primes the immune system leading to increased sickness in response to lipopolysaccharide**  
*Aitak Farzi, Evelin Painsipp and Peter Holzer (Graz)*

→ **Group 6:** Poster tour on **Thursday, 20 Sept, 16:00–16:30**

- P25 (L2) **Title to be announced**  
*Angela A. Stančić, Ákos Heinemann, Rufina Schuligoi and Rudolf Schicho (Graz)*
- P26 (A40) **Uremia-induced lysine modifications transform plasma albumin into a high-density lipoprotein receptor inhibitor**  
*Veronika Binder, Michael Holzer, Dalia El-Gamal, Sabine Dirnberger and Gunther Marsche (Graz)*
- P27 (A64) **Statins impact on epigenetics of tumor cells**  
*Murtaza Kulaksiz and Martin Hohenegger (Vienna)*

continued on next page

# 18th APHAR Symposium Graz, Austria, 20–21 September 2012

## POSTER PRESENTATIONS

Posters continued:

- P28 (A66) **IL-6-mediated migration of human metastatic melanoma cells is reduced by simvastatin treatment**  
*Christine Wasinger, Christoph Minichsdorfer and Martin Hohenegger (Vienna)*
- P29 (A51) **Statins reduce endogenous dolichol levels in the neuroblastoma cell line SH-SY5Y**  
*Bihter Atil, Evelyn Sieczkowski and Martin Hohenegger (Ljubljana)*

### → Group 7: Poster tour on Friday, 21 Sept, 10:30–11:00

- P30 (A8) **The GABA<sub>A</sub> receptor  $\alpha$ 2 subunit gene (GABRA2) is associated with alcohol-related behavior**  
*Dubravka Švob Štrac, Gordana Nedić, Matea Nikolac, Korona Nenadić Šviglin, Dorotea Mück-Šeler and Nela Pivac (Zagreb)*
- P31 (A30) **The effect of chronic fluoxetine administration on anxiety-like behavior and expression of 5-HT-related proteins in rats with constitutively altered 5-HT homeostasis**  
*Maja Kesić, Jasminka Štefulj, Gordana Mokrović and Lipa Čičin-Šain (Zagreb)*
- P32 (A44) **Neurobiological correlates of successful deep brain stimulation in a mouse model of high trait affect**  
*Claudia Schmuckermair, Stefano Gaburro, Anupam Sah, Rainer Landgraf, Simone B. Sartori and Nicolas Singewald (Innsbruck, Münster, München)*
- P33 (A58) **Peptide YY and neuropeptide Y in regulation of pain and spatial learning and memory**  
*Piyush Jain\*, Ahmet Hassan\*, Herbert Herzog and Peter Holzer (\*contributed equally) (Graz)*
- P34 (A65) **Therapeutic potential of a novel multifunctional iron chelator on cognitive deficits and insulin degrading enzyme expression in a rat model of sporadic Alzheimer's disease**  
*Ana Knezović, Marina Knapić, Jelena Osmanović-Barilar, Silvia Mandel, Moussa Youdim, Peter Riederer and Melita Šalković-Petrišić (Zagreb, Haifa, Würzburg)*

### → Group 8: Poster tour on Friday, 21 Sept, 15:00–15:30

- P35 (A33) **Influence of the 14-alkoxy group and the substitution in position 5 in N-methyl-14-alkoxymorphinan-6-ones on *in vitro* and *in vivo* pharmacological activities**  
*Tanila Ben Haddou, Roberta Lattanzi, Lucia Negri, Helmut Schmidhammer and Mariana Spetea (Innsbruck, Rome)*
- P36 (A26) **Understanding subtype-selective allosteric modulation of GABA<sub>A</sub> receptors**  
*Roshan Puthenkalam, Zdravko Varagić, Pantea Mirheydari, Werner Sieghart and Margot Ernst (Vienna)*
- P37 (A90) **Antiepileptic activity and subtype-selective action of flupirtine at GABA<sub>A</sub> receptors**  
*Mirnes Bajrić, Felicia Klinger, Ulla Schandl, Helmut Kubista and Stefan Boehm (Vienna)*
- P38 (A43) **Discovery and biological evaluation of a diphenethylamine derivative (HS665), a highly potent and selective  $\kappa$  opioid receptor agonist**  
*Mariana Spetea, Ilona P. Berzetei-Gurske, Elena Guerrieri, Jayapalreddy Mallareddy, Géza Tóth and Helmut Schmidhammer (Innsbruck, Menlo Park, Szeged)*
- P39 (A91) **Activation of kappa opioid receptors reduces seizure activity in a dose-dependent way**  
*Luca Zangrandi and Christoph Schwarzer (Innsbruck)*

