

The 45th FEBS Congress - Ljubljana, Slovenia

Saturday, 2021/7/3

17:30 - 18:00 Kocka Hall
Opening Ceremony Social Program

18:00 - 19:00 Kocka Hall
Opening Plenary Lecture Plenary Lectures

18:00 - 19:00 **Nobel laureate campaign supporting GMOs**
Richard Roberts (USA)

19:00 - 20:30 Other location
Welcome Reception (Foyer) Social Program

Sunday, 2021/7/4

08:00 - 09:00 Gallery Hall
Early Bird Session I: NGS is Everywhere Early Bird Sessions
Chairs: Tadeja Režen (SI) Nino Sinčić (CR)

09:00 - 11:00 Kocka Hall
Autophagy and Protein Recycling Symposia
Chairs: Patrizia Agostinis (BE) Nektarios Tavernarakis (GR)

09:00 - 09:30 **Autophagy in lymphangiogenesis**
Patricia Agostinis (Belgium)

09:00 - 09:30 **Organelle degradation by autophagy and autophagy-related pathways**
Noboru Mizushima (Japan)

09:00 - 09:30 **Autophagic quality control in the nervous system: Physiology and pathology**
Nektarios Tavernarakis (Greece)

09:00 - 11:00 Marmorna Hall A
Genome Structure and Regulation Symposia
Chairs: Đurđica Ugarković (HR) Ferran Azorín (ES)

09:00 - 09:30 **DNA methylation, satellite repeats and genome stability: Challenges and perspectives from rare genetic disorders**
Claire Francastel (France)

09:00 - 09:30 **Modulation of gene expression by satellite DNAs: physiological and evolutionary implications**
Đurđica Ugarković (Croatia)

09:00 - 09:30 **Epigenetic regulation of chromatin functions**
Ferran Azorín (Spain)

09:00 - 11:00 Marmorna Hall B
Molecular Evolution and Phylogenetics Symposia
Chairs: Damjan Franjević (HR) William Martin (DE)

09:00 - 09:30 **The evolution of multicellular complexity**
Tomislav Domazet-Lošo (Croatia)

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09:00 - 09:30	A hydrogen dependent geochemical analog of primordial carbon and energy metabolism William Martin (Germany)	
10:00 - 10:30	Can evolutionary age of genes be used to predict their function? Ivan Mijaković (Denmark)	
09:00 - 11:00	Gallery Hall Protein Biosynthesis and Expansion of the Genetic Code Chairs: Ita Gruic Sovulj (HR) Jason Chin (UK)	Symposia
09:00 - 09:30	Molecular and evolutionary foundations of translation fidelity Tzachi Pilpel (Israel)	
09:00 - 09:30	Keeping translation canonical: Lessons from aminoacyl-tRNA synthetases Ita Gruic Sovulj (Croatia)	
09:00 - 09:30	Reprogramming the genetic code Jason Chin (UK)	
09:00 - 11:00	Povodni mož Hall Protein Folding and Misfolding Chairs: Nataša Poklar Ulrih (SI) Franz-Ulrich Hartl (DE)	Symposia
09:00 - 09:30	Protein Folding, Misfolding and Association in vivo Simon Ebbinghaus (Germany)	
09:00 - 09:30	Rational design of oligomer-specific antibodies as diagnostic tools for Alzheimer's and Parkinson's diseases Michele Vendruscolo (UK)	
09:00 - 09:30	Chaperone Mechanisms in Protein Folding Franz-Ulrich Hartl (Germany)	
11:00 - 11:30	Other location Coffee Break (Hall A)	Coffee Break
11:30 - 12:30	Kocka Hall FEBS Sir Hans Krebs Lecture	Plenary Lectures
11:30 - 12:30	Epigenetics and genetic regulation in plants David Baulcombe (United Kingdom)	
12:30 - 14:30	Other location Lunch & Poster Sessions (Hall A)	Lunch & Poster Sessions
14:30 - 15:30	Kocka Hall EMBO Lecture	Plenary Lectures
14:30 - 15:30	Autophagy as an aging decelerator Guido Kroemer (France)	
15:30 - 16:00	Other location Coffee Break (Hall A)	Coffee Break

