Wednesday 24th April 2024

Venue: Jena University Hospital, Am Klinikum 1 (Lobeda), Lecture Hall 1

From 11:00	Registration at the reception
onwards	(Foyer area)
12:00 – 12:30	Opening Ceremony Opening remark by ISTRY President, Prof. Dr. Florian Zepf
12:30 – 13:30	Plenary Session 1 Ellen Nollen (University of Groningen, Netherlands) Tryptophan metabolism as a modifier of aging and age-related diseases: A worm's perspective
13:30 – 14:00	Coffee Break (Foyer area)
14:00 - 15:30	Symposium 1: Cancer Biology – Part 1 of 2 Chairs: Laura Santambrogio (USA) & Benjamin Heng (Australia) Speaker 1: Ahmed Sadik (Germany) Tryptophan metabolic trajectories regulate AHR activation profiles. Speaker 2: Shivani Krishnamurthy (Australia) Hiding in plain sight - Understanding the role of tryptophan metabolism in Hepatocellular Carcinoma. Speaker 3: Alessa L. Henneberg (Germany) Effects of the Trp-degrading enzyme IL4I1 in cancer and beyond. Speaker 4: Charlise Basson (South Africa) An in vitro investigation and mathematical modelling of L-kynurenine and quinolinic acid on B16 F10 melanoma cell survival.
15:30 – 16:00	Coffee Break (Foyer area)
16:00 – 17:00	Symposium 2: Analytical Methods for Detection of TRP & Related Metabolites Chairs: Johanna Gostner (Austria) & Edwin Lim (Australia) Speaker 1: Sonia Bustamante (Australia) An integrated multi-omics approach identifies putative biomarkers of the "Tryptophan metabolic hub" as predictors of inflammatory disease course. Speaker 2: Francisco Yanqui-Rivera (Germany) Unraveling tryptophan's fate in glioblastoma metabolism from tracing studies. Speaker 3: Svetlana Gramatiuk (Ukraine) Using phosphorescence in clinical oncology as an early prognostic test in
17:00 – 19:00	Welcome Reception
	(Foyer area)

Thursday 25th April 2024

Venue: Jena University Hospital, Am Klinikum 1 (Lobeda), Lecture Hall 1

08:00 – 10:00 Symposium 3: Lifestyle Factors: Diet and Nutrition

Chairs: Tsutomu Fukuwatari (Japan) & Stefano Comai (Italy)

Speaker 1: Philipp Zimmer (Germany)

Exercise is Medicine - Spotlight on KP modulation.

Speaker 2: Niklas Joisten (Germany)

Targeted tryptophan metabolomics reveals elevated systemic levels of tryptophan metabolites during and after acute exercise.

Speaker 3: Takashi Nakagawa (Japan)

NAD+ synthesis from tryptophan and nicotinic acid is important for maintaining skeletal muscle functions at an old age.

Speaker 4: Ana Pocivavsek (USA)

Elevated dietary kynurenine impacts sleep and arousal behaviors: Special considerations during the pregnancy.

Speaker 5: Tsutomu Fukuwatari (Japan)

Establishment of model mice to evaluate low niacin nutritional status using kynurenine 3-monooxygenase knock out mice.

Speaker 6: Simone JPM Eussen (Netherlands)

Longitudinal associations of macro- and micronutrient intake with plasma kynurenines in colorectal cancer survivors up to 12 months post-treatment.

10:00 – 10:30 | Coffee Break (Foyer area)

10:30 - 12:00

Symposium 4: Mental Health and Neuroscience – Part 1 of 2

Chairs: Robert Schwarcz (USA) & Ana Pocivavsek (USA)

Speaker 1: Stefano Comai (Italy)

Translational Insights: Navigating the Tryptophan to Kynurenine Pathway and Pharmacotherapy in Psychiatric Disorders.

Speaker 2: Funda Orhan (Sweden)

Kynurenic acid promotes activity-dependent synaptic pruning and associates with genetic risk variance for schizophrenia.

Speaker 3: Sarah Beggiato (Italy)

Possible relevance of kynurenic acid alterations in the MAM model of schizophrenia.

Speaker 4: Yasuko Yamamoto (Japan)

Indoleamine 2,3-dioxygenase 2 deficiency associates with autism-like behavior via dopaminergic neuronal dysfunction.

