



## COST863: Euroberry Programme – Queen’s Suite

### MONDAY 7<sup>TH</sup> DECEMBER

- 13:00-13:05**     **Welcome**  
Bruno Mezzetti, Chairman of the COST Action 863  
Gary Williamson, ICPH 2009 Chairman
- 13:05-14:45**     **Session 1 – Human health benefits of berry fruit**  
*Chair: B Mezzetti*
- 13:05-13:25**     **E1**    Berry consumption in humans: Bioavailability of polyphenols and effects on cardiovascular risk factors - *Irfan Erlund*
- 13:25-13:55**     **E2**    Blueberry Benefits in normal vision and after retinal stress – *W Kalt*
- 13:55-14:15**     **E3**    Characterization and free radical scavenging activity of bilberry (*Vaccinium myrtillus l.*) antioxidants - *V Tumbas*
- 14:15-14:35**     **E4**    Aronia juice, a berry juice rich in polyphenols, induces redox-sensitive activation of endothelial nitric oxide synthase and relaxation in porcine coronary arteries - *JH Kim*
- 14:35-14:45**     Discussion
- 15:00-15:30**     **ICPH Welcome /Keynote lecture (Main Auditorium)**  
*Chair: G Williamson*
- 15:30-16:00**     **Break - Queen’s Suite**
- 16:00-18:00**     **Session 2 – Mechanisms and factors affecting berry fruit health benefits**  
*Chair: M Battino*
- 16:00-16:20**     **E5**    The molecular events underlying blueberry-induced improvements in spatial working memory in young and aged rats - *C Rendeiro*
- 16:20-16:40**     **E6**    Cultivar and production system: possibilities to affect the content of bioactive compounds in strawberry - *M Josuttis*
- 16:40-17:00**     **E7**    Quality, nutritional quality and nutraceutical value as a new task for strawberry breeding - *J Diamanti*
- 17:00-17:20**     **E8**    Metabolic activity stimulation of the yeasts by polyphenols from black currant berries (*Ribes nigrum l.*) - *G Rapeanu*
- 17:20-17:50**     **E9**    The integration of human health and soft fruit breeding - *Derek Stewart*
- 17:50-18:00**     Discussion
- 18:15-19:30**     **Drinks Reception, Royal Hall**

## COST863: Euroberry – Queen’s Suite

### TUESDAY 8<sup>TH</sup> DECEMBER 2009

- 10:55-12:35**     **Session 3 Absorption and health benefits (Queen’s Suite)**  
*Chair: D Stewart Co-chair: W Kalt*
- 10:55-11:15**     **E10**    Absorption, metabolism and potential protective effects of berry-derived anthocyanins and ellagitannins - *William Mullen*
- 11:15-11:35**     **E11**    Strawberry phytochemicals: absorption, bioavailability and metabolism in humans - *G Maiani*
- 11:35-12:05**     **E12**    Berryfruit research at Plant and Food Research, New Zealand: from chemistry to health - *Roger Hurst*
- 12:05-12:35**     **E13**    Nutritional modulation of brain aging via berryfruit or walnut supplementation - *James Joseph*
- 12:25-14:35**     **Lunch, exhibition viewing, poster displays, company workshops – Hall Q**



