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A multilevel integrated approach for the identification of predictive markers of metabolic syndrome

Estelle Pujos-Guillot, Julien Bertrand, Mathieu Rambeau, Mélanie Pétéra, Marion Brandolini-Bunlon, Anthony Fernandes, Joanne Matta, Claire Lévy-Marchal, Sébastien Czernichow, Blandine Comte

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HAL Authorization

EPMA World Congress - Programme

Thursday 14 September 2017

13:30 – 14:00 Registration for Workshop

14:00 – 16:00 Workshop of Young Professionals in PPPM (EPMA-YPS)

Venue: Aula Magna (Level 1)

Chaired by Professor Dr R. Danesi and Professor Dr H. Podbielska

(10 mins per presentation)

Mini-encyclopaedia of wound healing: Lessons for predictive, preventive and personalized medicine. Lara Stolzenburg-Veeser and Olga Golubnitschaja

Patient stratification, prediction, prevention and prognosis in wound healing: Dream or reality? Eden Avishai and Olga Golubnitschaja

Altered sense regulation and related health conditions: is a predictive modelling possible?
Nadja Koschelew and Olga Golubnitschaja

Longevity – good luck or reasonable life-long healthcare strategy? Ekaterina Silantyeva and Olga Golubnitschaja

Accelerated ageing in breast cancer aetiology and progression: Multi-factorial patient profiles for effective prediction and prevention of the disease. Aviv Peer and Olga Golubnitschaja

Heterogeneity in breast cancer. Elaine Borg, Pierre Schembri Wismayer and Godfrey Grech

A clinical audit on HER2-positive breast cancer treatment & response trends in Malta.
Jeanesse Scerri, Godfrey Grech, Christian Scerri, Donika Metaraku

Evaluation of cytotoxicity of nanoparticles on cancer cells with LDH & MTT assays. Orestis Strymonis

Human saliva as a powerful source of information: multi-omics biomarker panels. Dana Mileguir and Olga Golubnitschaja

16:00 – 16:30 Registration for General Assembly

16:30 – 17:30 EPMA General Assembly (*EPMA Members only*)

Venue: Meeting Room 5 (Ground floor)

17:30 – 18:00 Registration for Congress

18:00 – 21:00 Opening Ceremony

Aula Magna (Level 1)

Keynote Speech by Olga Golubnitschaja **Global challenges and PPPM- solutions: Long-term strategies by the EPMA**

Short presentation by G. Tsangaris **The Key-Role of Multi-Omics in Predictive, Preventive and Personalized Medicine as the Medicine of the Future**

20:00 Welcome Reception

Venue: Corridors (Level 1)

Friday 15 September 2017

09:00 – 10:00 Keynote Speech

J. Flammer and K. Konieczka **Flammer Syndrome**
Venue: Aula Magna (Level 1)

10:00 – 10:30 Coffee Break

10:30 – 13:00 PPPM in Neurological, Neurodegenerative and Neuropsychiatric

Disorders Chaired by Professor Dr F. Paul and Professor Dr M. Legg

Venue: Aula Magna (Level 1)

Keynote (25 mins):

Psychiatry - Quo Vadis? Opportunities for a Personalized Approach to Diagnosis and Treatment. Bernhard T Baune

(15 mins per presentation)

Retinal imaging in neuroinflammatory and neurodegenerative disorders: current research and clinical applications. Friedemann Paul

Machine-assisted cognitive bias correction and prediction are key to predictive, preventive, personalized medicine (PPPM). Michael Legg

Personalized approach in the treatment of tinnitus and insomnia: combining repetitive transcranial magnetic stimulation and cognitive behavioural therapy. Kneginja Richter, Lukas Peter, Jens Acker, Joachim Höfig, Lence Miloseva, Günter Niklewski

Individualised paediatric drug therapy of an antiepileptic drug. Hana Shabbi, Christian Saliba, Doriette Soler, Godfrey Grech, and Janet Mifsud

Effects of physical activity programme on cognitive function, depression and quality of life in Alzheimer's patients with first stage: a randomized controlled trial. Muammer Canbaz, Neslihan Lok, Sefa Lok

Systems medicine of mitochondrial Parkinson's disease. Ronan M.T. Fleming

Flammer Syndrome: a potential risk factor for central serous chorioretinopathy? Tatjana Josifova

Poster Session

Prediction and prevention of suicidality among patients with depressive disorders: comorbidity as a risk factor. Lence Miloseva, Vladimir Milosev, Kneginja Richter, Lukas Peter, Günter Niklewski

Polymorphism in IL7RA gene in association with multiple sclerosis in Slovak population.