12:00 – 12:30	Lunch Break (Foyer area)
12:30 – 14:00	Poster Session 1 (Foyer area)
14:00 – 15:00	Plenary Session 2 Ralf Jockers (Institut Cochin, France) Unconventional and biased melatonin receptor function
15:00 – 15:30	Coffee Break (Foyer area)
15:30 – 17:00	Symposium 5: Cancer Biology – Part 2 of 2 Chairs: Philipp Zimmer (Germany) & Christiane Opitz (Germany) Speaker 1: Petr Tomek (New Zealand) Challenging arylformamidase as the gatekeeper of kynurenine pathway in cancer. Speaker 2: Pauline Holfelder (Germany) Tryptophan limitation induces EGFR-RAS signaling that activates mTORC1 and p38 MAPK to sustain translation and autophagy. Speaker 3: Sofia Rossini (Italy) Epacadostat stabilizes the apo-form of IDO1 and signals a pro-tumorigenic pathway in human ovarian cancer cells. Speaker 4: Deepak Sayeeram (Germany) Identification of downstream effectors of interleukin-4-induced 1 - mediated tryptophan degradation in glioblastoma.

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Friday 26th April 2024

Venue: Jena University Hospital, Am Klinikum 1 (Lobeda), Lecture Hall 1

08:00 – 10:00 Symposium 6: Immunology/Pathology

Chairs: Sophie Erhardt (Sweden) & Tina Notter (Switzerland)

Speaker 1: Trevor W. Stone (UK)

Exploring relationships between inflammatory mediators and the kynurenine pathway.

Speaker 2: Laura Santambrogio (USA)

Biochemical and Immunological Characterization of 3HKA; a Novel Antiinflammatory Biogenic Amine.

Speaker 3: Hidetsugu Fujigaki (Japan)

Targeted metabolomic analysis of serum tryptophan metabolites in patients with COVID-19.

Speaker 4: Odile Poulain-Godefroy (France)

Quinolinic acid modulates inflammatory epithelium response to influenza infection.

Speaker 5: Yukari Egashira (Japan)

Effects of anti-inflammatory food components on tryptophan-NAD metabolic key enzymes expression in LPS-treated microglial cells.

Speaker 6: Arve Ulvik (Norway)

Graves disease is associated with activation of the kynurenine pathway, a multiomics approach.

10:00 – 10:30 | Coffee Break (Foyer area)

10:30 – 12:00

Symposium 7: Mental Health and Neuroscience – Part 2 of 2

Chairs: Flaviano Giorgini (UK) & Funda Orhan (Sweden)

Speaker 1: Samara J. Walpole (Australia)

Sex- and suicide-specific alterations in the kynurenine pathway in the anterior cingulate cortex in major depression.

Speaker 2: Daniëlle DB Holthuijsen (Netherlands)

Longitudinal associations of plasma kynurenines and ratios with anxiety, depression, fatigue, and health-related quality of life in colorectal cancer survivors up to 12 months post-treatment.

Speaker 3: Lieke Bakker (Netherlands)

Relation of the kynurenine pathway with cognitive functioning and differences in patients with cognitive impairment or dementia: a systematic review and meta-analysis.

Speaker 4: Benjamin Heng (Australia)

Unraveling the Complexity: Understanding and Addressing pathology of Myalgic Encephalomyelitis/Chronic Fatigue Syndrome (ME/CFS).

12:00 – 12:30	Lunch Break (Foyer area)
12:30 – 14:00	Poster Session 2 (Foyer area)
14:00 – 15:00	Plenary Session 3 Robert Schwarcz (University of Maryland, USA) Kynurenic acid in brain function and dysfunction: Obscure no longer!
15:00 – 15:30	Coffee Break (Foyer area)
15:30 - 16:30	Symposium 8: Mix Topics Chairs: Trevor Stone (UK) & Stefano Comai (Italy) Speaker 1: Marta Gómez-Galán (Sweden) Surgical Stress and Cognitive Consequences: Unraveling Hippocampal Metabolic Shifts and the Impact of the Kynurenine Pathway. Speaker 2: Sandra Tatchum (South Africa) The in vitro effect of kynurenine metabolites on endothelioma cells and the in vivo effect of L-kynurenine and CTCE-9908 in C57BL/6 mice. Speaker 3: Mary EW Collier (UK) The effect of the single nucleotide polymorphism rs1053230 genotype on kynurenine 3-monooxygenase (KMO) expression, activity, cellular localisation and protein interactions.
16:30 – 17:00	 Awards & Closing Remarks Best Poster Award ISTRY Musajo Medal Award Closing remarks by ISTRY President
From 19:00 - late	Conference Dinner (Jena University Hospital, Cafeteria Hanfried) All conference delegates to attend. Note: No additional cost required, included in the registrations fee.