### → Group 9: Poster tour on Thursday, 20 Sept, 10:30–11:00

- P40 (A16) **Alloxan-induced diabetes alters rat common carotid artery response to adenosine**  
*Miroslav Radenković, Marko Stojanović, Radmila Janković, Mirko Topalović and Milica Stojiljković (Beograd)*
- P41 (A24) **The relaxation of non-pregnant rat myometrium by resveratrol with participation of the NO–cGMP pathway**  
*Radmila B. Novaković, Dragana D. Protić, Nebojša V. Radunović, Vladimir I. Kanjuh and Ljiljana C. Gojković-Bukarica (Beograd)*

# 18th APHAR Symposium Graz, Austria, 20–21 September 2012

## POSTER PRESENTATIONS

Posters continued:

- P42 (A21) **Bioactivation of nitroglycerin is determined by the subcellular localization of aldehyde dehydrogenase-2**  
*Regina Neubauer, Corina Madreiter, Matteo Beretta, Gerald Wölkart, Kurt Schmidt, Astrid Schrammel and Bernd Mayer (Graz)*
- P43 (A37) **Vascular bioactivation of nitroglycerin: reaction mechanism revealed by crystal structure of aldehyde dehydrogenase-2**  
*Barbara S. Lang, Antonius C. F. Gorren, Gustav Oberdorfer, M. Verena Wenzl, Cristina M. Furdui, Leslie B. Poole, Bernd Mayer and Karl Gruber (Graz, Winston-Salem)*
- P44 (A22) **Nitric oxide signaling in adipose triglyceride lipase-deficient microvascular endothelial cells**  
*Marion Mussbacher, Sarah Winkler, Günter Hämmerle, Rudolf Zechner, Bernd Mayer and Astrid Schrammel (Graz)*

→ **Group 10:** Poster tour on **Thursday, 20 Sept, 16:00–16:30**

- P45 (A14) **Laropiprant attenuates EP<sub>3</sub> and TP prostanoid receptor-mediated thrombus formation**  
*Sonia Philipose, Viktória Kónya, Mirjana Lazarević, Lisa M. Pasterk, Gunther Marsche, Sasa Frank, Bernhard A. Peskar, Ákos Heinemann and Rufina Schuligoi (Graz)*
- P46 (A20) **The role of PGE<sub>2</sub> EP<sub>4</sub> receptors in the regulation of endothelial barrier function**  
*Nora Kampitsch, Viktória Kónya, Rufina Schuligoi and Ákos Heinemann (Graz)*
- P47 (L1) **Title to be announced**  
*Safina Gadeock, Rufina Schuligoi, Ákos Heinemann and Rudolf Schicho (Graz)*
- P48(L4) **Title to be announced**  
*Katharina Jandl, Zoltán Bálint, Gerald P. Parzmair, Eva Sturm, Viktória Kónya and Ákos Heinemann (Graz)*
- P49 (L5) **Title to be announced**  
*Miriam Peinhaupt, Miriam Sedej and Ákos Heinemann (Graz)*
- P50 (L6) **Title to be announced**  
*Anna Theiler, Wolfgang Platzer, Rufina Schuligoi, Ákos Heinemann and Viktória Kónya (Graz)*

