



# 4<sup>th</sup> European Summer School on Nutrigenomics

June 21-25, 2021 - Virtual event

12:00 open session (check your connection) **Central Europe Time**

**13:00 Welcome**

**Monday: Exosome and early nutritional programming of the epigenome**  
Chairs: Rosita Gabbianelli, Stefano Lorenzetti

13:15 **Michael Müller**, Norwich Medical School, University of East Anglia, Norwich, United Kingdom. **We are what we eat and have eaten – Nutrigenomics of the exposome (an introduction)**

13:45 **Torsten Plosch**, Dept. Obstetrics and Gynaecology, University Medical Center Groningen, The Netherlands. **Fetal and early life programming of health**

14:15 **Louise Harvey**, Nutritional Programming Early Life Nutrition, Danone Nutricia Research, Utrecht, The Netherlands. **Windows of opportunity in the first 1000 days for nutritional programming of metabolic health**

14:45 Coffee break

15:00 **Inga C Teller**, Institute NaturScience, Bremen, Germany. **Lasting effects of early feeding and angles of breastfeeding support.**

15:30 Discussion with the speakers

**Selected presentations from participants (10 min + questions):**

16:00 **Getachew Arage**, Department of Nutrition and Diagnostics, College of Health Sciences, DebreTabor University, Debre Tabor, Ethiopia. **Effects of Early Life Exposure to Famine on Adulthood Metabolic and Cognitive Outcomes: A Historical Cohort Study from 1983 - 1985 Ethiopian Great Famine.**

16:15 **Marion Lecorquillé**, School of Public Health, Physiotherapy, and Sports Science, University College Dublin, Dublin, Republic of Ireland. **Maternal and paternal dietary quality, dietary inflammation status, and offspring DNA methylation**

16:30 **Poster session (poster 11-25, 2 min/person)**

**17:15 Poster discussion with the speakers (6 rooms: poster evaluation)**

18:00 Interactive test – closing

**Tuesday: Genetics versus epigenetics**

Chairs: Michael Muller, Baukje De Roos

13:00 **John Mathers**, Human Nutrition Research Centre, Population Health Sciences Institute, Newcastle University, U.K. **Scientific basis of human variability and potential for translation in personalised nutrition**

13:30 **Marianne Rots**, Department of Pathology and Medical Biology, University Medical Center Groningen, The Netherlands. **Mitochondrial DNA methylation: is it or is it not? (what is the true question?)**

14:00 **Wim Vanden Berghe**, Laboratory of Protein chemistry, Proteomics and Epigenetic Signaling University, Antwerp (Wilrijk), Belgium. **GWAS and EWAS: the Jekyll and Hyde sides of metabolic health and disease**

14:30 Coffee break

14:45 **Tomasz Jurkowski**, University of Cardiff, United Kingdom. **Diet, environmental factors and epigenetic machinery.**

15:15 **Valerio Napolioni**, University of Camerino, Italy. **Polygenic Risk Scores: an effective tool for genomic-based medicine in human complex traits**

**Selected presentations from participants (10 min + questions):**

15:45 **Przemyslaw Czajkowski**, Clinical Research Centre, Medical University of Białystok, Poland **Dietary fiber intake may influence the associations between FTO genetic variants and obesity-related parameters.**

16:00 **Lara Coppi**, DISFEB – Università degli Studi di Milano, Italy **Role of histone deacetylase 3 (HDAC3) and downstream players in physiopathology of adipose tissue**

16:15 **Celeste Ferraris**, School of Environmental and Life Sciences, The University of Newcastle, Australia. **Sour taste SNP KCNJ2-rs236514 associated with mild cognitive impairment in an elderly cohort**

16:30 Coffee break

16:45 **Technical talk Marianne Rots**, Department of Pathology and Medical Biology, University Medical Center Groningen, The Netherlands **Detecting mitochondrial DNA modification differences in clinical samples**

17:00 **Technical talk Wim Vanden Berghe** Laboratory of Protein chemistry, Proteomics and Epigenetic Signaling University, Antwerp (Wilrijk), Belgium. **Resolving epigenetic flavours by genomic and proteomic approaches.**

17:15 **Research talk John Mathers**, Human Nutrition Research Centre, Population Health Sciences Institute, Newcastle University, U.K. **Using personalised nutrition to improve public health: lessons from the Food4Me Study**