## ICPH Programme

### ICPH 2009 – Welcome – Main Auditorium

#### MONDAY 7<sup>th</sup> DECEMBER 2009

- 15:00-15:30**      **Welcome - Gary Williamson, ICPH 2009 Chairman**
- 15:05-15:30**      **O1    Opening keynote lecture**  
Polyphenols and health: Introduction and perspectives, *Helmut Sies*
- 15:35-18:15**      **Cancer**  
*Chair: R Dashwood    Co-chair: G Williamson*
- 15:35-16:00**      **O2**    Cancer preventive effects of green tea polyphenols– *Joshua Lambert*
- 16:00-16:25**      **O3**    Modulation of the aryl hydrocarbon receptor-mediated signaling pathway by polyphenols as one of the anti-carcinogenic effects - *Hitoshi Ashida*
- 16:25-16:45**      **Break (upper foyer, entrance to auditorium)**
- 16:45-17:10**      **O4**    Modulation of the Cellular Signaling Network by Chemopreventive and Cytoprotective Polyphenols - *Young-Joon Surh*
- 17:10-17:35**      **O5**    Dietary regulation of genes involved in oxidative stress and inflammation - *Rune Blomhoff*
- 17:35-17:55**      **O6**    Consumption of some polyphenols reduces fecal deoxycholic acid and lithocholic acid, the secondary bile acids of risk factors of colon cancer, in rats fed a high-fat diet - *Y Matsumoto*
- 17:55-18:15**      **O7**    Associations between phytoestrogen intake and metabolism and breast and prostate cancer risk - *GGC Kuhnle*
- 18:15-19:30**      **Drinks Reception, Royal Hall**



## ICPH Programme

ICPH 2009

TUESDAY 8<sup>th</sup> DECEMBER 2009

- 09:00-10:30 Bioavailability - Main Auditorium**  
*Chair: J Donovan Co-Chair: A Scalbert*
- 09:00-09:25 O8** Bioavailability of polyphenols – *Peter Hollman*
- 09:25-09:50 O9** Flavonoid paradox between biological activity and bioavailability: Insight into their delivery to the target site - *Junji Terao*
- 09:50-10:30 Welch's Sponsored New Investigator Lecture**
- 09:50-10:10 O10** Bioavailability of polyphenolic compounds from Concord grapes in humans - *Angelique Stalmach*
- 10:10-10:30 O11** Bioavailability of flavonoids: the role of bilirubin-mediated membrane transport in animal and plant organisms - *S Passamonti*
- 10:30-10:55 Break and Exhibition viewing - Hall Q – sponsored by Welch's**
- 10:55-12:25 Hormonal Effects – Main Auditorium**  
*Chair: A Cassidy Co-Chair: J Lampe*
- 10:55-11:20 O14** Metabolism of polyphenols - *Steve Barnes*
- 11:20-11:45 O15** Phytoestrogens act as antioxidants because they up-regulate antioxidant-longevity associated genes - *Jose Vina*
- 11:45-12:05 O16** Bioavailability of soy isoflavones in healthy human breast tissue – *S Bolca*
- 12:05-12:25 O17** Dietary Quercetin Inhibits Bone Loss Without Effect on the Uterus in Ovariectomized Mice - *H Yamamoto*
- 12:25-14:35 Lunch, exhibition viewing, poster displays, company workshops – Hall Q**



## ICPH Programme

ICPH 2009

TUESDAY 8<sup>th</sup> DECEMBER 2009 Cont/...

- 13:10-13:35**      **Poster talks (4 minute talks, 5 slides maximum) – King's Suite**  
**Chair: A Day Co-Chair: T Dew**
- 13:10-13:14**      **PT1**      The poor recovery of anthocyanins in intervention trials is likely the result of degradation in vivo and not during sample processing or storage - *CD Kay*
- 13:15-13:19**      **PT2**      Effects of cranberry fruits on prostate health - *J Ulrichova*
- 13:20-13:24**      **PT3**      Effects of cola nut (*cola nitida*) on the apoptotic cell of human breast carcinoma cell lines - *S Endrini*
- 13:25 -13:30**      **PT4**      No association between dietary intakes of coffee phenolic acids and total polyphenols and the risk of breast cancer in a French prospective cohort study - *GT Fagherazzi*
- 14:35-16:05**      **Mars sponsored Keynote session: Phytochemicals and Health – Main Auditorium**  
**Chair: J Spencer Co-Chair: J Erdman**
- 14:35-15:05**      **O18**      Role of flavanols in cardiovascular function - *Malte Kelm*
- 15:05-15:35**      **O19**      The future of polyphenols – *Barry Halliwell*
- 15:35-16:05**      **O20**      Mechanisms of protection against oxidative stress: direct, indirect, and bifunctional antioxidant activities - *Paul Talalay*
- 16:05-16:30**      **Break and Exhibition viewing - Hall Q – sponsored by Welch's**
- 16:30-17:55**      **Gut Microflora / Bioavailability – Main Auditorium**  
**Chair: A Waterhouse Co-Chair: P Kroon**
- 16:30-16:55**      **O21**      In vitro transformation of procyanidin B2 by human gut microflora - *Mike Clifford*
- 16:55-17:15**      **O22**      Formation of flavanol-maillard adducts and the effect on the human gut microflora - *MJ Oruna-Concha*
- 17:15-17:35**      **O23**      Intestinal absorption pathway of quercetin in thoracic lymph-cannulated rats - *K Murota*
- 17:35-17:55**      **O24**      Almond (*Prunus dulcis* (Mill.) D.A. Webb) polyphenols: from chemical characterization to targeted metabolite analysis and metabolomic profile in humans - *B Bartolome*
- 16:30-17:40**      **Epigenetics – Queen's Suite**  
**Chair: H Sies Co-Chair: C Orfila**
- 16:30-16:55**      **O25**      Epigenetics and the role of polyphenols in inflammation - *Irfan Rahman*
- 16:55-17:20**      **O26**      Dietary histone deacetylase (HDAC) inhibitors: is there an epigenetic role for tea polyphenols? - *Rod Dashwood*
- 17:20-17:40**      **O27**      Effects of resveratrol on histone expression in human intestinal Caco-2 cells oppose changes observed in ageing mouse gut - *D Ford*
- 18:00-18:25**      **Poster talks (4 minute talks, 5 slides maximum) – Main Auditorium**  
**Chair: A Day Co-Chair: L Lang**
- 18:00-18:04**      **PT5**      Lipids and surfactants enhance quercetin intestinal absorption by increasing its chemical stability and solubility, enhancing uptake by intestinal epithelial cells, and shifting the apical:basolateral efflux balance towards basolateral efflux - *PA Kroon*
- 18:05-18:09**      **PT6**      Polyphenol and alcohol nutritional biomarkers in an interventional clinical study on wine consumption - *M Urpi-Sardà*
- 18:10-18:14**      **PT7**      Can dietary flavonols interfere with a routine test for catecholamine-producing tumours? - *E Combet*
- 18:15-18:19**      **PT8**      Actions of grapeseed polyphenols in mammalian brain - *H Kim*
- 18:20-18:24**      **PT9**      Acute consumption of Champagne wine promotes endothelial-independent vascular reactivity and inhibition of MMP-9 metalloproteinase in healthy volunteers - *D Vauzour*
- 18:30-19:30**      **Posters and drinks – Hall Q**



