



## ***ILSI SEAR Australasia and CSIRO***

***in conjunction with the University of SA Business School***  
are pleased to invite you to a conference on

### **Human Variability in Response to Food and Nutrients:**

### **Building the Bridge to Personalised Nutrition - Challenges and Opportunities for Industry, Public Health and Academia**

**Date:** 14 and 15 May 2019

**Venue:** Stamford Plaza Sydney Airport  
Cnr Robey and O'Riordan Streets  
Mascot, Sydney, NSW 2020

**Cost:** \$830 Attendees - registration after 27 April 2019  
\$730 Attendees - early bird registration by 26 April 2019  
\$660 ILSI members/ CSIRO  
\$140 Students *(all fees include GST)*

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#### Objective:

Population based studies in food and nutrition have been essential in contributing to overall human wellbeing. However improved understanding of 'individual human variation' in nutrient requirements has awaited advancements in nutrigenomics and the mathematical and social sciences. For example, the 'omics sciences (genomics, proteomics, metabolomics)' are providing new insight and understanding that can be applied to personalised nutrition with the ambitious objective of one-to-one product design.

This conference will explore the nature of individual human variation in response to food choice and nutrient intake, and how that may initiate a new era of opportunity for personalised nutrition, and will -

1. Consider the evidence and nature of variability in human nutrition requirements and metabolic response
2. Review current understanding of variation in the human genome with potential impacts on population and personal nutrition
3. Address the integration of the 'omics sciences' and insights from medical studies which have led to an increased understanding of personalised health
4. Consider the potential implications for consumers and food supply
5. Discuss how the regulatory environment may need to evolve and adapt to the changing world of personalisation
6. Provide the opportunity to engage in discussion around the translation of these recent developments into a new scientific paradigm.

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**Program Day 1 : Tuesday 14 May 2019**

09.00	<i>Registration and Tea/coffee</i>
09.30	Introduction and welcome
09.40	Capturing the value from living differently Professor Lynne Cobiac, CSIRO Health and Biosecurity
10.10	It's in our capacity to adapt – explanation of human variability from the perspective of phenotypic flexibility Speaker TBC
10.40	<i>Morning Tea</i>
11.10	Human variability: scientific basis for personalised nutrition Prof John Mathers, University of Newcastle, UK
11.50	Personalized nutrition: Can our microbes tell us what to eat? David Zeevi, PhD, Rockefeller University, USA
12.30	<i>Lunch and networking</i>
1.30	Understanding the variable responses of gut microbiome to dietary interventions Dr Pramod Gopal, Plant and Food Research, New Zealand
2.00	Human variation – are our measurement tools reliable enough to provide personalized nutrition for health and performance? Prof David Bishop, Victoria University
2.30	Precision Medicine: Matching therapeutics to genomic lesions...how far have we come? Prof Deb White - SA Health & Medical Institute
3.00	Translation and quantification Speaker TBC
3.30	<i>Afternoon break</i>
4.00	Panel discussion
4.30	Close
4.30 – 5.30	<i>Networking drinks</i>

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**Program Day 2 : Wednesday 15 May 2019**

8.50	Welcome
9.00	<b>Metabolic and molecular adaptations to dietary restriction in humans</b> Prof Luigi Fontana, Charles Perkins Centre, Faculty of Medicine and Health, University of Sydney
9.40	<b>Personalised nutrition to precision health – a new approach to build health</b> Dr Nathan O'Callaghan, Lead – Precision Health Future Science Platform, CSIRO
10.10	<b>With the new knowledge, how will clinical nutrition respond?</b> Prof David Cameron-Smith, University of Auckland
10.40	<i>Morning break</i>
11.10	<b>What consumers want: using discrete choice experiments to better understand the role of human variability in consumer preferences, choice and trade-offs for nutrition, health and wellbeing</b> Dr Elisabeth Huynh, Australian National University
11.40	<b>There and back again: a return to personalised nutrition advice</b> Prof Sandra Capra, A.M., Emeritus Professor, University of Queensland
12.10	<b>Creating consumer access to personalized nutrition: risks and opportunities</b> Dr Femke Hannes, DSM Nutritional Products
12.40	<i>Lunch and networking</i>
1.40	<b>Lifting the lid on nutrigenomics: current applications and the future of nutrition</b> Dr Flavia Fayet-Moore, Nutrition Research Australia
2.10	<b>Regulatory perspective</b> FSANZ - speaker tbc
2.40	Panel discussion
3.10	General discussion
3.40	Summing up
3.45	<i>Close</i>