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16:00 - 18:00 Kocka Hall

Proteolytic Processing

Symposia

Chairs: Boris Turk (SI) Seamus J Martin (IE)

16:00 - 16:30 **Extracellular cysteine cathepsins: Friends or foes**

Boris Turk (Slovenia)

16:00 - 16:30 **Matrix remodeling as early pathophysiological biomarker**

Irit Sagi (Israel)

16:00 - 16:30 **Cell stress and inflammation**

Seamus J Martin (Ireland)

16:00 - 18:00 Marmorna Hall A

RNA Function

Symposia

Chairs: Štěpánka Vaňáčková (CZ) Jernej Ule (UK)

16:00 - 16:30 **Understanding tissue-specific protein composition of RNA-based enzymes**

Jernej Murn (USA)

16:00 - 16:30 **Systems-level understanding of protein–RNA complexes in stem cell differentiation**

Jernej Ule (UK)

16:00 - 16:30 **RNA methylation in nuclear pre-mRNA processing**

Štěpánka Vaňáčková (Czech Republic)

16:00 - 18:00 Marmorna Hall B

Epigenetics

Symposia

Chairs: Oliver Vugrek (HR) Christof Niehrs (DE)

16:00 - 16:30 **Mass spectrometry-based epigenetic mapping of clinical samples for biomarker discovery and (breast) cancer patient stratification**

Tiziana Bonaldi (Italy)

16:00 - 16:30 **Identifying epigenetic “driver” genes in cancer**

Zdenko Herceg (France)

16:00 - 16:30 **Decoding regulatory R-loops**

Christof Niehrs (Germany)

16:00 - 18:00 Gallery Hall

Protein Localization and Dynamics

Symposia

Chairs: Maja Herak Bosnar (HR) Anna Akhmanova (NL)

16:00 - 16:30 **Control of microtubule organization and dynamics: Seeing proteins and drugs in action**

Anna Akhmanova (The Netherlands)

16:00 - 16:30 **Oscillatory dynamics of Rac1 activity in amoeboid cell motility**

Igor Weber (Croatia)

16:00 - 16:30 **ER-Golgi membrane contact sites**

Antonella De Matties (Italy)

16:00 - 18:00 Povodni mož Hall

FEBS Special Session on Research and Career Skills – Assessment of Research and Researchers

Special Sessions & Workshops

Chairs: Laszlo Fesus (HU) Ferhan Sağın (TR)

16:00 - 16:20 **Scientific impact and the quest for visibility**

Ralitsa Madsen (UK)

16:20 - 16:40 **Current academic reward systems in relation to research integrity**

Laszlo Fesus (Hungary)

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16:40 - 17:00	Assessment of scientists for hiring, promotion, and tenure at German universities and research institutes Michael Brunner (Germany)	
17:00 - 17:10	Alternatives to impact factor for assessing publication performance and researchers Mary Purton (UK)	
17:10 - 18:00	Panel discussion	
18:00 - 19:00	Marmorna Hall A Speed Talk Session 1	Speed Talks
18:00 - 19:00	Marmorna Hall B Speed Talk Session 2	Speed Talks
18:00 - 19:00	Gallery Hall European Research Infrastructure and Initiatives Session Chair: Irena Mlinarič Raščan (SI)	Special Sessions & Workshops
18:00 - 18:30	EU-PEARL: Changing the paradigm of clinical trials in Europe Fátima Núñez (Spain)	
18:30 - 19:00	ELIXIR: A distributed infrastructure for life-science information Andrew Smith (UK)	
18:00 - 19:00	Povodni mož Hall Structural Biology Workshop – How to improve results, presentation and write a better paper	Special Sessions & Workshops
18:00 - 18:20	Alexander Wlodawer, Frederick, USA	
18:20 - 18:40	Joel L. Sussman, Rehovot, Israel	
18:40 - 19:00	Jaime Prilusky, Rehovot, Israel	
Monday, 2021/7/5		
08:00 - 09:00	Gallery Hall Early Bird Session II: How to Improve Immunotherapy of Cancer Chair: Maja Čemažar (SI)	Early Bird Sessions
09:00 - 11:00	Kocka Hall New Approaches in Structure Determination Chairs: Dusan Turk (SI) Wolfgang Baumeister (DE)	Symposia
09:00 - 09:30	Determining and reaching physical limits in electron cryomicroscopy Christopher J Russo (UK)	
09:00 - 09:30	Serial X-ray diffraction for macromolecular structure Henry Chapman (Germany)	