Dusan Dobrota, Daniel Čierny, Jozef Michalik, Jan Lehotsky

Profiling the genetic variants responsible for hereditary ataxia in a Maltese family. Mark Briffa

13:00 – 14:00 Lunch

Parallel Sessions

14:00 – 16:15 Two Keynote Speeches

1. David Harrison **Colorectal Cancer**
2. Alejandra Bruna **Study of the role of functional breast cancer heterogeneity upon therapeutic pressure using PDTX models**
Venue: Aula Magna (Level 1)

14:00 – 16:15 EEN Brokerage Event (Malta Enterprise)
Venue: Valletta Campus Theatre (Groundfloor)

16:15 – 16:30 Coffee Break

16:30 – 18:30 PPPM in Cancer

Chaired by Professor Dr G. Grech and Professor Dr O. Topolcan
Venue: Aula Magna (Level 1)

(10 mins per presentation)

Application of molecular medicine towards personalized treatment in oncology. Godfrey Grech

Dietary factors in breast cancer prevention. N. Shapira, Israel

Personalized medicine in oncology. V. Simanek, O. Topolcan, J. Finek, M. Hora, V. Treska, S. Svobodova, L. Pecen, J. Kinkorova, R. Kucera

Novel biomarkers predicting sensitivity to PP2A activators in triple-negative breast cancer. Christian Saliba, Shawn Baldacchino, Christian Scerri, Robert Gauci, Godfrey Grech

Early variations of KRAS mutations in circulating cell-free tumor DNA: a promising biomarker to monitor chemotherapy resistance in pancreatic cancer. E. Rofi, C. Vivaldi, M. Del Re, R. Danesi

Unravelling the role of *TRIB1* in colorectal cancer – a functional molecular pathology approach. Romina Briffa, Inhwa Um, Peter Mullen, Paul Reynolds, David J Harrison, Godfrey Grech

Role of microRNAs in diagnosis of lung cancers. Erika Halasova, Martina Krutakova, Miroslava Sarlinova, Tatiana Matakova, Lukas Plank

Monitoring of activating and resistance mutations in circulating cell-free tumor DNA of non-small cell lung cancer patients. G. Restante, E. Rofi, M. Del Re, P. Bordi, M. Tiseo, R. Danesi

Detection and analysis of circulating tumour cells in small cell lung cancer utilizing a flexible rare cell scanning platform. Michael W Kilpatrick, Eric R Kershner, Robert H Borgerding, Paul Robson, Sivakamasundari V.

Can PHI better separate gleason score 6 Tumors and facilitate decision for right

management for patients with prostate cancer? Ondřej Topolčan, Olga Dolejšova, Radka Fuchsova, Radek Kucera, Milan Hora, Hana Svobodova, Ondřej Hes, Viktor Eret, Ladislav Pecen

Immune checkpoint inhibitors in the treatment of patients with glioblastoma multiforme - from preclinical research to early clinical results. Jiri Polivka jr., Jiri Polivka, Milena Kralickova, Lubos Holubec

Modulation of immune component of tumor microenvironment: perspectives for the personalized cancer therapy. Julia Kzhyshkowska, Irina Mitrofanova, Tengfei Liu, Marina Zavyalova, Nikolai Litvyakov, Mikhail Buldakov, Nadezhda Cherdyntseva

Poster Session

Biomarker individual repair capacity to susceptibility in colorectal cancer. Tatiana Matakova, Erika Halašova, Anton Dzian, Maria Skerenová and Dusan Dobrota

Biobank in Pilsen and cancer research: an example of Personalized medicine approach. Kinkorová J., Topolčan O.

