



Wednesday 26, September

16:00-18:00 Registration

16:45-17:00 Opening Ceremony

17:00-18:00 **Keynote 1**
Diet, nutrients and inflammaging,
Philip Calder (UK)



Chair: Claudia Santos

18:00-19:30 *Welcome reception cocktails*
Wine by





Thursday 27, September

<p style="text-align: center;">9:00-9:30 Keynote 2</p> <p>Epigenetic modulation of inflammation and synaptic plasticity promotes resilience against stress in mice, Giulio Pasinetti (USA)</p> <p>Chairs: Anne-Marie Minihane & Francisco Tomás-Barberán</p> <p style="text-align: center;">Session 1: Bioactives for neuronal and immune functions</p>	<p style="text-align: center;">9:00-9:30 Keynote 3</p> <p>Recognized health effects of carotenoids in humans, Patrick Borel (FR)</p> <p>Chairs: Carmen Boeriu, António Vicente & Torsten Bohn</p> <p style="text-align: center;">Session 2: Bioactives functionalization and interactions</p>
<p style="text-align: center;">9:30-10:00</p> <p>Urolithins and equol: similar bioactive gut microbiota metabolites with different food origins, Francisco Tomás-Barberán (ES)</p> <p style="text-align: center;">10:00-10:30</p> <p>Gold standards for a realistic polyphenol research, Pedro Mena (IT)</p> <p style="text-align: center;">10:30-11:00 <i>Juicy break</i> </p> <p>11:00-11:15 Effect of 4 weeks daily wild blueberry supplementation on symptoms of depression in adolescents, Claire Williams (UK)</p> <p>11:15-11:30 Grape seed proanthocyanidins as modulators of the inflammatory response and barrier function in the intestine, Ximena Terra Barbadora (ES)</p> <p>11:30-11:45 Looking for new insight on the role of Omega-3 polyunsaturated fatty acids (n-3 PUFA) on cognitive decline and brain dysfunction in age-related disorders, Debora Cutuli (IT)</p> <p>11:45-12:00 Exploring potential cognitive benefits of wild blueberry consumption in children diagnosed with attention-deficit hyperactivity disorder (ADHD), Daniel Lampport (UK)</p> <p>12:00-12:15 Valerolactones and healthy Ageing: Linking Dietary factors, nutrient biomarkers, metabolic status and inflammation with cognition in older adults – The VALID Project, Donato Angelino (IT)</p> <p>12:15-12:30 Modulatory effects of polyphenols on type-2 immune function, Andrew Williams (DK)</p>	<p style="text-align: center;">9:30-10:00</p> <p>Polysaccharides for health: Bioactivity, functionalisation and applications, Carmen Boeriu (NL)</p> <p style="text-align: center;">10:00-10:30</p> <p>Polysaccharides as basic ingredients for delivery of functionality in foods, António Vicente (PT)</p> <p style="text-align: center;">10:30-10:00 <i>Juicy break</i> </p> <p>11:00-11:15 Interaction between carotenoids and phytosterols during in vitro digestion of a new functional fermented maize yoghurt-like product, Magali Gies (FR)</p> <p>11:15-11:30 Optimizing carotenoid bioaccessibility through processing of vegetable-based products, Sarah Verkempinck (BE)</p> <p>11:30-11:45 Microencapsulation of carotenoid pigments from <i>Dunaliella salina</i> into natural polysaccharides as potential food colouring ingredient, Ana Nunes (PT)</p> <p>11:45-12:00 Polyphenols fortification as a strategy to reduce the glycaemic index of bread, Lijiao Kan (NL)</p> <p>12:00-12:15 Extraction, Characterization and potential antioxidant and neuroprotective activities of Polysaccharides from some selected seaweeds, Tosin Olasehinde (ZA)</p> <p>12:15-12:30 Increasing solubilisation of pectin polysaccharides from apple by-product with high hydrostatic pressure treatments, Rocío Teresa Jiménez-Peña (ES)</p>