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09:00 - 09:30	Structural Biology in situ - The promise and challenges of cryoelectron tomography Wolfgang Baumeister (Germany)	
09:00 - 11:00	Marmorna Hall A Neurobiochemistry Chairs: Zrinka Kovarik (HR) Jean-Pierre Changeux (FR)	Symposia
09:00 - 09:30	Transcriptional regulation of acetylcholinesterase in different cell types: An enzyme in non-neuronal functions? Karl W.K. Tsim (Hong Kong)	
09:00 - 09:30	Modulation of synaptic signalling by adenosine and cannabinoids Ana M Sebastião (Portugal)	
09:00 - 09:30	Molecular dynamics of ligand-gated ion channels: From signal transduction to allosteric modulation of higher brain functions, implications for drug discovery Jean-Pierre Changeux (France)	
09:00 - 11:00	Marmorna Hall B Imaging for Life: From Molecules to Organisms Chairs: Robert Zorec (SI) Ling-Gang Wu (US)	Symposia
09:00 - 09:30	Imaging the length of a single vesicular SNARE protein and its role in fusion pore regulation Jernej Jorgačevski (Slovenia)	
09:00 - 09:30	Illuminating membrane structural dynamics of fusion and endocytosis Ling-Gang Wu (USA)	
09:00 - 09:30	Superresolution imaging of the extracellular space in live brain tissue Jan Tønnesen (Spain)	
09:00 - 11:00	Gallery Hall Membranes Chairs: Igor Križaj (SI) Christian Eggeling (DE)	Symposia
09:00 - 09:30	Membrane dynamics at cellular lipid storage sites Elina Ikonen (Finland)	
09:00 - 09:30	Direct regulation of receptor signaling by membrane lipids Ünal Coskun (Germany)	
09:00 - 09:30	Dissecting molecular membrane organization - a super-resolution fluorescence spectroscopy story Christian Eggeling (Germany)	
09:00 - 11:00	Povodni mož Hall Receptor–Ligand interactions Chairs: Kristina Sepčić (SI) Jan Tytgat (BE)	Symposia
09:00 - 09:30	Use of animal toxins to characterize the role of ASIC channels in pain Sylvie Diochot (France)	
09:00 - 09:15	AcTakines, a novel class of immunocytokines Jan Tavernier (Belgium)	
09:00 - 09:30	Venom components are priceless diamonds to study receptor-ligand interactions Jan Tytgat (Belgium)	
09:00 - 09:30	Cyclotides: Bioactive peptides from plants with applications in drug design and agriculture David Craik (Australia)	
11:00 - 11:30	Other location Coffee Break (Hall A)	Coffee Break

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11:30 - 12:30 Kocka Hall
FEBS 2020 Plenary Lecture Plenary Lectures

11:30 - 12:30 **Protein synthesis in eukaryotes: From ribosome assembly to targeting of membrane proteins**
Nenad Ban (Switzerland)

12:30 - 14:30 Other location
Lunch & Poster Sessions (Hall A) Lunch & Poster Sessions

14:30 - 15:30 Kocka Hall
FEBS/EMBO Women in Science Award Lecture Plenary Lectures

14:30 - 15:30 **Decoding the molecular basis of limb regeneration**
Elly Tanaka

15:30 - 16:00 Other location
Coffee Break (Hall A) Coffee Break

16:00 - 18:00 Kocka Hall
Bionanotechnology Symposia
Chairs: Gregor Anderluh (SI) TBA

16:00 - 16:30 **TBA**
TBA

16:00 - 16:30 **Towards the buildup of magic bullet: multifunctional nanostructures for cancer diagnostics and treatment**
Victoria Shipunova (Russia)

16:00 - 16:30 **DNA nanobiotechnology on lipid membranes**
Ulrich F. Keyser (UK)

16:00 - 18:00 Marmorna Hall A
Designed Regulatory Circuits and Genome Editing Symposia
Chairs: Roman Jerala (SI) Martin Fussenegger (CH)

16:00 - 16:30 **Design principles of regulatory networks**
Naama Barkai (Israel)

16:00 - 16:30 **Synthetic genomics and regulatory circuits in yeast**
Tom Ellis (UK)

16:00 - 16:30 **Designed therapeutic mammalian cell regulatory circuits**
Martin Fussenegger (Switzerland)

16:00 - 18:00 Marmorna Hall B
Structures of Nucleic Acids Symposia
Chairs: Janez Plavec (SI) Harald Schwalbe (DE)

16:00 - 16:30 **G-quadruplexes and G-quadruplex ligands: targets and tools in antiviral therapy**
Sara Richter (Italy)

16:00 - 16:30 **G-quadruplexes and i-motifs**
Jean-Louis Mergny (France)

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16:00 - 16:30 **NMR studies of structure and dynamics of RNA**
Harald Schwalbe (Germany)

16:00 - 18:00 Gallery Hall
FEBS Special Session on Science and Society - Plastic Revolution, Pollution and Substitution
Chairs: Emmanouil Fragkoulis (GR) Raffaele Porta (IT)

Special Sessions & Workshops

16:00 - 16:30 **Introduction**
Raffaele Porta (Italy)

16:30 - 17:00 **From plastics to microplastics and organisms**
Oliver Bajt (Slovenia)

17:00 - 17:30 **The transition from plastics to bioplastics: An opportunity to reconnect global growth with sustainability**
Paola Fabbri (Italy)

17:30 - 18:00 **Active biopackaging produced from byproducts and wastes from food and marine industries**
Frederic Debeaufort (France)

16:00 - 18:00 Povodni mož Hall
FEBS Special Session on Gender Issues in Science

Special Sessions & Workshops

18:00 - 19:00 Marmorna Hall A
Speed Talk Session 3

Speed Talks

18:00 - 19:00 Marmorna Hall B
Speed Talk Session 4

Speed Talks

20:00 - 21:00 Other location
Science on the street

Special Sessions & Workshops

20:00 - 20:45 **Vpliv plastike in mikroplastike na organizme v naravnem okolju/ The impact of plastics and microplastics on living organisms**
Oliver Bajt

Tuesday, 2021/7/6

08:00 - 09:00 Gallery Hall
Early Bird Session III: New Approaches in Medicinal Chemistry
Chair: Iztok Turel (SI)

Early Bird Sessions

09:00 - 11:00 Kocka Hall
Stem Cells and Regenerative Medicine
Chairs: Miomir Knežević (SI) Stephen Minger (UK)

Symposia

09:00 - 09:30 **A solution for long-term allogeneic tolerance leads to off-the-shelf therapeutic cell products**
Andras Nagy (Canada)

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- 09:00 - 09:30 **Stem cell-based modelling of complex diseases**
Agota Apati (Hungary)
- 09:00 - 09:30 **Clinical progress in stem cell therapy for age-related macular degeneration**
Pete Coffey (UK/USA)
- 09:00 - 09:30 **Pluripotent stem cells for cell therapy in diabetes**
Henrik Semb (Denmark)

09:00 - 11:00 Marmorna Hall A

Plant Biotechnology

Chairs: Maja Ravnikar (SI) Mario Pezzotti (IT)

Symposia

- 09:00 - 09:30 **Optimizing plant synthetic biology**
Nicola Patron (UK)
- 09:00 - 09:30 **Novel approaches in crop diagnostics**
Neil Boonham (UK)
- 09:00 - 09:30 **Plasticity of grapes**
Mario Pezzotti (Italy)

09:00 - 11:00 Marmorna Hall B

Immunotherapy

Chairs: Janoš Terzić (HR) Stefan Rose-John (DE)

Symposia

- 09:00 - 09:30 **Neutrophils predict T-cell depletion and anti-PD1 treatment failure in NSCLC**
Julia Kargl (Austria)
- 09:00 - 09:30
Michael Zimmermann (Germany)
- 09:00 - 09:30 **Interleukin-6 and ADAM17 in inflammation and cancer**
Stefan Rose-John (Germany)

09:00 - 11:00 Gallery Hall

Pharmacogenomics and Biomarkers

Chairs: Jerka Dumić (HR) Magnus Ingelman-Sundberg (SE)

Symposia

- 09:00 - 09:30 **Mode of Action and Therapeutic Potential of the ER stress Regulating Protein CERNF**
Mart Saarma (Finland)
- 09:00 - 09:30 **Diagnostic proteomic biomarkers to detect kidney diseases**
Tomris Ozben (Turkey)
- 09:00 - 09:30 **Pharmacogenomic biomarkers for prediction of drug response: Recent method development and clinical importance**
Magnus Ingelman-Sundber (Sweden)

09:00 - 11:00 Povodni moř Hall

Biochemistry of Toxins

Chairs: Maja Šegvić Klarić (HR) Isabelle Oswald (FR)

Symposia

- 09:00 - 09:30 **Biology, pharmacology and toxicology of Botulinum neurotoxins**
Ornella Rossetto (Italy)
- 09:00 - 09:30 **Biochemical mechanisms of toxic alcohols poisonings, markers of outcome and timely detection of long-term health sequelae: Lessons from a 6-year prospective cohort study**
Sergej Zakharov (Czech Republic)
- 09:00 - 09:30 **The challenge of investigating the toxicity of mycotoxins mixtures**
Isabelle Oswald (France)

11:00 - 11:30 Other location

Coffee Break (Hall A)

Coffee Break

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11:30 - 12:30 Kocka Hall
IUBMB Lecture Plenary Lectures

11:30 - 12:30 **Carving the complex landscape of cholinergic signalling regulators**
Hermona Soreq (Israel)

12:30 - 14:30 Other location
Lunch & Poster Sessions (Hall A) Lunch & Poster Sessions

14:30 - 15:30 Kocka Hall
FEBS Education Plenary Lecture Plenary Lectures

14:30 - 15:30 **Why science education is more important than most scientists think**
Bruce Alberts (USA)

15:30 - 16:00 Other location
Coffee Break (Hall A) Coffee Break

16:00 - 18:00 Kocka Hall
New Frontiers in Medicinal Chemistry Symposia
Chairs: Marijeta Kralj (HR) Stanislav Gobec (SI)

16:00 - 16:30 **Selective inhibitors of Monoamine oxidase isoforms A and B**
Stanislav Gobec (Slovenia)

16:00 - 16:30 **Novel tools and drugs for G proteins and G protein-coupled receptors**
Christa Müller (Germany)

16:00 - 16:30 **Addressing Alzheimer's disease complexity with multi target-directed small molecules**
Maria Laura Bolognesi (Italy)

16:00 - 18:00 Marmorna Hall A
Molecular Machines Symposia
Chairs: Brigita Lenarčič (SI) Kristina Djinović Carugo (AT)

16:00 - 16:30 **Towards molecular architecture of the muscle Z-disk assembly**
Kristina Djinović Carugo (Austria)

16:00 - 16:30 **Unveiling transcriptional and extra-transcriptional roles of the RNA Polymerase III machinery**
Alessandro Vannini (UK)

16:00 - 16:30 **The structure of human thyroglobulin**
Jan Löwe (UK)

16:00 - 18:00 Marmorna Hall B
Mechanisms of Microbiome–Host Interactions Symposia
Chairs: Maja Rupnik (SI) Harry Sokol (FR)

16:00 - 16:30 **Methodological approaches to study microbiome functions**
David Berry (Austria)