17:30 Coffee break

17:45 **Research talk Louise Harvey**, Nutritional Programming Early Life Nutrition, Danone Nutricia Research, Utrecht, The Netherlands. **Optimising pre-clinical models of nutritional programming for markers of metabolic health**

18:00 **Research talk Tomasz Jurkowski**, University of Cardiff, United Kingdom. **Probing epigenetic stability with synthetic approaches**

18:15 Discussion with the speakers

18:45 Interactive test - closing

**Wednesday: Nutrigenomics supports health and wellbeing: how to do prevention?**

Chairs: Marianne Rots, Wim Vanden Berghe

13:00 **Susan Duthie**, The Robert Gordon University, Aberdeen, U.K. **Let food be thy medicine & medicine by thy food? Did Hippocrates get it right & is this still relevant for the 21st Century?**

13:30 **Clarissa Gerhauser**, Division Cancer Epigenomics, German Cancer Research Center (DKFZ), Heidelberg, Germany. **Multi-layered epigenomic regulation of adipogenesis and its involvement in the pathogenesis of obesity and metabolic syndrome**

14:00 **Raffaella De Caterina**, University of Pisa, Italy. **The ups, downs, and ups again of omega-3 fatty acids as cardioprotective agents.**

14:30 Coffee break

14:45 **Saverio Cinti**, Marche Polytechnic University, Italy. **White, brown and pink adipocytes: the rainbow of the nutritional system.**

**Selected presentations from participants (10 min + questions)**

15:15 **Alexandra King**, Faculty of Sport, Allied Health and Performance Science, St Mary's University, Twickenham, TW1 4SX, UK. **A longitudinal study to determine the effect of gene-based personalised diet and physical activity advice on healthy eating motivation in university students.**

15:30 **Kathleen Wijman**, Department of Public Health and Primary Care, Ghent University, Ghent, Belgium. **Adolescents' stress reactivity and emotional eating during a lab stressor: differences depending on chronic stress and overweight**

15:45 Coffee break

16:00 **Research talk Baukje De Roos**, Deputy Director Rowett Institute, University of Aberdeen, U.K. **Fish, fish oil and health – nutrigenomic approaches to identify effects and responsiveness**

16:15 **Research talk Clarissa Gerhauser**, Division Cancer Epigenomics, German Cancer Research Center (DKFZ), Heidelberg, Germany. **Modulation of the epigenome during human adipocyte differentiation by docosahexaenoic acid and selected flavanone derivatives.**

16:30 **Research talk Stefano Lorenzetti**, Istituto Superiore di Sanità – ISS, Roma, Italy. **A short life history intervention study (4-mo RCT) is already sufficient to improve seminal plasma biomarkers in healthy young males living in highly polluted Italian areas?**

16:45 **Technical talk Susan Duthie**, The Robert Gordon University, Aberdeen, U.K. **Using proteomics to study the impact of flolate on human health and disease: a fishing exercise or big game hunting?**

17:00 Coffee break

17:15 Discussion with the speakers

17:45 Interactive test - closing

**Thursday: Food/environment and microbiota: the choices for wellness**

Chairs: Susan Duthie, Torsten Plosch

13:00 **Omry Koren**, Bar Ilan University, Safed, Israel. **The microbiome in the first 1000 days**

13:30 **Marco Ventura**, University of Parma, Italy **The First Microbial Colonizers of the Human Gut: Composition, Activities, and Health Implications of the Infant Gut Microbiota**

14:00 Coffee break

**Selected presentations from participants (10 min + questions)**

14:15 **Giulia Gaudioso**, Department of Food Quality and Nutrition, Research and Innovation Centre, Fondazione Edmund Mach, San Michele all'Adige, Trento, Italy. **In vitro fecal fermentation of Broccoli di Torbole ectotype (Brassica oleracea var. botrytis): analysis of gut microbiota composition**

14:30 **Federica Bernuzzi**, Quadram Institute of Biosciences, Department of Food Health and Innovation, Norwich Research Park NR4 7UA, United Kingdom. **The regulation of central metabolism by the food derived bioactive Sulforaphane**

14:45 **Duygu Dede Sener**, Department of Bioinformatics, Maastricht University, The Netherlands. **Digestive tract diseases and the microbiome: How to functionally integrate host transcriptomics and metabolomics**

15:00 Coffee break

15:15 **Technical talk Christian Milani**, University of Parma, Italy **Novel cutting edge metagenomics approaches for the analysis of the microbiota**