12:30-13:15 *Lunch*
Wine by



13:15-14:00 Flash presentations: **Innovative approaches in bioactives research**

Chair: Pedro Mena

Extractable and non-extractable polyphenols from apple pomace,
Pedro António Rodrigues Fernandes (PT)

Magnetic ligand fishing: A bio-analytical technology for facilitated discovery of bioactive constituents in complex food matrices,
Sileshi Wubshet (NO)

Pineapple by-product as a food ingredient,
Diana Isa de Oliveira Santos (PT)

Biorefining of carrot and red beetroot by-products into valuable ingredients,
Ramune Bobinaite (LT)

Storage stability and in vitro static release of microencapsulated tomato pomace extract,
Luiz Carlos Corrêa Filho (PT)

Evaluation of cosmetic activity of optimized anthocyanin extracts from different wine lees,
Melanie Matos (PT)

Session 3: Mechanism of action of plant bioactives and derived metabolites

Chairs: María-Teresa Conesa & Daniele del Rio

Session 4: Marine Bioactives

Chairs: Anabela Raymundo

14:00-14:30

Critical evaluation of gene expression analyses in human tissues in response to supplementation with dietary bioactive compounds,
María-Teresa Conesa (ES)

14:30- 15:00

Polyphenols specifically inhibit VEGF-family receptor tyrosine kinase signalling by binding directly to the receptor ligands,
Paul Kroon (UK)

15:00-15:15 Biotransformation of silymarin flavonolignans by human fecal microflora, **Katerina Valentová** (CZ)

14:00-14:30


Cognitive benefits of marine n-3 fatty acids,
Anne-Marie Minihane (UK)

14:30- 15:00





Microalgae biomass as source of bioactive compounds for staple foods production,
Anabela Raymundo (PT)

15:00-15:15 Charge and Size-Selective Separation of Peptides from Salmon Protein Hydrolysate and their respective In-Vitro anti-diabetic Activity, **Henaux Loïc** (CA)



<p>15:15-15:30 Nanobased targeted approach to study anthocyanins transport through MKN-28 Cells: putative involvement of Glucose Transporters, Hélder Oliveira (PT)</p> <p>15:30-15:45 Inter-individual differences in the metabolism of polyphenols, Yelena Guttman (IL)</p> <p>15:45-16:00 Resveratrol and resveratrol phase-2 metabolites modulate the expression of junctional adhesion molecules, Priscilla Day (UK)</p> <p>16:00-16:15 Ferulic acid and its derivatives modulate endothelial function through maintenance of Nitric Oxide balance in HUVEC cells, Giulia Corona (UK)</p>	<p>15:15-15:30 In vitro bioaccessibility and deacetylation of fucoxanthin from the microalga <i>Nitzschia laevis</i>, Bingbing Guo (NL)</p> <p>15:30-15:45 Health Benefits of EPA and DHA in <i>Isochrysis galbana</i> Biomass Considering Bioaccessibility as Modelled by an In Vitro System Simulating Human Digestion, Carlos Cardoso (PT)</p> <p>15:45-16:00 Valorisation of wild cyanobacterial biomass towards high-added value ingredients, Michail Syrpas (LT)</p> <p>16:00-16:15 Microalgae cell disruption: Effect on the bioactivity and rheology of wheat bread, M. Cristiana Nunes (PT)</p>
<p>Industry lectures</p>	
<p>16:15-16:30 Microbial bioactives alter cellular metabolism, Sofia Moco (CH)</p>	<p>16:15-16:30 Metabolic targets of watercress and PEITC in MCF-7 and MCF-10A cells explain differential sensitisation responses to ionising radiation, Natasa Giallourou (UK)</p>
<p>16:30-17:00 <i>Coffee Break</i> </p> <p>17:00-17:30 Keynote 4 Phenolic compounds as natural alternatives to artificial food additives: colouring, preserving and bioactive agents, Isabel Ferreira (PT) Chair: Ana Matias</p>	
<p>17:30-18:30 Poster session</p>	
<p>20:00-23:00 <i>Conference dinner</i></p>	

