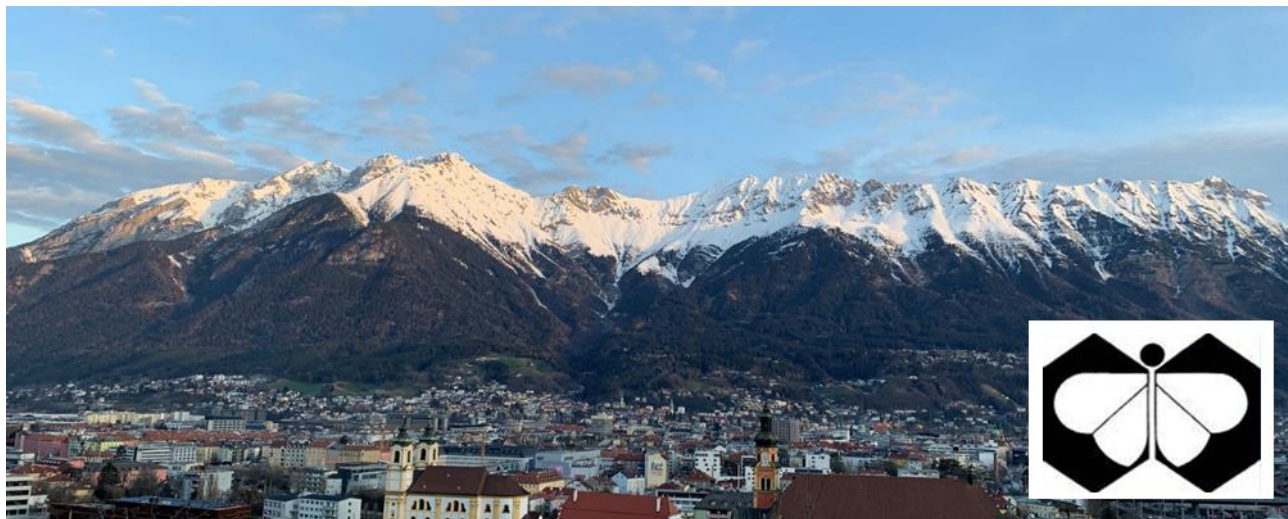




41st International Winter-Workshop on Clinical, Chemical, and Biochemical Aspects of Pteridines

February 5th – 7th, 2025

Ágnes-Heller-Haus, Innsbruck, Austria

DFP ID 1008865

International Society of Pteridinology (ISP)

in collaboration with

**Austrian Society of Laboratory Medicine and Clinical Chemistry (ÖGLMKC),
Verein zur Förderung von Forschung und Weiterbildung in Infektiologie und
Immunologie an der Medizinischen Universität Innsbruck,
Medical University of Innsbruck - Institute of Medical Biochemistry,
Leopold-Franzens University of Innsbruck - Department of Pharmacognosy**



CONFERENCE ORGANISATION

- Workshop managers:** Johanna Gostner (Innsbruck), johanna.gostner@i-med.ac.at
Simone Moser (Innsbruck), simone.moser@uibk.ac.at
- Scientific committee:** Thomas Felder (Salzburg), Johanna Gostner (Innsbruck),
Andrea Griesmacher (Innsbruck), Bohuslav Melichar (Olomouc),
Simone Moser (Innsbruck), Günter Weiss (Innsbruck)
- Honorary members:** Dietmar Fuchs (Innsbruck), Gilbert Reibnegger (Graz),
Vojtech Parrák (Bratislava)
- Local organizing team:** Lucia Parráková, Pablo-Monfort Lanzas, Cornelia Karg, Michael
Zwerger (Innsbruck)

Meeting Site

Ágnes-Heller-Haus, University of Innsbruck, Seminar Room 14 (1st floor)
University of Innsbruck, Innrain 52a, Innsbruck, Austria

Scientific Goal

The purpose of the workshop is to bring together researchers and clinicians engaged or interested in a wide spectrum of issues covering chemistry, enzymology, transport and clinical aspects of pteridines and folates and related topics.

The Workshop will begin on February 05th at 12:00, ending on February 07th at noon.