→ **Group 11:** Poster tour on **Friday, 21 Sept, 10:30–11:00**

- P51 (A81) **Restricted collision coupling of the adenosine A<sub>2A</sub> receptor is due to its agonist-induced confinement in the membrane**  
*Patrick Thurner, Simon Keuerleber, Ingrid Gsandtner, Christoph Gruber, Michael Freissmuth and Jürgen Zezula (Vienna)*
- P52 (A63) **Pharmacochaperoning of the ER-retained A<sub>1</sub> adenosine receptor**  
*Justyna Kusek, Christian W. Gruber, Christian Nanoff and Michael Freissmuth (Vienna)*
- P53 (L8) **Title to be announced**  
*Georg Dorn, Ákos Heinemann, Maria Waldhoer and Julia Kargl (Graz)*
- P54 (A83) **TRPC3 overexpression promotes angiotensin II-induced cardiac dysfunction**  
*Bernhard Doleschal, Stefan Wolf, Marie-Sophie Huber, Gerald Wölkart, Gudrun Antoons and Klaus Groschner (Graz)*

→ **Group 12:** Poster tour on **Friday, 21 Sept, 15:00–15:30**

- P55 (A89) **Peptidomics screening for the discovery of uterotonic plant peptides**  
*Johannes Koehbach, Alfred F. Attah, Margaret O'Brien, Michael Freissmuth and Christian W. Gruber (Vienna, Ibadan, Galway)*
- P56 (A79) **Activity of semicarbazide-sensitive amine oxidase in guinea-pig tissues is not affected by metformin**  
*Katja Lukan and Simona Rajtar Osredkar (Ljubljana)*

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## POSTER PRESENTATIONS

Posters continued:

- P 57 (A34) **Plasma levels of an atropine/scopolamine mixture following ingestion of low doses as food contaminant**  
*Lucija Perharić, Gordana Koželj and Lovro Stanovnik* (Ljubljana)
- P58 (A29) **The role of potassium channels in the mechanism of vasodilatation of human umbilical vein induced by resveratrol**  
*Dragana D. Protić, Radmila B. Novaković, Svetlana Spremović-Radjenović, Nebojša V. Radunović, Helmut Heinle, Vladimir I. Kanjuh and Ljiljana C. Gojković-Bukarica* (Beograd, Tübingen)
- P59 (A25) **Improving the low solubility of resveratrol**  
*Milica T. Atanacković, Ljiljana C. Gojković-Bukarica and Jelena M. Cvejić* (Novi Sad, Beograd)

### → Group 13: Poster tour on Thursday, 21 Sept, 10:30–11:00

- P60 (A9) **Protective effect of silymarin on doxorubicin-induced cardiotoxicity in rats**  
*Nebojša Stilinović, Aleksandar Rašković, Momir Mikov, Saša Vukmirović and Boris Milijašević* (Novi Sad)
- P61 (A12) **Acetaminophen changes paracellular transport activity through regulation of the tight junction protein ZO-1 and its tyrosine phosphorylation in an intestinal barrier model**  
*Mohammad R. Lornejad-Schäfer, Christine Schäfer and Klaus R. Schröder* (Linz)
- P62 (A77) **The influence of alpha-melanocortin enantiomers on acetaminophen-induced hepatitis in mice**  
*Petra Turčić, Karlo Houra, Mirna Bradamante, Paško Konjevoda, Tomislav Kelava and Nikola Stambuk* (Zagreb, Zabok)
- P63 (A72) **Soluble osteopontin concentrations in serum and ascites of women with advanced serous ovarian cancer**  
*Katarina Černe, Ana Bačnik, Katarina Galič-Jerman and Borut Kobal* (Ljubljana)
- P64 (A67) **Pharmacological stimulation of murine and human hematopoietic stem cells**  
*Christian Bergmayr, Christian Balasz, Zarzar Kazemi, Filza Hussain, Thomas Bauer, Herbert Strobl, Peter Selzer, Wolfgang Strohmaier, Michael Freissmuth and Eva Zebedin-Brandl* (Vienna, Junglinster)