15:30 **Technical talk Omry Koren**, Bar Ilan University, Safed, Israel. **Fecal transplants: past, present, future**

15:45 **Research talk Michael Müller**, Norwich Medical School, University of East Anglia, Norwich, United Kingdom. **"A calorie is not a calorie" – The impact of diets for the gut-liver axis**

16:00 Discussion with speakers

16:30 **Poster session (poster 26-40, 2 min/person)**

**17:15 Poster discussion with the speakers (separated 6 rooms: poster evaluation)**

18:00 **Face to face with the speakers** (participants can meet speakers in individual rooms: 4 rooms one for each topic of the week)

18:30 Interactive test - closing

**Friday: Probiotic-epigenetics for healthy aging: evidence from longitudinal studies**

Chairs: Gerhauser Clarissa, Omry Koren

13:00 **Baukje De Roos**, Deputy Director Rowett Institute, University of Aberdeen, U.K. **Precision nutrition, personalised dietary strategies and improvement of population and individual health – how can we make this work?**

13:30 **Fabio Virgili**, Council for Agricultural Research and Economics - CREA, Rome, Italy. **Are we ready to personalize our diet by DNA-based dietary advice?**

14:00 Coffee break

14:15 **Augustin Scalbert**, International Agency for Research on Cancer, Nutrition and Metabolism Branch, World Health Organisation, Lyon, France. **Dietary polyphenols and cancer risk in the EPIC cohort**

14:45 **Round table: Michael Muller, Baukje De Roos, John Mathers, Melita Vidakovic** (Science Communicator and science writer ect) **How to promote health through social interventions?**