Saturday 16 September 2017

08:45 – 09:10 Keynote Speech

Russel Andrews, NASA, USA **Healthcare update from the ‘Golden State’ (California): ‘Midas Medicine’ Marches to Unpredictable but Profitable and Impersonal Music.**

Venue: Aula Magna (Level 1)

09:10 – 11:45 PPPM Strategies in Healthcare

Chaired by Dr V. Costigliola, Professor Dr Dianjun Sun and Dr M. Kapalla

Venue: Aula Magna (Level 1)

10:15 – 10:30 Coffee Break

(10 mins per presentation)

Cooperation: keynote for the future of health care. Elisabeth van der Gulik

Innovative approaches to overcoming market access obstacles in Predictive, Preventive and Personalized Medicine (PPPM). Ildar Akhmetov

Christian Doppler - Laboratory for personalized medicine. Kurt Krapfenbauer and Olga Golubnitschaja

The influence of environmental factors and stress on human health and chronic diseases: PPPM lessons from Antarctica. Rostyslav V. Bubnov, Yevhen V. Moiseyenko, Mykola Ya Spivak, NASC of Ukraine

Extension of laboratory medicine to provide complex health assessment in the context of Predictive, Preventive and Personalized Medicine (PPPM). Marko Kapalla, Juraj Kubáň

A comprehensive and personalized imaging approach in emergency and limited-resource subsets. Francesca M. Trovato

Introduction of molecular blood transfusion in Malta. Antonella Giordmaina

Progress and challenges in controlling Kashin–Beck disease: epidemiological trends in China. Kewei Wang and Dianjun Sun

Preventive assessment of risk factors among students during their education in the University. Maria Evseyeva, Evgenij Shchetinin, Elena Italyantseva, Anjelika Rusidi

Prevalence and control of IDD in China. Dianjun Sun and Peng Liu

Tackling socioeconomic disparities to revitalize the Mediterranean diet, a priority challenge at a time of economic crisis. Licia Iacoviello, Marialaura Bonaccio, Giovanni de Gaetano

Challenges of screening plant extracts for therapeutic development: lessons learned from a case in practice. Frank Heemskerck

Poster Session

Communication strategies for developing health awareness in preventive medicine. Anna

O. Stebletsova, Anna V. Karpova, Eugene V. Dorokhov

Sleep quality and stress resistance among students related to additional work. Maria Evseyeva, Vladimir Baturin, Elena Mishchenko, Victoria Jenenko

Improvement in preventive examinations among young people in the context of vascular age assessment. Maria Evseyeva, Vladimir Koshel, Elena Fursova, Michail Eremin, Anjelika Rusidi

12:00 – 12:30 Keynote Speech
Evi Lianidou **Liquid Biopsies**
Venue: Aula Magna (Level 1)

12:30 – 13:45 Lunch

13:45 – 15:00 Innovative Technologies in PPPM

Chaired by Professor Dr X. Zhan
Venue: Aula Magna (Level 1)

(15 mins per presentation)

Identification of biomarkers of ocular surface disease using impression cytology. Suzanne Hagan, Boatemaa Omotayo, Katherine Oliver, Michael Doughty, Claire Walshe

Validation of a Diagnostic Breast Cancer Expression Assay using Retrospective FFPE Tissue. Shawn Baldacchino, Sharon Falzon, James DeGaetano, Christian Saliba, Jeanesse Scerri, Christian Scerri, Godfrey Grech

The roles of proteomic and metabolomic variations in predictive, preventive, and personalized medicine. Xianquan Zhan, Ying Long, Miaolong Lu

Profiling IgG N-glycans as biomarkers of the ageing process. Wei Wang

Novel approach for preventing implant failure: programming of anti-inflammatory macrophages using self-standing release systems with a phenotype-fixing cytokine cocktail formulation. Julia Kzhyshkowska, Vladimir Riabov, Fabián Salazar, SuSu Htwe, Alexandru Gudima, Julien Barthes, Helena Knopf-Marques, Harald Klüter, Amir M Ghaemmaghami, Nihal Engin Vrana

Application of thermal imaging for personalized diagnosis of lipodystrophy. Joanna Bauer, Ewelina Dereń, Agnieszka Migasiewicz, Halina Podbielska

Poster Session

Personalized telecare in pregnancy by means of remote cardiotocography. Anna Skotny, Halina Podbielska

New aspects of preventive endoscopic hemostasis in treatment of peptic ulcer bleeding in the experimental condition. E.F. Cherednikov, S.V. Barannikov, M.N. Romantsov, A.V. Popov

A new opinion on gastroduodenal bleeding prevention in patients with somatic pathology.