Friday 28, September

<p>9:00-9:30 Keynote 5 Food proteins and the control of food intake, Daniel Tomé (FR)</p> <p>Chairs: Isidra Recio & Daniel Tomé</p> <p>Session 5: Bioactive Peptides & Proteins</p>	<p>9:00-9:30 Keynote 6 Enhanced Detoxication of Air Pollutants in Clinical Trials with Broccoli-based Interventions, Thomas Kensler (USA)</p> <p>Chairs: Rosário Bronze & Richard Mithen</p> <p>Session 6: Polyphenols & Glucosinolates</p>
<p>09:30-10:00 Health implications of protein digestion products, Isidra Recio (ES)</p> <p>10:00-10:30 Marine bioactive proteins and peptides: Opportunities and Challenges Maria Hayes (IR)</p> <p>10:30-11:00 Juicy break </p> <p>11:00-11:15 Emerging molecular level insights into the role of dietary polyphenols in the prevention of Celiac Disease, Ricardo Dias (PT)</p> <p>11:15-11:30 Meat digestion provides peptides release with antidiabetic bio-activity throughout the whole digestive process, Laetitia Theron (FR)</p> <p>11:30-11:45 Evaluation of the in vitro and in vivo antidiabetic potential of a blue whiting (<i>Micromesistius</i> <i>poutassou</i>) protein hydrolysate, Padraigin Harnedy (IE)</p> <p>11:45-12:00 Deflamin, an edible anti-inflammatory and antioxidant protein isolated from legume seeds, Joana Mota (PT)</p> <p>12:00-12:15 Influence of raw milk microflora and starter cultures in cheese on protein hydrolysis and bioactive peptide generation during digestion, Egger Lotti (CH)</p> <p>12:15-12:30 Hemorphins released from bovine haemoglobin gastrointestinal digestion: Dual effects on intestinal hormones and DPP-IV regulations, B. Cudennec (FR)</p>	<p>09:30-10:00 Toxins in Brassica crops, and why they may be good for us, Richard Mithen (UK) </p> <p>10:00-10:30 Breast cancer metastasis and flavonoids – a role of quercetin in cancer prevention, Kayoko Shimoi (JP) </p> <p>10:30-11:00 Juicy break </p> <p>11:00-11:15 Perspectives on bioactivity of olive oil: evidence from animal models and human interventions, Sandra Silva (PT)</p> <p>11:15-11:30 Effect of isothiocyanates and Brassicaceae extracts on targeting colorectal cancer stemness using a 3D cell model of colorectal cancer, Ana Teresa Serra (PT)</p> <p>11:30-11:45 Glucosinolate hydrolysis products: precursors to novel compounds in foods, Franziska S. Hanschen (DE)</p> <p>11:45-12:00- Effects of Cyanidin-3-O-glucoside and its metabolites on glucose metabolism of human mammary carcinoma cells, Talita Carneiro (BR)</p> <p>12:00-12:15 - Resveratrol's effects on a prostate cancer cell line are dependent on oxygen levels, João Fonseca (CA)</p> <p>12:15-12:30 Antioxidant activity of (poly)phenolic extracts from raw and cooked cactus cladodes (<i>Opuntia ficus-</i> <i>indica</i>) after faecal fermentation in human colon carcinoma HT29 cells, Elsy De Santiago (ES)</p>



12:30-13:15 *Lunch*
Wine by



13:15-14:00 Flash presentations: **Novel bioactives, applications and dietary biomarkers**

Chair: Antonio Cilla



Novel bioactive triterpenoids vary in content and composition in red raspberries (*Rubus idaeus*) according to tissue, extraction procedure, and variety but also between *Rubus* species,
Gordon McDougall (UK)