15:15 Interactive test

15:30 **Photo with all participants (Screenshots)**

15:45 Best poster award

15:45 Farewell

**Poster session**

1. **Maternal and paternal dietary quality, dietary inflammation status, and offspring DNA methylation** Marion Lecorquillé<sup>1</sup>, John Mehegan<sup>1</sup>, Cecily C. Kelleher<sup>1</sup>, Matthew Sudeman<sup>1</sup>, Catherine M Phillips<sup>1</sup>, School of Public Health, Physiotherapy, and Sports Science, University College Dublin, Dublin, Republic of Ireland<sup>1</sup>, WRC Integrative Epidemiology Unit, Population Health Sciences, Bristol Medical School, University of Bristol, Bristol, UK.
2. **Effects of Early Life Exposure to Famine on Adulthood Metabolic and Cognitive Outcomes: A Historical Cohort Study from 1983 - 1985 Ethiopian Great Famine**, Getachew Arage<sup>1</sup>, Prof. Tefera Be-Isheh<sup>2</sup>, Dr. Kalkidan Hassen<sup>3</sup> Department of Nutrition and Diagnostics, College of Health Sciences, DebreTabor University, Debre Tabor, Ethiopia,<sup>1</sup>Department of Nutrition and Diagnostics, Institute of Health, Jimma University, Jimma, Ethiopia.
3. **Dietary fiber intake may influence the associations between FTO genetic variants and obesity-related parameters**, Przemyslaw Czajkowski, Edyta Adamczak-Patruno, Wioleta Bauer, Urszula Krawczoka, Joanna Fedorczak, Monika Moroz, Maria Gorska, Adam Kretowicz, Clinical Research Centre, Medical University of Białystok, Poland.
4. **Role of histone deacetylase 3 (HDAC3) and downstream players in physiopathology of adipose tissue**, Lara Coppi<sup>1</sup>, Carolina Perri<sup>1</sup>, Raffaella Longo<sup>1</sup>, Nicolas Guerri<sup>2</sup>, Tiziana Caputo<sup>1</sup>, Beatrice Desrosvres<sup>1</sup>, Maurizio Crestani<sup>1</sup>, DISFEB – Università degli Studi di Milano, University of Lausanne.
5. **Sour taste SNP KCNJ2-rs236514 associated with mild cognitive impairment in an elderly cohort** Celeste Ferraris<sup>1</sup>, Alessandra Turner<sup>1</sup>, Christopher Scarlett<sup>1</sup>, Martin Versey<sup>1</sup>, Mark Luszcz<sup>1</sup>, Tamara Burcher<sup>1</sup>, and Emily A. Brockton<sup>1</sup> of Saint. Allied Health and Performance Science, St Mary's University, Twickenham, TW1 4SX, UK.
6. **A longitudinal study to determine the effect of gene-based personalised diet and physical activity advice on healthy eating motivation in university students**, A. King, A. P. Lic, J. Nixon, E. Mauro, Y. Vanhaecke<sup>1</sup>, Nathalie Michels<sup>2</sup> Department of Public Health and Primary Care, Ghent University, Ghent, Belgium, Department of Veterinary Public Health and Food Safety, Ghent University, Ghent, Belgium, Ghent University, School of Biological Sciences, Institute for Global Food Security, Belfast, Northern Ireland, UK.
7. **Adolescents' stress reactivity and emotional eating during a lab stressor: differences depending on chronic stress and overweight**, Kathleen Wijman<sup>1</sup>, Joanna Klossowska<sup>1</sup>, Stefan De Henauw<sup>1</sup>, Lynn Vanhaecke<sup>1</sup>, Nathalie Michels<sup>2</sup> Department of Public Health and Primary Care, Ghent University, Ghent, Belgium, Department of Veterinary Public Health and Food Safety, Ghent University, Ghent, Belgium, Ghent University, School of Biological Sciences, Institute for Global Food Security, Belfast, Northern Ireland, UK.
8. **In vitro fecal fermentation of Broccoli di Torbole ectotype (Brassica oleracea var. botrytis): analysis of gut microbiota composition** G. Gaudioso, C. Dittallevi, K. M. Tuohy and F. Fava Department of Food Quality and Nutrition, Research and Innovation Centre, Fondazione Edmund Mach, San Michele all'Adige, Trento, Italy.
9. **The regulation of central metabolism by the food derived bioactive Sulforaphane**, Federica Bernuzzi<sup>1</sup>, Tiziana Rocco<sup>1</sup>, S. Saha<sup>1</sup>, T. Torcomian<sup>1</sup> and M.H.Traka<sup>1</sup>, Quadram Institute of Biosciences, Department of Food Health and Innovation, Norwich Research Park NR4 7UA, United Kingdom; Earham Institute, Norwich Research Park NR4 7UA, United Kingdom.
10. **Digestive tract diseases and the microbiome: How to functionally integrate host transcriptomics and metabolomics**, Duygu Dede Sener, Christa Evela, Department of Bioinformatics, Maastricht University, Maastricht, The Netherlands.