Topics of the scientific program/sessions

neopterin, biopterin, folate, other pteridines, tryptophan, phenylalanine, related biogenic amines, iron, homocysteine, indoleamine 2,3-dioxygenase-1, nitric oxide synthases, mediators of inflammation, redox-systems, clinical immunology, immunology, biochemistry, clinical biochemistry, metabolic disorders, microbiome, nutrition, chemistry, analysis, laboratory diagnosis, biology, molecular biology, phytomedicine, toxicology

Language: The official conference language is English.

Presentation Format: Oral presentations and/or poster (5 min poster presentation)

!!!NEW!!!

Short Talk: 15 minutes + 5 minutes for discussion.

Keynote Lectures: 25 minutes + 5 minutes for discussion.

Publication

Abstracts will be published in PTERIDINES (by deGruyter Publishers; IF 0.5).

Contributors are invited to submit original articles of their work to the Journal PTERIDINES. Papers based on conference contributions will be subjected to a rapid reviewing process.

On-line submission via <http://www.degruyter.com/view/j/pteridines>

DFP

ID 1008865; credits: Wednesday:5, Thursday: 7, Friday: 5, total: 17

Wednesday, February 05th, 2025 – afternoon

12:00 – 13:00	Registration and Get-Together-Coffee
13:00 – 14:00	Opening Ceremony
13:00 – 13:10	Opening remarks Gostner JM, Moser S (Innsbruck, Austria)
13:10 – 13:30	What it is all about: neopterin-biopterin-tryptophan in biomedicine Gostner JM (Innsbruck, Austria)
13:30 – 13:50	From pterins to bilins – an emerging compound class Moser S (Innsbruck, Austria)
13:50 – 14:00	Overview of topics Moser S (Innsbruck, Austria)
14:00 – 14:30	Opening Lecture <i>Chair: Hübner K (Innsbruck, Austria)</i>
14:00 – 14:30 30 min	Oxygen-dependent regulation of NAD and hypoxia conditioning: a review Burtscher J, Kopp M (Innsbruck, Austria)
14:30 – 15:30	Session 1: Biomarkers, Behaviour, Psychiatry <i>Chair: Hübner K (Innsbruck, Austria)</i>
14:30 – 14:50	Social stress and feather pecking behaviour alter tyrosine, phenylalanine, and kynurenine concentrations in the plasma of laying hens Nicklas AL, Gostner JM, Parrakova L, Karg CA, van Staaveren N, Edwards AM, Shoveller AK, Forsythe P, Harlander A (Guleph, Canada)
14:50 – 15:10	Multi-method analysis of a natural sickness period: An integrative single case study Schubert C, Seizer L, Lauby NCS, Fuchs D (Innsbruck, Austria)
15:10 – 15:30	Neuroimmune profiling in the EULAST cohort – associations of immunometabolic markers and psychopathology Wilgermein C, Gostner JM, Hofer S, Karg CA, Post F, Hackl H, Sperner-Unterweger B, Hofer A (Innsbruck, Austria)
15:30 – 16:00	Coffee Break
16:00 – 17:00	Session 2: Toxicology <i>Chair: Ganzera M (Innsbruck, Austria)</i>
16:00 – 16:20	Impact of PFAS on neopterin formation and tryptophan breakdown in human PBMCs Kernbichler DE, Parrakova L, Karg CA, Felder TK, Siller A, Schennach H, Uhl M, Gostner JM (Innsbruck, Austria)
16:20 – 16:40	<i>In vitro</i> characterization of the immunotoxicity of BPA and BPA alternatives using pathway-level dose-response modeling with DoseRider Monfort-Lanzas P, Parrakova L, Ruiz Catalan O, Siller A, Schennach H, Karg CA, Hackl H *, Gostner JM* (Innsbruck, Austria), * equal contribution
16:40 – 17:00	Investigation of the UV protective potential of secondary metabolites from natural sources in human corneal cells Karg CA, Hammerle F, Lückenbach J, Zwerger M, Moser S, Ganzera M, Gostner JM (Innsbruck, Austria)

