**TUESDAY, OCTOBER 27, 2015**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>1:00-3:00 pm</td>
<td>ICPH Registration and Welcome</td>
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<tr>
<td>3:00-3:30 pm</td>
<td>Introduction</td>
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<tr>
<td>3:30 pm</td>
<td><strong>PLENARY OPENING SESSION</strong></td>
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<td></td>
<td>Bioavailability of polyphenols as an essential step to understanding efficacy.</td>
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<td></td>
<td>Pr. G. Williamson (<em>University of Leeds – UK</em>)</td>
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<td>Dietary flavonoids and healthy ageing - recent advances from epidemiological and clinical research.</td>
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<td>Pr. A. Cassidy (<em>University of East Anglia – UK</em>)</td>
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<td>Inflammaging and epimenetic age.</td>
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<td>Pr. C. Franceschi (<em>University of Bologne – Italy</em>)</td>
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<tr>
<td>5:30 pm</td>
<td>Dietary Modulation of brain plasticity: Implications for Mental Health.</td>
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<td>Dr. S. Thuret (<em>King’s College London – UK</em>)</td>
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<td>Welcome Cocktail (City Hall of Tours)</td>
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**PLENARY SESSION 2**  
Introductory lectures for sessions A&B

**8:30 am**

Polyphenol metabolism by the gut microbiota and nutrikinetics modeling.  
**Pr. J. Duynhoven** *(University of Wageningen – Netherlands)*

Polyphenols and risk of new-onset diabetes in the PREDIMED trial.  
**Pr. R.M. Lamuela-Raventos** *(University of Barcelona – Spain)*

Preclinical and clinical evidence for the beneficial effects of the cacao flavonols on metabolic dysregulations.  
**Pr. I. Ramirez-Sanchez** *(Instituto Politecnico Nacional – Mexico)*

**10:00 am**

**Coffee Break**

**10:30 am**

**Session A: Innovative aspects in polyphenols bioavailability and exposure assessment**

Metabolomic approach for improving assessment of exposure to polyphenols-rich foods through combined multi-metabolite models.  
**Dr. R. Llorach** *(University of Barcelona - Spain)*

Effects of biotransformation and food matrix on the bioactivities of polymethoxylavones.  
**Pr. H. Xiao** *(University of Massachusetts - USA)*

**Session B: Advances in polyphenols targets for obesity, metabolic syndrome and diabetes**

A novel mechanism for the anti-diabetic action of green tea polyphenols.  
**Pr. J.A. Kim** *(University of Alabama - USA)*

Fruit polyphenols improve type 2 diabetes and the metabolic syndrome through alleviating inflammation and modulating the gut microbiota.  
**Pr. A. Marett** *(University of Laval - Canada)*

**11:30 am**

**Short selected communications**

Multiple-approach studies to assess anthocyanin gastric absorption – potential role of GLUT1.  
**Iva Fernandes** *(University of Porto – Portugal)*

Role of sulfotransferases in resveratrol bioavailability and adipocyte metabolism.  
**Nele Gheldof** *(Nestlé Institute of Health Sciences - Switzerland)*

Neuroprotective potential of phenolic sulfates, abundant bioavailable metabolites.  
**Claudia Nunes dos Santos** *(IBET - Portugal)*

Linking metabolism and bioactivity of curcumin.  
**Claus Schneider** *(Vanderbilt University Medical School – USA)*

**Short selected communications**

Regularly consuming a green/roasted coffee blend shows benefits against metabolic syndrome.  
**Laura Bravo** *(ICTAN-CSIC – Spain)*

Flavan-3-ols and n-3 fatty acids prevent non-alcoholic fatty liver disease in a high fat-high fructose fed mouse model.  
**Pr. Anne M Mimihane** *(University of East Anglia - UK)*

Estrogen receptor α triggers most of the beneficial effect of red wine polyphenols intake of obesity-induced metabolic and vascular disorders.  
**Raffaela Soleti** *(Inserm - France)*

The metabolism enhancement effect of cyanidin-3-glucoside through skeletal muscle, adipocyte and their communications.  
**Toshiya Matsukawa** *(University of Tsukuba – Japan)*

**12:30 am**

Lunch

**12:30-1:30 pm**

Poster session
### Session C: Neuro-cognitive effects of polyphenols: at the cutting edge

Polyphenols found in berry fruit improve age-associated changes in cognitive function and brain inflammation.

**Dr. B. Shukitt-Hale (University of Tufts - USA)**

Cognitive and cerebral blood-flow effects of polyphenols in humans.