## ICPH Programme

ICPH 2009

WEDNESDAY 9<sup>th</sup> DECEMBER 2009

- 09:00-10:20 CVD - Main Auditorium**  
*Chair: K Croft Co-Chair: A Scalbert*
- 09:00-09:25 O33** Effects of Polyphenols on Endothelial Function in Cardiovascular Disease -  
*Joe Vita*
- 09:25-09:50 O34** Impact of flavanols on vascular reactivity and vascular health: Implications for  
dietary recommendations - *Carl Keen*
- 09:50-10:20 O35 Barry Callebaut Sponsored lecture** Cocoa, flavonoids and cardiovascular  
protection - *Claudio Ferri*
- 10:20-10:45 Poster talks (4 minute talks, 5 slides maximum) – Main Auditorium**  
*Chair: L Lang Co-Chair: J Rothwell*
- 10:20-10:24 PT10** Prevention of obesity and metabolic syndrome by the tea and tea polyphenols  
- *JD Lambert*
- 10:25-10:29 PT11** Mild and intense oxidative stress of human neurons: protection exerted by  
colon-derived phenolic catabolites - *D Del Rio*
- 10:30-10:34 PT12** Chemoenzymatic Separation of Diastereomers Silybin A and B and Chirality  
Problems: Do We Need Optically Pure Nutraceuticals? *V Kren*
- 10:35 -10:39 PT13** Dose related effects of resveratrol (resVida®) on endothelium dependent  
vasodilatation - *NM Berry*
- 10:39 -10:44 PT14** Resveratrol modulates cerebral blood flow and oxygenation parameters in  
humans - *E Wightman*
- 10:45-11:10 Break and Exhibition viewing - Hall Q**
- 11:10-12:50 CVD – Main Auditorium**  
*Chair: J Lampe Co-Chair: C Keen*
- 11:10-11:40 O41 The Hershey Company sponsored lecture** Cardiovascular benefits of  
flavonoid-rich foods - a meta-analysis of randomised controlled trials - *Aedin  
Cassidy*
- 11:40-12:05 O42** Flavonoids in heart disease and hypertension: mechanistic aspects - *Cesar  
Fraga*
- 12:05-12:30 O43** Flavonoids and stroke in man and mouse - *Lenore Arab*
- 12:30-12:50 O44** Glucuronidated quercetin lowers blood pressure in spontaneously  
hypertensive rats via deconjugation - *F Perez-Vizcaino*
- 11:10-12:40 Food Intake / Composition / Processing – Queen’s Suite**  
*Chair: M Clifford Co-Chair: S Khokhar*
- 11:10-11:35 O45** The hidden face of food polyphenols - *Véronique Cheyrier*
- 11:35-12:00 O46** The importance of chemical synthesis for research in polyphenols and health -  
*Denis Barron*
- 12:00-12:20 O47** Unravelling the structure of black tea thearubigins - *N Kuhnert*
- 12:20-12:40 O48** Determination of nonextractable polyphenols suggest the underestimation of  
the actual dietary intakes and food content of polyphenols in literature data: A  
study in the Spanish Mediterranean diet - *F Saura-Calixto*
- 12:45-14:45 Lunch, exhibition viewing, poster displays, company workshops – Hall Q**



## ICPH Programme

ICPH 2009

WEDNESDAY 9<sup>th</sup> DECEMBER 2009 Cont/...

- 14:45-16:00 Obesity / Diabetes – Main Auditorium**  
*Chair: M Feruzzi Co-Chair: R van Dam*
- 14:45-15:10 O49** Polyphenols, adipose tissue and obesity - *Jaap Keijer*
- 15:10-15:40 O50** **Unilever sponsored lecture** Green tea catechins and fat mass: mechanisms and evidence - *Margriet Westerterp*
- 15:40-16:00 O51** Cinnamon improves insulin sensitivity, prevents mesenteric fat accumulation and increases glycogen synthesis in an animal model of the metabolic syndrome - *A Roussel*
- 16:00-16:25 Break and exhibition viewing – Hall Q**
- 16:25-17:50 CVD – Main Auditorium**  
*Chair: C Fraga Co-Chair: A Crozier*
- 16:25-16:50 O52** Effects of tea and tea flavonoids on nitric oxide, endothelial function and blood pressure - *Jonathan Hodgson*
- 16:50-17:10 O53** mRNA and miRNA : targets of polyphenols in atherosclerosis prevention - *D Milenkovic*
- 17:10-17:30 O54** Polyphenol consumption and hypertension status: a baseline cross-sectional analysis within the PREDIMED trial - *RM Lamuela-Raventos*
- 17:30-17:50 O55** Cocoa flavanol intervention mediated improvement of endothelial dysfunction is related to mobilization of circulating angiogenic cells in optimally medicated CAD patients - *C Heiss*
- 16:25-17:50 Diabetes / Obesity – Queen’s Suite**  
*Chair: F Dionisi Co-Chair: M Morgan*
- 16:25-16:50 O56** Dietary polyphenols, their food sources, and risk of type 2 diabetes - *Rob van Dam*
- 16:50-17:10 O57** The effects of a high-catechin green tea on body composition in a Western population - *IA Macdonald*
- 17:10-17:30 O58** Dietary quercetin attenuates high-fat/high-sucrose diet-induced obesity in mice - *M Kobori*
- 17:30-17:50 O59** Hypoglycaemic and hypolipidaemic effects of Hesperetin glycosides prevent diabetic osteopathy in type 2 diabetic rats - *M Uehara*
- 19:00-01:00 Dinner and Music – Majestic Hotel, Harrogate**



