

# Precision Nutrition

## Report Form 2018



IUNS  
INTERNATIONAL  
UNION OF  
NUTRITIONAL  
SCIENCES

## Task Force Chair/s

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## Task Force Members

- Martin Kohlmeier
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## Summary of activities in 2018

This Task Force has been involved in several activities related to Congress presentations, Preparation of a Textbook about Nutrigenetics and Nutrigenomics and some articles where this IUNS TF about personalized Nutrition has visibly collaborated

## Report of activities and achievements in 2018

- International Conferences where IUNS was represented
- XVII Mediterranean Congress of Rheumatology. 12-14th April 2018. Genoa. Conference : Epigenetics and Mediterranean diet
- 1st INTERNATIONAL CONGRESS Italian Society of Clinical Nutrigenomics and Epigenetics (SINEC), Napoli April 27-28 2018. Conference: "Nutrigenomics of Obesity".
- 52th European Society for Clinical Investigation and 4TH annual Omics Symposium May 30, 2018 Barcelona Conference : "Microbiota and Obesity"
- XVII Congreso de la Sociedad Española de Nutrición (SEN). 26-29 de June de 2018 – Barcelona. Conferencia: "Objetivos IUNS"
- University of Poznan, Poland. May 17th 2018. Conference: "Lifestyle determinants of obesity".
- Nutrition 2018 ASN Boston (USA) 8-12th June 2018. Conference: "Individualized Food Dietary Patterns".

- III Summer School Camerino, Jesi 25-29th June 2018. Conference: "DNA Methylation: metabolism and taste interactions with adiposity"
- 40th ESPEN Congress. Madrid 2-4th September 2018. Conference: "Epigenomics: a role for Mediterranean diet"
- 12th ISNN Congress Winnipeg September 29th, 2018 Short Course: about Precision Nutrition in Practice: Principles and uses of epigenetics
- XVII SLAN Congress 11th-15th November 2018 Guadalajara Mexico. Conference: "Obesidad en el Siglo XXI: Desde las ciencias básicas al tratamiento"
- 2nd APPNO 4-6th December 2018 Tokyo. Conference " Omics in Obesity, Diabetes and cardiovascular Diseases".
- International Symposium on Understanding the Double Burden of malnutrition for Effective Interventions.IAEA-WHO-UNICEF conjoint Action Viena 11-14th December 2018. Conference: "Epigenetics within the double burden of malnutrition".

**Preparation of the Textbook of Nutrigenetics and Nutrigenomics to be published by Elsevier. Co-editors: M Kohlmeier, JA Martinez and R de Caterina Supplement for Advances in Nutrition including a Foreword about Guide and Proceedings of the International Union of Nutritional Sciences (IUNS) 21st International Congress of Nutrition (ICN) held in Buenos Aires, Argentina, October 15–20, 2017." , also featuring the following manuscripts:**

- 1.-(ADVANNUT/2018/018796): Perspective: Are we ready to measure child nutritional status with lasers?. (7pges)
- 2.- (ADVANNUT-2018-018853) "Humans vs. obesity: who will win?" (6 pages)
- 3.-(ADVANCES-18-0107) "Diet, gut microbiota and obesity: links with host genetics and epigenetics and potential applications.( 14 pages )
- 4.- (ADVANNUT/2018/018713) Effects of sweeteners on the gut microbiota: a review of experimental studies and clinical trials. (18 pages.)
- 5.- (ADVANNUT/2018/018812) "Mechanisms of Action of Probiotics" (18 pages)

### **Other articles related with IUNS Visibility**

Barrington WT, Salvador AC, Hartiala JA, De Caterina R, Kohlmeier M, Martinez JA, Kreutzer CB, Heber D, Lusi AJ, Li Z, Allayee H. Proceedings of the 11th Congress of the International Society of Nutrigenetics and Nutrigenomics (ISNN 2017). J Nutrigenet Nutrigenomics. 2017;10(5-6):155-162.

Fallaize R, Livingstone KM, Celis-Morales C, Macready AL, San-Cristobal R, Navas-Carretero S, Marsaux CFM, O'Donovan CB, Kolossa S, Moschonis G, Walsh MC, Gibney ER, Brennan L, Bouwman J, Manios Y, Jarosz M, Martinez JA, Daniel H, Saris WHM, Gundersen TE, Drevon CA, Gibney MJ, