Oct 23, 2020 FRIDAY

9.00 - 10.30 OPENING CEREMONY

Echoes and professional greetings to the Zagreb Centennial Anniversary and the Summer School of Pathophysiology in Dubrovnik

Zdenko Kovač. Hundred years of Zagreb School of Pathophysiology. Advancements in integrative understanding, visions and methods dealing with medical complexity in health and disease

Coffee time

- 11.00-11.45 **Leonid Churilov. Inflammation: Classic and Current Concepts** (Department of Pathology & Laboratory of the Mosaic of Autoimmunity, Saint Petersburg State University, Russia)
- 11.45-12.30 Miroslav Radman. Disease latency: Cellular parabiosis, inflammation and the onset of disease (Mediterranean Institute for Life Sciences (MedILS), Split, Croatia and and INSERM U1001, Université René Descartes-Paris-5, Faculté de Médecine., Paris, France).

Lunch time

13.30 - 13.55	Filip Grladinović. Neutrophil to lymphocyte ratio: Etiopathogenetic
	background of clinical predictivity. (School of Medicine, University of Zagreb,
	National and University Hospital Centre Hospital KBC Zagreb, Rebro, Croatia
	student/demonstrator at Department of Pathophysiology)

- 13.55. -14.20 Grgur Salai. The role of hypomagnesemia in the etiopathogenesis of various diseases and disorders. (School of Medicine, University of Zagreb, National and University Hospital Centre Hospital KBC Zagreb, Rebro, Croatia student/demonstrator at Department of Pathophysiology)
- 14.20-14.45 Antun Zvonimir Kovač. Mechanisms of positive effects of cold-water immersion in sport performance and injuries. (School of Medicine, University of Zagreb, National and University Hospital Centre Hospital KBC Zagreb, Rebro, Croatia – student/demonstrator at Department of Pathophysiology)

Coffee time

15.00-15.45	Boro Dropulić, CAR-T cell therapy for cancer and HIV-1 infection.
	(Lentigen Technology, A Miltenyi Biotec Company, Gaithersburg, Maryland,
	USA)

15.45-16.30 Audiovisual Featured Topic. Importance of stimulative academic environment: The academic mission and achievements of Milislav Demerec at the Cold Spring Laboratories – insights of Sydney Brenner, Barbara McClintock, James Watson and Ernst Mayr.

Oct 24, 2020 SATURDAY

- 9.00-9.45 **Siniša Volarević. Dysregulation of ribosome biogenesis in cancer** (*Medical School University of Rijeka, Croatia*)
- 9.45-10.30 **Mladen Merćep. Protein oxidation and its' detection in age-related diseases** (Mediterranean *Institute for Life Sciences, Split, Croatia*).

Coffee time

- 11.00 11.45 Antonio Rendas. Teaching and learning pathophysiology: make sure not to get lost in translation (Department of Pathophysiology, Nova Medical School, Nova University, Lisbon, Portugal)
- 11.45 12.30 Zdenko Kovač. Networking and regulation of etiopathogenetic clusters and pathways (Department of Pathophysiology, School of Medicine, University of Zagreb, National and University Hospital Centre KBC Zagreb, Rebro, Croatia)

Lunch time

- 13.30 14.00 Luka Lovrenčić. Mirror J model of oxygen metabolism (National and University Hospital Centre KBC Zagreb, Rebro, Croatia)
- 14.00 -14.30 Fran Božić. PD-1:PD-L1/2 interaction in etiopathogenesis of gestational trophoblastic disease and miscarriage. (School of Medicine, University of Zagreb, National and University Hospital Centre Hospital KBC Zagreb, Rebro, Croatia – student/demonstrator at Department of Pathophysiology)

Coffee time

- 15.00–15.45 **Wong, Harikesh. Multicellular control of immunological homeostasis.** (*National Institutes of Health (NIH), National Institute of Allergy and Infectious disease (NIAID), Bethesda Maryland USA*)
- 16.00 17,30 Visit to Dominican Monastery in Dubrovnik Museum, Gallery, Pharmacy, Medieval Library and Medical Books with the expert guidance by professor Stjepan Krasić, O.P.

Oct 25, 2020 SUNDAY

- 9.00-9.45 Asya Rolls. Using the brain to control immunity (Department of Immunology, Rappaport Faculty of Medicine, Technion - Israel Institute of Technology, 3525422, Haifa, Israel)
- 9.45-10.15 **Tomislav Luetić. Twin-to-Twin Transfusion Syndrome (TTTS) after birth** (Department of Surgery, School of Medicine, University of Zagreb, National and University Hospital Centre Hospital KBC Zagreb)

Coffee time

10.30- 12.30 Quiz in Pathophysiology "THE NATURE OF INFLAMMATION,, – WRITTEN TEST

Lunch time

13.30 – 14.45 Quiz in Pathophysiology "THE NATURE OF INFLAMMATION,, – PUBLIC ORAL COMPETITION

Coffee time

- 15.15-15.45 **Ivan Merdžo, Dysregulation of mitochondria in diabetic vasculature** (School of Medicine, University of Mostar, Bosnia and Herzegovina)
- 15.45-15.55 A challenging cognitive issue in medicine Mortality trends during the health system lock down
- 15.55 16.35 Audiovisual Featured Topic. Fuzzy logic in medicine

Oct 26, 2020 MONDAY

- 9.00-9.45 **Yoshihiro Ishikawa. The autonomic regulation of the heart; transition from health to disease.** (*Cardiovascular Research Institute, Yokohama City University Graduate School of Medicine, Yokohama, Japan*)
- 9.45-10.10 **Joško Bilandžić. Etiopathogenesis of hypertensive crisis.** (School of Medicine, University of Zagreb, National and University Hospital Centre Hospital KBC Zagreb, Rebro, Croatia – student/demonstrator at Department of Pathophysiology)
- 10.10 10.35 Fran Rode, Antun Zvonimir Kovač. Compliance with guidelines for surgical antimicrobial prophylaxis at the University hospital Dubrava (A prospective study). (School of Medicine, University of Zagreb, National and University Hospital Centre Hospital KBC Zagreb, Rebro, Croatia – student/demonstrator at Department of Pathophysiology)

Coffee time

- 11.00 -11.25 Dražen Belina. Croatian organ retrieval success and EUROTRANSPLANT top positioning. Heart surgeon's personal view. (Department of Heart Surgery, National and University Hospital Centre KBC Zagreb, Rebro, Croatia
- 11.25-12.10 Audiovisual Featured Topic. Pitfalls of contemporary medical professional complexity and quantitative versus qualitative approach in medicine with the insights of Atul Gawande, Richard Feynman and Ivan Illich.
- 12.10-13.10 CLOSING CEREMONY