**Pr. D. Kennedy (University Northumbria, UK)**

**Short selected communications**

- Characterization of Brain-Bioavailable Bioactive Polyphenol Metabolites in Pre-Symptomatic Alzheimer’s Disease.
  - **Giulio Maria Pasinetti (Icahn School of Medicine at Mount Sinai – USA)**

- The acute effects of a polyphenol-rich blueberry beverage on cognitive function in healthy younger and older adults.
  - **Dr Georgina Dodd (University of Reading – UK)**

- Beneficial effects of the Neurophenol extract on age-related cognitive decline.
  - **Julien Bensalem (Activ’Inside – France)**

- Green tea promotes positive effects on redox status of different regions in the central nervous system of obese and lean rats.
  - **Rosemari Otton (Universidade Cruzeiro do Sul – Brazil)**

- Phenolic acid intake, delivered via moderate Champagne wine consumption, improves spatial working memory via the modulation of hippocampal and cortical protein modulation in aged animals.
  - **David Vauzour (University of East Anglia - UK)**

### Session D: Recent breakthroughs in cancer prevention

Stress, breast cancer and flavonoids - A role of quercetin conjugate as a beta2-adrenergic receptor antagonist.

**Pr. K. Shimo (University of Shizuoka - Japan)**

Advances in cancer chemoprevention – lessons from resveratrol.

**Pr. K. Brown (University of Leicester - UK)**

**Short selected communications**

- Dietary polyphenols and cancer incidence: a comprehensive systematic review and dose-response meta-analysis.
  - **Giuseppe Grosso (University of Catania – Italy)**

- Preclinical efficacy of pterostilbene against human melanoma: a stress-related indirect mechanism reconciles bioavailability and anticancer activity in vivo.
  - **Jose M. Estela (Faculty of Medicine Valencia – Spain)**

- Analysis of Normal and Malignant Colon Tissue Specific MicroRNAs in Response to Dietary Intervention with a Pomegranate Extract: Modulatory Effects vs. Potential Artefacts.
  - **Maria Teresa Garcia Conesa (CEBAS-CSIC – Spain)**

- Exploring the anti-tumoral effect of citrus polyphenols using a 3D cell model of colorectal cancer.
  - **Ana Teresa Serra (IBET – Portugal)**

- Bioavailability and bioactivity of raspberry phytochemicals using in vivo digestion coupled to ex vivo simulated colonic fermentation.
  - **Chris Gill (Ulster University - Ireland)**

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**Refreshment and Poster session**
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<tr>
<th>Time</th>
<th>Session E: Update for properties of polyphenols in cardiovascular diseases</th>
<th>Session F: Innovative approaches</th>
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<tr>
<td>10:30 am</td>
<td>Flavonols and their metabolites in the vascular wall.</td>
<td>Shotgun Metabolomics and lipidomics for discovery of polyphenol bioactivity.</td>
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<td><strong>Pr. F. Perez-Vizzacino (Universidad Complutense de Madrid - Spain)</strong></td>
<td><strong>Pr. J.F. Stevens (University of Oregon State - USA)</strong></td>
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<td>11:30 am</td>
<td>Cardiovascular benefits of dietary polyphenols.</td>
<td>Novel controlled-release technologies to enhance efficacy of polyphenolics.</td>
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<td><strong>Pr. K. Croft (University of Western Australia - Australia)</strong></td>
<td><strong>Dr. R.C. Gupta (University of Louisville - USA)</strong></td>
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<td>11:30 am</td>
<td><strong>Short selected communications</strong></td>
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<td>Increased microparticle production and impaired microvascular endothelial function in aldosterone-salt-treated rats: protective effects of polyphenols.</td>
<td>Identification of the metabolomic fingerprint associated with flavonoid consumption level.</td>
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<td><strong>Ramaroson Andriantsitohaina (Inserm - France)</strong></td>
<td><strong>Kerry Ivey (Harvard T. H. Chan School of Public Health - USA)</strong></td>
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<td>Comparative acute effects of soy isoflavones and orange juice-derived flavanones on markers of cardiovascular risk in men at moderate risk of cardiovascular disease.</td>
<td>Fluid shear stress: a modulator of the vascular protective effects of curcumin?</td>
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<td><strong>Peter Curtis (University of East Anglia – UK)</strong></td>
<td><strong>Laurent-Emmanuel Monfoulet (INRA - France)</strong></td>
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<td>DOCA-salt-induced hypertension, alteration of cardiac, vascular and renal structures and functions in rats is prevented by chronic intake of a standardized Crataegus extract.</td>
<td>Exploring the biological activity of flavonoid metabolites.</td>
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<td><strong>Valérie B. Schini-Kerth (Université de Strasbourg – CNRS – France)</strong></td>
<td><strong>Colin Kay (University of East Anglia – UK)</strong></td>
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<td>Increased bioavailability of phenolic acids and enhance vascular response following intake of an enzymatically generated, high free ferulic acid flatbread.</td>
<td>A novel matrix rich in flavan-3-ols: hazelnut skin. From phytochemical characterization to evaluation of biological activities.</td>
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<td><strong>Alice Turner (University of Reading – UK)</strong></td>
<td><strong>Pedro Mena (University of Parma – Italy)</strong></td>
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<td>Do anthocyanins in purple tomatoes reduce the risk of cardiovascular disease?</td>
<td>C. elegans as a model to elucidate the mechanisms of action of flavonoids: a transcriptomic approach.</td>
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<td><strong>Sebastian Achterfeldt (Institute of Food Research – UK)</strong></td>
<td><strong>Celestino Santos-Buelga (Universidad de Salamanca – Spain)</strong></td>
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PLENARY SESSION 5
Introductory lectures for sessions G&H