E. F. Cherednikov, A.V. Budnevsky, A.V. Popov, K.O. Fursov

15:00 – 17:45 PPM in Dentistry

Chaired by Professor Dr M. Mozaffari, Professor Dr M. Saag and Professor Dr A. Kunin
Venue: Aula Magna (Level 1)

(15 mins per presentation)

Stem cells and tooth regeneration: an overview. Mahmood S. Mozaffari

Comparison of dental fear and anxiety in relation to dental health in Estonian and Vietnamese children. Jana Olak; Minh Son Nguyen¹; Thuy Trang Nguyen; Bui Bao Tien Nguyen; Mare Saag

Age-specific attitudes regarding dental health. Isaeva Elena, Sitkina Eugenia, Kudryavtseva Tatiana, Loboda Ekaterina

Patient-specific periodontology: reality and outlook. Tachalov Vadim, Orekhova Ludmila, Isaeva Elena, Loboda Ekaterina

Electromagnetic influence on microstructural changes of dental filling materials: improvement in physical and mechanical properties. Natalia S. Moiseeva, Anatoly A. Kunin, Ruslan A. Shabanov, Nakhid T. Aliev

mRNA expression of RANKL and OPG in gingival tissue of patients with periodontitis, Carlo Cafiero, University of Naples Federico II, Italy

Improving the effectiveness of dental caries prevention using therapeutic toothpastes.

Anatoly A. Kunin, Natalia S. Moiseeva, L.E. Mekhantieva

The effectiveness of a personal approach to learning manual skills during dental hard tissues preparation. B.R. Shumilovich, V.V. Rostovtsev, A.V. Saneev, L.M. Adunts

Prediction of the development of dental caries in adolescents based on the functional state of the masseter muscles. Yury A. Ippolitov, Mikhail E. Kovalenko, Ekaterina N. Bondareva, Natalia S. Moiseeva

Fundamental strategy and individual prevention of inflammatory periodontal diseases.

Olga I. Oleinik, Andrey V. Sushchenko, Elena A. Alferova, Oksana P. Krasnikova

Prevention of the risk of complications in patients with cardiovascular disease using anesthesia during an outpatient visit to the dentist. Anna V. Podoprighora, Olga A. Kumirova, Natalia S. Moiseeva, Alexandr S. Scherbinin

Poster Session

Dental caries prevention using the modulated red light (MRL). Svetlana N. Pankova, Olga A. Kumirova, Natalia S. Moiseeva, Olga A. Azarova

Prevention of cross infections in dental care facilities in different environments. Svetlana N. Pankova, Olga A. Azarova, Svetlana G. Shelkovnikova, E.A. Azarova

Personalized approach in assessing the tonus of tongue muscles in patients with

ankyloglossia. Dmitry Yu. Kharitonov, R.V. Lesnikov, Elena Yu. Zolotareva, Natalia S. Moiseeva

Orthopedic treatment of patients suffering from chronic oral mucosal diseases with removable prosthesis structures on a background of immunological correction. A.L. Solovyeva, E.A. Leshcheva, N.G. Mashkova, O.A. Kumirova

Dentaseptin for periodontal diseases prevention. A.N. Morozov, N.V. Chirkova, Zh.V. Vecherkina, E.A. Lescheva

Informativeness of epidemiological indicators as the basis of prevention effectiveness. Irina A. Belenova, Elena A. Andreeva, Inessa V. Koretskaya, Elena Yu. Caverina

Preventive effectiveness of the cyto-bacterioscopic method investigation in the detection of periodontal diseases. Aleksandr Shcherbakov, V.V. Sudareva, I. Shcherbakova

Application of the Vector System with ozonized water for secondary prevention of inflammatory periodontal diseases. Anatoly A. Kunin, Kristina P. Kubyshkina

The use of fluoride-free toothpastes in prophylaxis of dental caries. Anatoly A. Kunin, Tatyana Kupets, Natalia S. Moiseeva, Dmitry A. Kunin

17:45 – 18:00 Coffee Break

18:00 – 19:00 Awarding Ceremony (EPMA-YPS)

Venue: Aula Magna (Level 1)

Head of the Scientific Committee – Assoc. Professor Dr B. Baban, USA

19:15 Group leave from Valletta Campus Lobby (Groundfloor) for Mdina Tour & Dinner