### → Group 14: Poster tour on Thursday, 21 Sept, 16:00–16:30

- P65 (A73) **Expression of organic cation transporter 3 (SLC22A3) and plasma membrane monoamine transporter (SLC29A4) in human umbilical vein endothelial cells and their relevance for histamine uptake**  
*Polonca Ferk, Metoda Lipnik-Štangelj, Mojca Kržan and Katarina Černe* (Ljubljana)
- P66 (A54) **The N-terminus acts as a lever to support amphetamine-induced substrate efflux by the serotonin transporter**  
*Sonja Sucić, Carina Kern, Harald H. Sitte and Michael Freissmuth* (Vienna)
- P67 (A55) **How does the carboxyl terminus assist folding and ER export of the serotonin transporter?**  
*Ali El-Kasaby, Florian Koban, Michael Freissmuth and Sonja Sucić* (Vienna)
- P68 (A56) **Calmodulin kinase II regulates amphetamine-induced reverse transport in dopamine and serotonin transporters**  
*Thomas Steinkellner, Therese Montgomery, Jae-Won Yang, Matthias Rickhag, Sonja Sucić, Ype Elgersma, Oliver Kudlacek, Michael Freissmuth, Ulrik Gether and Harald H. Sitte* (Vienna, Dublin, Copenhagen, Rotterdam)

### → Group 15: Poster tour on Friday, 21 Sept, 10:30–11:00

- P69 (A76) **ABC transporters of the liver fluke Fasciola hepatica**  
*Oliver Kudlacek, Yaprak Dönmez and Thomas Stockner* (Vienna)
- P70 (A78) **The NBD-NBD interface is not the sole determinant for transport in ABC transporters**  
*Yaprak Dönmez, Zahida Parveen, Peter Chiba and Thomas Stockner* (Vienna)

# 18th APHAR Symposium Graz, Austria, 20–21 September 2012

## POSTER PRESENTATIONS

Posters continued:

- P71 (A53) **Decrypting structural and functional changes in LeuTAa at atomic level employing LRET**  
*Azmat Sohail, Simon Bulling, Peggy Stolt-Bergner, Oliver Kudlacek, Gerhard F. Ecker, Michael Freissmuth, Thomas Stockner, Harald H. Sitte and Walter Sandtner (Vienna)*
- P72 (A59) **Identifying forces that stabilize the oligomeric state of bacterial homologs of neurotransmitter transporters**  
*Kumaresan Jayaraman, Azmat Sohail, Michael Freissmuth, Harald H. Sitte and Thomas Stockner (Vienna)*

→ **Group 16:** Poster tour on **Friday, 21 Sept, 15:00–15:30**

- P73 (A32) **Low affinity histamine uptake into neonatal rat astrocytes does not involve OCT**  
*Vesna Terbut, Maša Novak, Katja Perdan-Pirkmajer, Sergej Pirkmajer and Mojza Kržan (Ljubljana)*
- P74 (A80) **Real-time uptake of fluorescent ASP+ via the organic cation transporter 3**  
*Felix P. Mayer, Diethart Schmid, Marion Holy, Jae-Won Yang, Isabella Salzer, Stefan Boehm, Peter Chiba and Harald H. Sitte (Vienna)*
- P75 (A52) **LRET-based distance measurements in the mammalian glutamate transporter EAAT3**  
*Kusumika Saha, SanthoshKannan Venkatesan, Azmat Sohail, Thomas Stockner, Simon Bulling, Gerhard F. Ecker, Harald H. Sitte and Walter Sandtner (Vienna)*
- P76 (A57) **Deciphering structural rearrangements during transport process in the bacterial transporter GltPh, homolog to mammalian glutamate transporter**  
*SanthoshKannan Venkatesan, Azmat Sohail, Walter Sandtner, Thomas Stockner, Gerhard F. Ecker and Harald H. Sitte (Vienna)*

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