11. **11dearrib packaging capability in the preservation of raw and cooked ham: a comparative study**, Acquaticelli, L., Kamgang Nzokou, F., Silvi, S., Angeloni, S., Caprioli, G. and S. Gargari, G. University of Camerino, via Sant'Agostino 1, Camerino, Italy.
12. **Organic and antibiotic-free chicken meat: a proteomic approach**, L. Alessandrini, M. Ricciutelli, M. Cortese, S. Vincenzetti, R. Galli, G. Sagarini, School of Pharmacy, University of Camerino, Italy.
13. **Role of Saccharomyces cerevisiae supplemented to glial and neural cells**, Arneli F. Maggi, E. Lee W. Mancini P., Fietto P., Archer T., Bionano R. Department of Medico-Surgical Sciences and Biotechnologies, Sapienza University of Rome, Italy. Department of Biology and Biotechnologies "Charles Darwin", Sapienza University of Rome. Department of Experimental Medicine, Sapienza University of Rome. Department of Pharmacy, University of Rome, Italy. Department of Biotechnology and Biotechnologies "Charles Darwin", Sapienza University of Rome. Department of Experimental Medicine, Sapienza University of Rome. Department of Pharmacy, University of Rome, Italy. Department of Biotechnology and Biotechnologies "Charles Darwin", Sapienza University of Rome. Department of Experimental Medicine, Sapienza University of Rome. Department of Pharmacy, University of Rome, Italy.
14. **The association of dietary fiber intake and serum vitronectin with leptin and apelin gene expression from visceral and subcutaneous adipose tissue among adults**, Ezzat Yudashkian<sup>1</sup>, Maryam Zakeshi<sup>1</sup>, Golshan Asghar<sup>1</sup>, Mehdi Hedayati<sup>1</sup>, Parvin Mirmiran<sup>1</sup>, Alireza Khalaji<sup>1</sup> Nutrition and Endocrine Research Center, Research Institute for Endocrine Sciences, Shahid Beheshti University of Medical Sciences, Tehran, Iran, Cellular and Molecular Endocrine Research Center, Research Institute for Endocrine Sciences, Shahid Beheshti University of Medical Sciences, Tehran, Iran<sup>1</sup> Tehran Obesity Treatment Center, Department of Surgery, Shahid Beheshti University, Tehran, Iran.
15. **Characterization of Gut Microbiome in Type-1 Diabetic Children in Qatar Population**, Farah El Asadi<sup>1</sup>, Anun Prasad Lakshmanan<sup>1</sup>, Dhinoth Kumar Bangarasaam<sup>1</sup>, Shaikha Alabdulljabbar<sup>1</sup>, Sara Zaidan<sup>1</sup>, Goran Petrovski<sup>1</sup>, Annalisa Terranova<sup>1</sup> College of Health and Life Sciences, Hamad Bin Khalifa University, Qatar, Research Branch, Qatar, Research Branch, Qatar, Paediatrics Department, Endocrine and Diabetes Division, Sida Medicine, Qatar.
16. **Organic meat in compostable packaging solutions: a preliminary study**, L. Alessandrini, M. Ricciutelli, G. Caprioli, G. Sagarini, School of Pharmacy, University of Camerino, Italy.
17. **An emerging vegetable, (Citrullum matriflorum L.), as a source of nutraceuticals: extraction, purification and chemical characterization of polar extracts**, Dielitta Patti<sup>1</sup>, Simone Angeloni<sup>1</sup>, Giovanni Caprioli<sup>1</sup>, Filippo Maggi<sup>1</sup>, Massimo Ricciutelli<sup>1</sup>, Lotta Arnoldi<sup>1</sup>, Gianni Sagarini<sup>1</sup> School of Pharmacy, University of Camerino, Camerino, Italy; Research and Development Department, Modena SpA, Milan, Italy.
18. **mirk-29a affects the progression of Alzheimer's Disease through one carbon-metabolism** Tiziana Riala, Department of Experimental Medicine, "La Sapienza" University of Rome, Italy.
19. **Glucocorticoid signaling alterations induced by late-onset dietary restriction aggravate metabolic inflammation in the liver of old wistar rats**, Ana Teofilovic<sup>1</sup>, Milos Vratovic<sup>1</sup>, Natasa Velickovic<sup>1</sup>, Danijela Vojnovic<sup>1</sup>, Milica Miletic<sup>1</sup>, Milica Petrovic<sup>1</sup>, Miroslav Jovanovic<sup>1</sup>, Aleksandra Mladenovic<sup>1</sup>, Djordjevic<sup>1</sup> and Ana Djordjevic<sup>1</sup> Department of Neurobiology, Institute for Biological Research "Siniša Stanković", National Institute of Republic of Serbia, University of Belgrade, Despot Stefan Blvd, Belgrade, Serbia.