Analysis of gamma-oryzanol, an attractive bioactive component from different rice cultivars,
Maria Manuela da Conceição Lageiro (PT)

Glycaemic effects following acute consumption of beetroot juice,
Christine Bosch (UK)

Polyphenol interactions impact in gliadins digestion and immunogenicity,
Maria Rosa Perez Gregorio (PT)

Serum carotenoid and tocopherol levels as indicators of adherence to dietary recommendations: The multiethnic cohort study,
Gertraud Maskarinec (USA)

Session 7: Food bioactives: dietary interventions Chairs: Regina Menezes & Gordon McDougall	Session 8: Bioactives for cardiometabolic health Chairs: Ana Rodriguez-Mateos & Paul Kroon
<p style="text-align: center;">14:00-14:30 Nutritional metabolomics: dietary evaluation from biomarkers, Cristina Andrés Lacueva (ES)</p> <p style="text-align: center;">14:30- 15:00 From carotenoid intake to blood and tissue concentrations – Implications for dietary intake recommendations, Torsten Bohn (LU)</p> <p>15:00-15:15 Seasonal consumption of polyphenol-rich fruits affects the hypothalamic leptin signaling system in a photoperiod-dependent mode, Maria Ibars Serra (ES)</p> <p>15:15-15:30 A polyphenol-rich dietary pattern as a strategy to improve intestinal permeability: rationale and outcomes of the MaPLE project, Patrizia Riso (IT)</p> <p>15:30-15:45 Effect of high fat meal enriched with mixed spices on postprandial glycemia, appetite, thyroid hormones and metabolic endotoxemia in healthy subjects, Yoghatama Cindya Zanzer (SE)</p> <p>15:45-16:00 Grapefruit juice (furanocoumarin)-beetroot juice (dietary nitrate) cocktail: Interactions with the nitrate-nitrite-nitric oxide pathway through CYP3A4 inhibition of nitrite oxidation, and the enterosalivary circulation, Charlotte Mills (UK)</p> <p>16:00-16:15 A functional citrus concentrate enriched in hesperidin/β-cryptoxanthin exerts metabolic syndrome preventive effects in rats, Laura Gence (FR)</p>	<p style="text-align: center;">14:00-14:30 Berry (poly)phenols and cardiovascular health: evidence from clinical studies and mechanistic insights, Ana Rodriguez-Mateos (UK)</p> <p style="text-align: center;">14:30- 15:00 Assessing the respective contributions of dietary flavanols and procyanidins in mediating cardiovascular effects in humans, Christian Heiss (UK)</p> <p>15:00-15:15 Beneficial effects of (poly)phenols in an animal model of hypertension: exploring the role of gut microbiota, Andreia Gomes (PT)</p> <p>15:15-15:30 Daily consumption of Aronia Melanocarpa (chokeberry) improves vascular function in healthy individuals, Geoffrey Istas (UK)</p> <p>15:30-15:45 Two-week consumption of blood orange juice improves endothelial function in healthy overweight adults, Lu Li (UK)</p> <p>15:45-16:00 Dose-response effect of an apple extract on postprandial glycaemia, insulinaemia and incretin secretion: a randomized controlled trial, Emily Prpa (UK)</p> <p>16:00-16:15 Apple polyphenols decrease endothelial dysfunction and atherosclerosis after chronic Western diet in a ApoE mouse model, Claire Dufour (FR)</p>
<p>16:15-16:45 <i>Coffee Break</i> </p> <p>16:45-17:15 Keynote 7 The role of dietary bioactives in lifelong health – what works for whom?, Baukje de Roos (UK)</p> <p>17:15 -17:50 Closing Ceremony with poster awards</p> <p><i>Supported by</i></p>  <p>Chair: Claudia Santos & Victor de Freitas</p>	