16:00 - 16:30 **Health effects of microbiota mediated by food transformations**
Mirjana Rajilic-Stojanovic (Serbia)

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16:00 - 16:30 **Gut microbiota regulation of metabolism in health and disease**
Harry Sokol (France)

16:00 - 18:00 Gallery Hall
FEBS/IUBMB Special Session on Education I
Chair: Ferhan Saĝin (TR)

Special Sessions & Workshops

16:00 - 16:10 **Introduction**
16:10 - 16:50 **Exploring new horizons in education: using multiple pathways to enhance and energize science instruction**
Janet Zadina (USA)
16:50 - 17:30 **Implementing cognitive science and discipline-based education research in the undergraduate science classroom**
Ido Davidesco (USA)
17:30 - 18:00 **Small-group discussions**

16:00 - 18:00 Povodni moŝ Hall
Bioinformatics and Computational Biology
Chairs: Kristian Vlahoviĉek (HR) Petr Svoboda (CZ)

Symposia

16:00 - 16:30 **Exascale biology: From genome to climate with a few stops along the way**
Daniel A. Jacobson (USA)
16:00 - 16:30 **Computational modeling of RNA and RNP 3D structures, with the use of experimental data**
Janusz M. Bujnicki (Poland)
16:00 - 16:30 **Evolution of small RNA pathways in rodents**
Petr Svoboda (Czech Republic)

18:00 - 19:00 Marmorna Hall A
Speed Talk Session 5

Speed Talks

18:00 - 19:00 Marmorna Hall B
Speed Talk Session 6

Speed Talks

18:00 - 19:00 Gallery Hall
FEBS Networking workshop

Special Sessions & Workshops

19:00 - 20:00 Gallery Hall
FEBS YSF Bridge

Social Program

Wednesday, 2021/7/7

08:00 - 09:00 Gallery Hall
Early Bird Session IV: Molecular Toxicology and Environment
Chair: Marta Popoviĉ (CR)

Early Bird Sessions

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09:00 - 11:00 Kocka Hall
Cancer Immunology and Immunotherapy Symposia
Chairs: Janko Kos (SI) Wolf Herve Fridman (FR)

09:00 - 09:30 **NK cells in tumor biology**
Anahid Jewett (USA)

09:00 - 09:30 **The role of MDSC in regulation of immune response**
Viktor Umansky (Germany)

09:00 - 09:30 **Prognostic and predictive value of B cells and tertiary lymphoid structures in human cancers**
Catherine Sautes Fridman (France)

09:00 - 11:00 Marmorna Hall A
Cellular Organization Symposia
Chairs: Iva Tolić (HR) Devrim Gozuacik (TR)

09:00 - 09:30 **A multiparametric single cell imaging approach of ROS and RNS pathways using chemogenetic tools and genetic biosensors**
Emrah Eroglu (USA)

09:00 - 09:30 **Architecture and dynamics of the mitotic spindle**
Iva Tolić (Croatia)

09:00 - 09:30 **Autophagy as a key cellular stress response mechanism**
Gozuacik (Turkey)

09:00 - 11:00 Marmorna Hall B
Molecular Interactions of Plants with the Environment Symposia
Chairs: Kristina Gruden (SI) Wolfram Weckwerth (AT)

09:00 - 09:30 **Study of spatial responses reveals mechanisms of plant resistance to viruses**
Kristina Gruden (Slovenia)

09:00 - 09:30 **TBA**
TBA

09:00 - 09:30 **Proteomics and metabolomics in studies of plant systems in environment**
Wolfram Weckwerth (Austria)

09:00 - 11:00 Gallery Hall
Life on the Edge – Extremophilic/ Extremotolerant organisms Symposia
Chairs: Ana Plemenitaš (SI) Elizaveta Bonch-Osmolovskaya (RU)

09:00 - 09:30 **Hot and cold desert soil microbiomics: it's all about water**
Don A Cowan (South Africa)

09:00 - 09:30 **Subunit interactions and assembly of the archaellum, the archaeal motility structure**
Sonja-Verena Albers (Germany)