20. **Impact of oca/methionine/threonine supplementation on liver glutathione level in aged mice**, Varja Todornovic, Nevena Dabecic, Bojana Vidovic, Tijana Ilic, Sladana Sabadzic, Department of Bromatology, Faculty of Pharmacy, Belgrade, Belgrade, Serbia.
21. **Nucleic acids - under-rated food components**, Zuzanna Kozłara, Agnieszka Bartoszek, Department of Food Chemistry, Technology and Biotechnology, Gdansk University of Technology, Gdansk, Poland.
22. **Genetic risk score to predict the likelihood of dental caries in Finnish adolescents**, Ninin Agrawal, Elina Engberg, Jussi Furolinen, Emma Dahlström, Heli Vilijanen, Folkhälsan Research Center, Helsinki, Finland.
23. **Metabonomics - based machine learning method for the discovery and characterisation of biomarkers implicated in Non-Alcoholic Fatty Liver Disease**, Amirin Farizan Babu<sup>1</sup>, Sara Leah Sillico<sup>1</sup>, Howell Leung<sup>1</sup>, Emmanuel Nychas<sup>1</sup>, Gianni Panagiotou<sup>1</sup>, Kai Hanhineva<sup>1</sup>, University of Eastern Finland, Department of Clinical Nutrition and Food Safety, Kuopio, Finland, Leibniz Institute for Natural Product Research and Infection Biology - Hans Knoll Institute (HKI), Systems Biology and Bioinformatics, Jena, Germany.
24. **Influence of renal disorder and dietary factors on the incidence of cataracts in children**, Sima Todorescu Argopolova<sup>1</sup>, DMD, PhD, Ayshie Seyhan Sallim<sup>1</sup>, PhD, Chief Assistant at the Department of Pediatric Dentistry, Faculty of Dental Medicine, Chief Assistant at the Department of Biochemistry, Molecular Medicine and Neurogenetics, Faculty of Pharmacy, University of Salerno, Italy. Department of Parasitology, Vama<sup>1</sup> Varna, Bulgaria.
25. **Effect of Extra virgin olive oil polyphenols pattern on anti-inflammatory activities: analytical aspects**, Andersson Annunziata<sup>1</sup>, Stefania De Santis<sup>1</sup>, Pasquale Crupi<sup>1</sup>, Department of Pharmacy-Drug Science, University of Bari Aldo Moro, Bari, Italy. Department of Interdisciplinary Medicine, University of Bari Aldo Moro, Bari, Italy.
26. **Elevated intake of high amylose wheat improves conception rates and increases placental size but not fetal weight in mice**, See Ming Lim<sup>1</sup>, Amanda J. Pagen<sup>1</sup>, John Carragher<sup>1</sup>, Iain Seaton<sup>1</sup>, Sarah A. Robertson<sup>1</sup>, Maria Felicia Ferrara<sup>1</sup>, Carlo Franchini<sup>1</sup>, Antonio Moschetti<sup>1</sup>, Marcello Chappas<sup>1</sup>, Maria Lisa Gudimov<sup>1</sup>, Pasquale Crupi<sup>1</sup> and Filomena Corbo<sup>1</sup> Department of Pharmacy-Drug Science, University of Bari Aldo Moro, 70126 Bari, Italy. National Institute of Gastroenterology, S. de Bellis<sup>1</sup> Research Hospital, Castellana Grotte (BA), Italy. Department of Pharmacy, University of Salerno, Italy. Pediatric Unit, Department of Biomedical Sciences and Human Oncology, University of Bari Aldo Moro, Bari, Italy. Department of Interdisciplinary Medicine, University of Bari Aldo Moro, Bari, Italy.
27. **Redox, nutrigenomic activity of ascorbic acid and its derivatives**, Patrycja Jakubczyk<sup>1</sup>, Klaudia Sulborska<sup>1</sup>, Monika Baranowska, Bohumir Aduzdamzama, Witold Przytycz, Barbara Kusznierzewska, Wojciech Czarnowski, Agnieszka Bartoszek, Faculty of Chemistry, Gdansk University of Technology, Poland.
28. **Long-term differential effects of procyandins on CCK secretion in young versus 21-month-old female rats under cafeteria diet**, Alba Miguñes-Gómez, Carme Grau-Bové, Maria Sierra-Cruz, Esther Rodríguez-Gallego, Raül Beltrán-Debbas, Mireia Bellí, Ximena Tena, Montserrat Pimen and Anna Ardevol, MiBioFood Research Group, Department of Biochemistry and Biotechnology, Universitat Rovira i Virgili, Tarragona, Spain.
29. **Grape-seed proanthocyanidin extract reverts obesity-related metabolic derangements in aged female rats**, Maria Sierra-Cruz, Alba Miguñes-Gómez, Carme Grau-Bové, Esther Rodríguez-Gallego, Raül Beltrán-Debbas, Mireia Bellí, Ximena Tena, Montserrat Pimen and Anna Ardevol, MiBioFood Research Group, Department of Biochemistry and Biotechnology, Universitat Rovira i Virgili, Tarragona, Spain.
30. **Live Biotherapeutic Probiotics: Human Microbiome Machine Learning Instico clinical trials NPO1. Practical approach to care of personalized probiotics medicine**, Róyed M Reyher, Probiotics Microbiology PhD, City for Scientific Research and Applied Technology, Alex, Egypt.