## ICPH Programme

ICPH 2009

THURSDAY 10<sup>th</sup> DECEMBER 2009

- 09:00-10:30 Nestle sponsored session - hydroxycinnamates and health - Main Auditorium**  
**Chair: J Vinson Co-Chair: P Hollman**
- 09:00-09:30 O60** Antioxidant effects of coffee consumption in humans: results of intervention trials - *Siegfried Knasmuller*
- 09:30-10:00 O61** Bioavailability of chlorogenic acids in coffee: human studies - *Alan Crozier*
- 10:00-10:30 O62** Bioavailability and metabolism of chlorogenic acids in humans - *Adriana Farah*
- 10:30-10:55 Break and exhibition viewing – Hall Q**
- 10:55-12:20 Inflammation – Main Auditorium**  
**Chair: I Rahmann Co-Chair: J Hodgson**
- 10:55-11:20 O63** Dietary polyphenols and cardiovascular risk - *Kevin Croft*
- 11:20-11:40 O64** Bilberry juice decreases the plasma concentration of NF-KB related inflammatory markers in subjects at high risk of CVD - *A Karlsen*
- 11:40-12:00 O65** Effect of cocoa powder in patients at high-risk for cardiovascular disease. Targeted and metabolomic study of biomarkers of consumption, effect and inflammation - *C Andres-Lacueva*
- 12:00 -12:20 O66** Methylation of chrysin markedly improves its anti-inflammatory properties in an IL-1b-stimulated Caco-2 cell model - *A During*
- 10:55-12:25 Student / Young Investigator Talks – Queen’s Suite**  
**Chair: K Cooper Co-Chair: K Murato**
- 10:55-11:10 O67** Intact absorption and metabolism of aspalathin, a C-glycosyl flavonoid from the South-African health beverage, rooibos tea - *FL Courts*
- 11:10-11:25 O68** Influence of catechin and epicatechin stereochemistry on the absorption and metabolism of flavanols in humans - *Jl Ottaviani*
- 11:25-11:40 O69** Inhibition of 20-hydroxyeicosatetraenoic acid synthesis using specific plant lignans: in vitro and human studies - *JHY Wu*
- 11:40-11:55 O70** Effects of caffeinated and decaffeinated coffee on adipokines and glucose tolerance: A randomized controlled trial - *NM Wedick*
- 11:55-12:10 O71** The impact of a blueberry intervention on cognition in young and older UK adults - *PS How*
- 12:10-12:25 O71A** An antioxidant-enriched phytochemical cocktail improves the blood pressure lowering efficacy in mild to moderate hypertensive male patients - *D Sankar*
- 12:20-13:15 Lunch, exhibition viewing, poster displays, company workshops – Hall Q**