Thursday, February 06th, 2025 – morning

09:00 – 10:30	Session 3: From Neopterin to Chronobiology <i>Chair: Moser S (Innsbruck, Austria)</i>
09:00 – 09:30 30 min	Laboratory medicine in palliative care: Is there a role for neopterin and related biomarkers? Melichar B (Olomouc, Czech Republic)
09:30 – 09:50	A preliminary study on neopterin, tryptophan and kynurenine levels of human colostrum samples Girgin G, Sanajou S, Meric-Deliveli S, Baydar T (Ankara, Turkey)
09:50 – 10:10	A validated HPLC-MS/MS method for the quantification of melatonin in human breast milk samples Allmer K, Pichler J, Lanzinger E, Häusler S, Felder TK (Salzburg, Austria)
10:10 – 10:30	Tryptophan levels after chronotherapeutic Forest Environment trial or Vital Sky light or Standard Care on the ICU after cardiac surgery Bengesser S, Gostner JM, Zwerger M, Stross T, Pilz R, Miksch E, Pfeiffer A, Skacel P, Dalkner N, Reininghaus E, Lukic E, Schörghuber M, Wagner-Skacel J & ICU Pflorgeteam (Graz, Austria)
10:30 – 11:00	Coffee Break
11:00 – 12:00	Session 4: Mixed Topics <i>Chair: Felder TK (Salzburg, Austria)</i>
11:00 – 11:20	Development of new fluorescent iridium(III) complexes as promising agents in photodynamic therapy Quraishi E, Gao B, Kuan SL, Weil T, Opatz T (Mainz, Germany)
11:20 – 11:40	Virtual screening of pesticides for potential Janus kinase inhibition Fischer F, Tremml V, Schuster D (Salzburg, Austria)
11:40 – 12:00	Kinase inhibitors induce off-target effects on mitochondrial bioenergetics in cancer cell models Strich S, Feichtner A, Schwaighofer S, Doerrier C, Schmitt S, Gnaiger E, Hengst L, Stefan E, Torres-Quesada O (Innsbruck, Austria)
12:00 – 13:00	Lunch Break

Thursday, February 06th, 2025 –afternoon

13:00 – 14:20	Session 5: Post-Infectious Inflammatory and Metabolic Alterations <i>Chair: Melichar B (Olomouc, Czech Republic)</i>
13:00 – 13:20	Biopsychronology 2.0: Taking a closer look at blood of Long-COVID patients Hermann M, Lisch C, Gerth R, Marth T, Wick G, Kurz K, Fries D, Wick N (Innsbruck, Austria)
13:20 – 13:40	Therapeutic efficacy of inhaled N-chlorotaurine in a mouse model of <i>Aspergillus fumigatus</i> pneumonia Speth C, Rambach G, Windisch A, Falbesoner N, Schatz C, Schäfer G, Nagl M (Innsbruck Austria)
13:40 – 14:00	Metabolome analyses in patients with post-acute infectious syndromes (PAIS) Wagner K (Innsbruck, Austria)
14:00 – 14:20	Urine metabolome analyses, inflammation parameters and other potential biomarkers in patients with post-acute infection syndromes (PAIS) Kurz K (Innsbruck and Lans, Austria)
14:20 – 14:50	Coffee Break
14:50 – 16:10	Session 6: Infection and Immunity <i>Chair: Pellegrin K (Portsmouth, VA), Fuchs D(Innsbruck, Austria)</i>
14:50 – 15:10	Pilot study of autoantibodies in patients with Long COVID Rappl P, Neupärtl D, Schütz B, Gonos S, Engl S, Löffler-Ragg J, Weiss G, Kurz K (Innsbruck, Austria)
15:10 – 15:30	Iron and infection. New insights. Portnaia I, Hoffmann A, Demetz E, Volani C, Seifert M, Weiss G (Innsbruck, Austria)
15:30 – 15:50	Deletion of tumour necrosis factor in mice leads to promotion of <i>Salmonella enterica</i> serovar Typhimurium multiplication by modulating macrophage iron homeostasis. Brigo N, Pfeifhofer-Obermair C, Tymoszuk P, Grubwieser P, Engl S, Seifert M, Bumann D, Schleicher U, Bogdan C, Weiss G (Innsbruck, Austria)
15:50 – 16:10	PCBP2-dependent iron trafficking controls <i>Salmonella</i> infection in macrophages Grander M, Haschka D, Weiss G (Innsbruck, Austria)
16:10 – 16:20	Group Picture
16:10 – 17:40	ISP General Assembly