31. **Assessment of the relationship between protein consumption and development of glucose metabolism disturbances in carriers of some common single nucleotide polymorphisms in gene BDNF (rs1083211)**, Urszula Krawczoka, Edyta Adamczak-Patruno, Wioleta Bauer, Przemyslaw Czajkowski, Joanna Fedorczak, Monika Moroz, Maria Gorska, Adam Kretowicz, Clinical Research Centre, Medical University of Białystok, Poland.
32. **Caffeine exposure and folate deficiency in vitro can influence chromatin translocation events associated with childhood leukaemia**, Jessica Saville<sup>1</sup>, Kay Padgett<sup>1</sup>, Lisa Russell<sup>1</sup> and Jill A. McKay<sup>1</sup> Department of Applied Sciences, Northumbria University, UK. Translational and Clinical Research Institute, Newcastle University, UK.
33. **Extra virgin olive oil extracts dampen the inflammatory response by imprinting an anti-inflammatory profile to murine dendritic cells**, Stefania De Santis<sup>1</sup>, Marina Liszi<sup>1</sup>, Giulio Verna<sup>1</sup>, Francesca Curci<sup>1</sup>, Rosalba Milani<sup>1</sup>, Maria Felicia Ferrara<sup>1</sup>, Carlo Franchini<sup>1</sup>, Antonio Moschetti<sup>1</sup>, Marcello Chappas<sup>1</sup>, Maria Lisa Gudimov<sup>1</sup>, Pasquale Crupi<sup>1</sup> and Filomena Corbo<sup>1</sup> Department of Pharmacy-Drug Science, University of Bari Aldo Moro, 70126 Bari, Italy. National Institute of Gastroenterology, S. de Bellis<sup>1</sup> Research Hospital, Castellana Grotte (BA), Italy. Department of Pharmacy, University of Salerno, Italy. Pediatric Unit, Department of Biomedical Sciences and Human Oncology, University of Bari Aldo Moro, Bari, Italy. Department of Interdisciplinary Medicine, University of Bari Aldo Moro, Bari, Italy.
34. **Redox, nutrigenomic activity of ascorbic acid and its derivatives**, Patrycja Jakubczyk<sup>1</sup>, Klaudia Sulborska<sup>1</sup>, Monika Baranowska, Bohumir Aduzdamzama, Witold Przytycz, Barbara Kusznierzewska, Wojciech Czarnowski, Agnieszka Bartoszek, Faculty of Chemistry, Gdansk University of Technology, Poland.
35. **Exploring the anticancer effects of the food bioactive Ferulic: focus on cytoskeleton-related mechanisms** Iria Guerrero<sup>1</sup>, Johana Vidovic<sup>1</sup>, Joao G. Costa<sup>1</sup>, Sandra Ferreira<sup>1</sup>, Nuno G. Oliveira<sup>1</sup>, Nuno Saraiva<sup>1</sup>, Ana S. Fernandes<sup>1</sup> CIQOS, Universidade Lusófona's Research Center for Biosciences & Health Technologies, Lisboa, Portugal, Faculty of Pharmacy, University of Belgrade, Serbia, Research Institute for Medicines (iMed.ULisboa), Universidade de Lisboa, Portugal.
36. **Could nucleic acids oxidatively modified during thermal processing of red meat be components with potentially cardioprotective properties?** Anna Kozielec, Karol Parnech, Agnieszka Bartoszek, Gdansk University of Technology (Faculty of Chemistry, Department of Chemistry, Technology and Biotechnology of Food), Gdansk, Poland.
37. **Quantitative analysis of raw cow milk reveals that milkRNA levels relate to the inflammatory profile of milk** Irene Peracci<sup>1</sup>, Donatella Fedeli<sup>1</sup>, Rosita Gabbianelli<sup>1</sup>, Laura Bordoni<sup>1</sup>, School of Advanced Studies and Unit of Molecular Biology and Nutrigenomics, University of Camerino, Italy.
38. **Walnut-derived peptides in a model of low-grade inflammation: any nutrigenomic effect?** Fanni Zhao<sup>1</sup>, Laura Bordoni<sup>1</sup>, Weihong Min<sup>1</sup>, Rosita Gabbianelli<sup>1</sup> School of Advanced studies, University of Camerino, Italy. College of Life Science and Food Science, Jiangnan University, China. Department of Food Science and Technology, University of Camerino, Italy.
39. **Difference in genetic susceptibility to cancers among Asians and Caucasians: A Literature Review** Anh Hoang Nguyen, Faculty of Health Sciences and Sport, University of Stirling, United Kingdom
40. **Biological activity of tea-chokoberry and chokoberry fermented beverages**, Patryk Lichocki, Filip Białkowski, Edyta Malinowska-Panczyk, Gdansk University of Technology (Faculty of Chemistry, Department of Chemistry, Technology and Biotechnology of Food), Gdansk, Poland.