09:00 - 09:30 **New thermophilic prokaryotes with unusual metabolic pathways**
Elizaveta Bonch-Osmolovskaya (Russia)

09:00 - 11:00 Povodni mož Hall
Immune and Inflammatory Disorders Symposia
Chairs: Bojan Polić (HR) Burkhard Becher (CH)

09:00 - 09:30 **Clone wars: Failure in self-antigen presentation leading to the autoimmune neurodegeneration**
Alexey Belogurov (Russia)

09:00 - 09:30 **The T cell/phagocyte interface in inflammation and immunopathology**
Burkhard Becher (Switzerland)

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09:00 - 09:30	Timing NKT cell development Marc Schmidt-Supprian (Germany)	
11:00 - 11:30	Other location Coffee Break (Hall A)	Coffee Break
11:30 - 12:30	Kocka Hall FEBS Datta Lecture	Plenary Lectures
11:30 - 12:30	Designable modules in synthetic biology: From the design of cell logic circuits to protein origami nanostructures Roman Jerala (Slovenia)	
12:30 - 14:00	Other location Lunch & Poster Sessions (Hall A)	Lunch & Poster Sessions
14:00 - 14:30	Kocka Hall FEBS Letters Award Lecture	Plenary Lectures
14:00 - 14:30	Selective brain region vulnerability in Parkinson's Disease is governed by a-Synuclein conformations Tim Bartels (UK)	
14:30 - 15:00	Kocka Hall FEBS Journal Prize Lecture	Plenary Lectures
14:30 - 15:00	A redox-sensitive mobile protein HIC-5: a guardian of anchorage-dependent cell growth and a fortress against tumor metastasis Motoko Shibamura (Japan)	
15:00 - 15:30	Other location Coffee Break (Hall A)	Coffee Break
15:30 - 16:30	Kocka Hall PABMB Lecture	Plenary Lectures
15:30 - 16:30	The oxygen paradox in human biology and medicine: Bioenergetics, free radicals and oxidative stress Rafael Radi (Uruguay)	
16:30 - 18:30	Kocka Hall Cancer Initiation and Progression Chairs: Tamara Lah Turnšek (SI) Geoffrey Pilkington (UK)	Symposia
16:30 - 17:00	Precision cancer therapy: The journey of CCR5 from bubonic plague to current clinical treatments Richard Pestell	
16:30 - 17:00	Glioblastoma cancer stem cells metabolism and the role of novel drugs targeting Geoffrey Pilkington (UK)	

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16:30 - 17:00	Breast cancer-initiating cells: what we know and what we expect from them Maria Grazia Daidone (Italy)	
16:30 - 18:30	Marmorna Hall A Aging Stress and Neurodegeneration Chairs: Boris Rogelj (SI) Tihomir Balog (HR)	Symposia
16:30 - 17:00	TBA	
16:30 - 17:00	Can cellular organelles regulate animal longevity? Adam Antebi (Germany)	
16:30 - 17:00	Genetics in neurodegeneration John A. Hardy (UK)	
16:30 - 18:30	Marmorna Hall B Redox Biology – Oxidative Stress Signalling Chairs: László Virág (HU) Ana Casas Guijirro (NL)	Symposia
16:30 - 17:00	Transcription factor NRF2 is a master regulator of redox metabolism: implications in chronic diseases Antonio Cuadrado (Spain)	
16:30 - 17:00	NADPH oxidases in infection and inflammation Ulla G. Knaus (Ireland)	
16:30 - 17:00	Network pharmacology approach for stroke therapy: Towards the end of medicine as we know it. Ana Casas Guijirro (The Netherlands)	
16:30 - 18:30	Gallery Hall Metabolic Engineering: Emerging Technologies for Industrial Process Development Chairs: Hrvoje Petković (SI) Christoph Wittman (DE)	Symposia
16:30 - 17:00	Approaches towards innovative antibiotics from microbes Rolf Muller (Germany)	
16:30 - 17:00	Computational enzyme design for metabolic engineering Jiri Danborsky (Czech Republic)	
16:30 - 17:00	Systems metabolic engineering of industrial microorganisms Christoph Wittman (Germany)	
16:30 - 18:30	Povodni mož Hall FEBS/IUBMB Special Session on Education II Chairs: Jerka Dumić (HR) Jason Perret (BE)	Special Sessions & Workshops
16:30 - 16:40	Introduction	
16:40 - 17:20	Expectations of professionalism in doctoral education in an ever-changing academic world Robert Harris (Sweden)	
17:20 - 18:00	The postdoc experience - hopes, fears, expectations and reality Geula Hanin (UK)	
18:00 - 18:30	Panel discussion	
18:45 - 21:45	Other location Congress Dinner, Bled, Hotel Toplice	Social Program