New insights on the complex molecular mechanisms of polyphenols through nutri(epi)genomics.
**Dr. D. Milenkovic** (Institut National de Recherche Agronomique – Clermont-Ferrand, France)

Human gut microbiota metabolism of ellagic acid. Interindividual variability for urolithins production is correlated with health status: cause or consequence.
**Dr. J.C. Espin** (CEBAS-CSIC of Murcia – Spain)

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3:30 pm

**Session G: New insights into mechanisms of action of polyphenols**

Dietary flavonoids induce autophagic degradation in macrophages.
**Pr. Y. Kawai** (University of Tokushima - Japan)

Procyanidin-membrane interactions in the regulation of cell signaling.
**Pr. P. Oteiza** (University of California - USA)

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**Session H: Hot topics in polyphenols and gut microbiota interactions**

A role for polyphenols in shaping the structure and function of the gut microbiome.
**Pr. K.M. Tuohy** (Foundation Edmund Mach of Trento - Italy)

Dietary modulation of gut microbial metabolome.
**Dr. W. Russell** (Rowett Institute of Nutrition and Health - UK)

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4:30 pm

**Short selected communications**

Soy isoflavones and membrane steroid receptors: a new horizon.
**Vladimir Ajdžanović** (Institute for Biological Research “Siniša Stanković” – Serbia)

Delphinidin inhibits tumor growth by acting on vegf signalling in endothelial cells.
**Claire Lugnier** (Inserm – France)

Potent inhibition of VEGF activity by pomegranate polyphenols: A novel mechanism for the atheroprotective effects observed in epidemiology.
**Rebecca Edwards** (Institute of Food Research – UK)

(Poly)phenols from quasi-isogenic raspberries: attenuation of neuroinflammation.
**Gonçalo Garcia** (iBET – Portugal)

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**Identification of novel flavonoid O- and C-glycosidases in gut bacteria.**
**Annett Braune** (German Institute of Human Nutrition Potsdam-Rehbrueck – Germany)

Quantification of microbial polyphenol uptake, kinetics and metabolism using mass spectrometry.
**Nikolai Kuhnert** (Jacobs University Bremen – Germany)

Importance of the colonic microbiota in the bioavailability of orange juice (poly)phenols: in vivo and in vitro studies.
**Gema Pereira-Caro** (Andalusian Institute of Agricultural and Fishering Research and Training – Spain)

Short chain fatty acids affect hesperetin transport and phase II metabolism in Caco-2 cells.
**Evelien Van Ryneman** (Ghent University – Belgium)

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5:30 pm

**Refreshment and poster session**

7:00 pm

**Gala Dinner**
8:30 am
Flavan-3-ols and cardiovascular health - Journey to dietary recommendations  
Session hosted by Unilever with the support of ILSI North America

Introduction – Pr. A. Cassidy (University of East Anglia - UK)

Review of current science on tea flavan-3-ols.  
Dr. P. Hollman (Wageningen University - Netherlands)

Review of totality of the evidence for flavan-3-ols.  
Dr. J. Novotny (U.S. Department of Agriculture - USA)

Process for achieving dietary recommendations & current gaps in flavan-3-ol evidence.  
Dr. M. Ferruzzi (Purdue University - USA) / Dr. D. Balentine (Unilever)

Panel of discussion moderated by Pr. A. Cassidy

Cranberry Polyphenols: A Nutritional Approach to Combating Antimicrobial Resistance  
Session hosted by Ocean Spray

Antimicrobial Resistance and Urinary Tract Infections.  
Dr. Kalpana Gupta (Boston University School of Medicine, USA)

Cranberry Polyphenols and Bacterial Mechanisms.  
Dr. Christina Khoo (Ocean Spray’s Director of Research Science)

Bioactive Dietary Polyphenols, Cardiometabolic and Cognitive Outcomes.  
Dr. Peter Howe (Professor, University of Newcastle, Australia)

Chemo-protective effectiveness of cranberry phenolic fractions.  
Dr. Luis Goya (ICTAN-CSIC)

10:00-10:30 am  
Coffee Break

10:30 am

CLOSING SESSION  
Innovation and perspectives in polyphenol research: The future is now

The exposome in cancer epidemiology – Polyphenols as a case study.  
Dr. A. Scalbert (International Agency for Research on Cancer - France)

Polyphenols, cardiovascular disease and health claims.  
Dr. P. Kroon (Institute of Food Research – Norwich, UK)

Microbiome - a window into food microbe - hot interactions.  
Dr. J. Doré (Institut National de Recherche Agronomique - Jouy en Josas, France)

The polyphenols and health dialogue: the genome is the interpreter.  
Dr. J. Ordonez (Tufts University - Boston, USA)

12:30 am  
Awards / Closing