## ICPH Programme

ICPH 2009

THURSDAY 10<sup>th</sup> DECEMBER 2009

- 13:15-14:45**      **Coca-cola sponsored lecture – Fruit and juice polyphenols – Main Auditorium**  
*Chair: P Milbury Co-Chair: C Orfila*
- 13:15-13:45**      **O72**      Absorption and metabolism of a diverse spectrum of phenolic and polyphenolic compounds in a low calorie juice drink - *Alan Crozier*
- 13:45-14:15**      **O73**      Role of polyphenol juice drinks in the prevention of postprandial inflammatory stress in humans - *Mauro Serafini*
- 14:15-14:45**      **O74**      Bioavailability and metabolism of orange beverage flavanones in healthy humans - *Francisco Tomas-Barberan*
- 13:15-14:45**      **Brain / Neurobiology – Queen’s Suite**  
*Chair: J Joseph Co-Chair: H Kim*
- 13:15-13:40**      **O75**      Measuring the impact of dietary components on cognitive function - *Louise Dye*
- 13:40-14:05**      **O76**      Flavonoids and brain health: multiple effects underpinned by common mechanisms - *Jeremy Spencer*
- 14:05-14:25**      **O77**      Green tea decreases oxidative stress, improves insulin signalling and prevents the impairment of brain glucose uptake in brain of rats with the metabolic syndrome - *RA Anderson*
- 14:25-14:45**      **O78**      Acute neurocognitive effects of cocoa polyphenols - *AB Scholey*
- 14:45-15:10**      **Break and exhibition viewing – Hall Q**
- 15:10-16:05**      **Keynote lecture – The Future – Main Auditorium**  
*Chair: G Williamson*
- 15:10-15:35**      **O79**      Personalised nutrition: Opportunities and challenges - *Mike Gibney*
- 15:35-16:00**      **O80**      Polyphenols: An agenda for the next decade - *Eric Rimm*
- 16:00-16:05**      **Closing remarks - Gary Williamson**



## Poster Presentation Programme

Poster Session	Abstract	Page
<b>Tuesday 8<sup>th</sup> December</b>		
<b>13:30 – 14:30</b>		
<b>Berry Related</b>	<b>All numbers</b>	
<b>COST863: Euroberry</b>	<b>All numbers</b>	
<b>Cancer</b>	<b>Even numbers</b>	
<b>Bioavailability</b>	<b>Even numbers</b>	
<b>Intake and Biomarkers</b>	<b>Even numbers</b>	
<b>Bioactivity</b>	<b>Even numbers</b>	
<b>Tuesday 8<sup>th</sup> December</b>		
<b>18:30 – 19:30</b>		
<b>Methodology</b>	<b>Even numbers</b>	
<b>Composition and Processing</b>	<b>Even numbers</b>	
<b>CVD</b>	<b>Even numbered</b>	
<b>Diabetes and Obesity</b>	<b>Even numbers</b>	
<b>Brain/Neurobiology</b>	<b>Even numbers</b>	
<b>Cancer</b>	<b>Odd numbers</b>	
<b>Bioavailability</b>	<b>Odd numbers</b>	
<b>Wednesday 9<sup>th</sup> December</b>		
<b>13:40 – 14:40</b>		
<b>Intake and biomarkers</b>	<b>Odd numbers</b>	
<b>Bioactivity</b>	<b>Odd numbers</b>	
<b>Methodology</b>	<b>Odd numbers</b>	
<b>Composition and processing</b>	<b>Odd numbers</b>	
<b>CVD</b>	<b>Odd numbers</b>	
<b>Diabetes and obesity</b>	<b>odd numbers</b>	
<b>Brain/Neurobiology</b>	<b>Odd numbers</b>	



## Company Seminar Programme

**Tuesday 8<sup>th</sup> December**  
**13:40 – 14:30**

**King's Suite, Harrogate International Centre**

Hepatoprotective effects of apple polyphenols (Appjfnol) on CCl4-induced acute liver damage in mice Research on resveratrol	J F Natural	13:40 – 14:10
Polyphenols by LCMS and GCMS	Agilent	14:15 – 14:30

**Wednesday 9<sup>th</sup> December**  
**13:25 – 14:40**

**King's Suite, Harrogate International Centre**

Polyphenols: from science to consumer communication	Nestle	13:25 – 13:40
Barry Callebaut: Heart and engine of the chocolate industry	Barry Callebaut	13:45 – 14:00
Electrochemical detection techniques in the analysis of redox compounds	ESA – A Dionex Company	14:05 – 14:20