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Thursday, 2021/7/8

09:00 - 11:00 Kocka Hall

Structural and Functional Glycobiology

Symposia

Chairs: Gordan Lauc (HR) Serge Perez (FR)

09:00 - 09:30 **Protein glycosylation at the interface of inflammation and cancer**

Salome Pinho (Portugal)

09:00 - 09:30 **Glycans as biomarkers and functional effectors in diabetes**

Olga Gornik (Croatia)

09:00 - 09:30 **State of the art in establishing structures and dynamics of glycans and their interactions**

Serge Perez (France)

09:00 - 11:00 Marmorna Hall A

The Circadian Clock and Disease

Symposia

Chairs: Damjana Rozman (SI) Achim Kramer (DE)

09:00 - 09:30 **Lipid metabolism around the body clocks**

Charna Dibner (Switzerland)

09:00 - 09:30 **Internal clocks and chronotherapy**

Achim Kramer (Germany)

09:00 - 09:30 **Human clocks, sleep and metabolism**

Debra Skene (UK)

09:00 - 11:00 Marmorna Hall B

Biomembranes and Lipid Mediators

Symposia

Chairs: Marija Heffer (HR) Raquel Marin (ES)

09:00 - 09:30 **Analysis of brain glycolipids and their noncovalent interactions by novel mass spectrometric approaches based on ion mobility and chip-ionization**

Alina-Diana Zamfir (Romania)

09:00 - 09:30 **Plasma membrane & nanoparticles: Love, hate and immune regulation**

Rostyslav O. Bilyy (Ukraine)

09:00 - 09:30 **Malfunctions in lipid rafts during menopause and Alzheimer's disease: A window to develop new biomarkers**

Raquel Marin (Spain)

09:00 - 11:00 Gallery Hall

Lipidomics

Symposia

Chairs: László Vigh (HU) Kim Ekroos (FI)

09:00 - 09:30 **TBA**

09:00 - 09:30 **Eicosanoids and Related Bioactive Mediators of Inflammation**

Edward Dennis (USA)

09:00 - 09:30 **Lipidomics analysis and reporting – the Lipidomics Standards Initiative (LSI)**

Kim Ekroos (Finland)

09:00 - 10:00 Povodni mož Hall

European Research Council Session

Special Sessions & Workshops

Chair: Israel Pecht (IL)

09:00 - 10:00 **How to apply for your next ERC grant**

Philippe Cupers, Belgium

The 45th FEBS Congress - Ljubljana, Slovenia

10:00 - 11:00	Povodni mož Hall Biochemistry: A Success Story Chair: Israel Pecht (IL)	Symposia
10:00 - 10:30	Charging the code - Structural insights into tRNA modification enzymes Sebastian Glatt (Poland)	
10:00 - 10:30	Multivalent effects of an intrinsic plasticity of a potyvirus coat protein Marjetka Podobnik (Slovenia)	
11:00 - 11:30	Other location Coffee Break (Hall A)	Coffee Break
11:30 - 12:30	Kocka Hall FEBS Theodor Bücher Lecture	Plenary Lectures
11:30 - 12:30	The biology of CRISPR-Cas Emmanuelle Charpentier (Germany)	
12:30 - 13:00	Kocka Hall Closing ceremony	Social Program