Sunday 17 September 2017

09:00 – 12:00 **PPPM in Diabetes and CVD**

Venue: Aula Magna (Level 1)

Chaired by Professor Dr W. Wang and Professor Dr Samuel Asamoah Sakyi

10:45 – 11:15 **Coffee Break**

Keynote (25 mins):

The Promise of whole body vibration to curtail inflammation associated with obesity/type 2 diabetes: role of myeloid to lymphoid skewing. Babak Baban, Jack Yu, Lin Yin, Aneeq Malik, Dorothea Rowe and Mahmood Mozaffari

(15 mins per presentation)

A multilevel integrative approach for the prediction of the development of metabolic syndrome. Estelle Pujos-Guillot, Julien Bertrand, Mathieu Rambeau, Mélanie Pétéra, Marion Brandolini, Antony Fernandes, Joanne Matta, Claire Lévy-Marchal, Sébastien Czernichow, Blandine Comte

Input of multidimensional phenotyping in the metabolic syndrome stratification. Estelle Pujos-Guillot, Stéphanie Monnerie, Etienne Thévenot, Christophe Junot, José Morais, Hélène Payette, Pierrette Gaudreau, Blandine Comte

Insulin resistance and its concomitant effect on vitamin D status among type 2 diabetics. Samuel Asamoah Sakyi, Linda Ahenkorah Fondjo, William K. B. A. Owiredu, Richard Ephraim Dadzie, Edwin Ferguson Laing, Michael Acquaye Adotey-Kwofie

Role of endothelial I κ B kinase 2 in atherosclerosis. Marion Mussbacher, Manuel Salzmann, José Basílio, Mario Kuttke, Hans Volek, Bastian Hösel, Ulrike Resch, Alice Assinger, Johannes Schmid

Relationship between single-nucleotide polymorphism of *NOTCH1* gene target sequence and congenital heart disease. Dong Li, Long Ji, Haifeng Hou, Kai Zhu, Qian Wang

Association between obstructive sleep apnea and hypertension: a systematic review and meta-analysis. Haifeng Hou, Yange Zhao, Wenqing Yu, Hualei Dong, Xiaotong Xue, Jian Ding, Wijia Xing, Wei Wang

Quality of life and cold extremities in Korea. Kwang-Ho Bae, Ki-Hyun Park, Su-Jung Kim, and Si-woo Lee

Acute stroke care in Czech Republic – value of stroke centers and quality of care indicators sharing. Jiri Polivka, Petr Sevcik, Vladimir Rohan, Jolana Hommerova, Jiri Polivka jr.

Optimal physical activity based on principles of personalized medicine. Novak J, Topolcan O, Racek J, Stork M, Zeman V, Kucera R, Simanek V.

Poster Session

Predicting cardiovascular risk in diabetic patients: are we all on the same side? Ivica Smokovski and Tatjana Milenkovic

Homocysteine: risk factor for coronary artery disease in patients with type 2 diabetes mellitus. Marija Krstevska, Ksenija Bogoeva Kostovska, Katerina Tosheska Tajkovska, Irena Kostovska

Integrative selection of oral hygiene complex for pregnant women with diabetes mellitus and periodontal disease. Orekhova Liudmila, Musaeva Ramilya, Aleksandrova Anna, Posokhova Eleonora

Cardiological aspects of preventive management of pregnant women: assessment of central pressure. Maria Evseyeva, Oksana Sergeeva, Irina Prokhorenko -Kolomoytsev, Kirill Pavlov

Prevention of cardiovascular disease in patients with somatoform dysfunction of the vegetative nervous system. E.Y. Esina, V.V. Lyutov, V.N. Tsigan, A.A. Zuykova

Nephrin: marker for early detection of hypertensive nephropathy. Irena Kostovska

The importance of routinely reporting non-HDL-cholesterol by the clinical laboratory
Katerina Tosheska-Trajkovska, Irena Kostovska and Gordana Bosilkova

The role of personalized nutritional support for patients with cerebral stroke. Safonicheva OG, Ovchinnikova MA, Achkasov EE. I.M. Sechenov First Moscow State Medical University, Moscow, Russian Federation.

12:30 – 13:30 Closing Remarks and Announcement of the EPMA World Congress 2019
Venue: Aula Magna (Level 1)