Friday, February 07th, 2025 – morning

09:00 – 10:10	Tryptophan Metabolism <i>Chair: Gostner JM (Innsbruck, Austria)</i>
09:00 – 09:30 30min	Tryptophan metabolism in health and disease Opitz C (Heidelberg, Germany)
09:30 – 09:50	The tryptophan-kynurenine pathway- therapeutic strategy for neuroprotection in tauopathies Khiratkar K, Majerova P, Kovac A, Vécsei L, Milata V, James K (Bratislava, Slovakia)
09:50 – 10:10	Kynurenine pathway, neopterin, heavy metals and trace elements in electronic waste recycling industry workers Muhammetli S, Demir C, Sanajou S, Girgin G, Baydar T (Ankara, Turkey)
10:10 – 11:10	Poster and Networking Session
11:10 – 11:40	Coffee Break
11:40 – 12:40	Session 7: Bilins in Phytochemistry <i>Chair: Karg CA (Innsbruck, Austria)</i>
11:40 – 12:00	From senescence to bioactivity: exploring phyllobilins in papaya leaves Elvert C, Zhigang R, Gostner JM, Koeberle A, Hammerle F, Karg CA, O Adepiti A, Moser S (Innsbruck, Austria)
12:00 – 12:20	Natural tetrapyrroles and cardiovascular health: Exploring the atheroprotective potential of bilirubin and phyllobilins Kirchweiger B, Roggio AP, Verilli G, Frei P, Völkl M, Karg CA, Moser S, Fürst R (Munich, Germany)
12:20 – 12:40	Niche techniques in modern pharmacognosy – taking FCPC as an example Zwerger MJ, Gostner JM, Moser S, Ganzera M (Innsbruck, Austria)
12:40 – 13:00	Blair-Curtius-Pfleiderer-Wachter AWARD <i>Parrak V (Bratislava, Slovakia)</i>
13:00 – 13:20	Concluding remarks Gostner JM, Moser S (Innsbruck, Austria)

Poster

For the first time at this year's workshop, there will also be the opportunity to present a poster, either as a poster only or in addition to the lecture.

No	Poster (P)/ Poster and Talk (P&T)	Title/Authors
1	P	Tetrahydrobiopterin: A crucial mediator in colitis-associated abdominal pain Staats Pires A, Lenfers Tuner B, da Luz Scheffer D, de Souza Menegassi V, Marques Rizzattii S, Niero L, Guillemin GJ, Latini A (Florianopolis, Brazil)
2	P	<i>In silico</i> study of natural antioxidants Buglak A (St. Petersburg, Russia)
3	P	Activation of IDO-1 is a key event that drives immunotoxicity Parrakova L, Ruiz Catalan O, Monfort-Lanzas P, Fuchs D, Gostner JM (Innsbruck, Austria)
4	P & T	The tryptophan-kynurenine pathway – Therapeutic strategy for neuroprotection in tauopathies Khiratkar K, Majerova P, Kovac A, Vécsei L, Milata V, James K (Bratislava, Slovakia)
5	P & T	Neuroimmune profiling in the EULAST cohort – associations of immunometabolic markers and psychopathology Wilgermein C, Gostner JM, Hofer S, Karg CA, Post F, Hackl H, Sperner-Unterweger B, Hofer A (Innsbruck, Austria)
6	P & T	Iron and infection. New insights. Portnaia I, Hoffmann A, Demetz E, Volani C, Seifert M, Weiss G (Innsbruck, Austria)
7	P & T	Virtual screening of pesticides for potential Janus kinase inhibition Fischer F, Tremml V, Schuster D (Salzburg, Austria)
8	P & T	Kynurenine pathway, neopterin, heavy metals and trace elements in electronic waste recycling industry workers Muhammetli S, Demir C, Sanajou S, Girgin G, Baydar T (Ankara, Turkey)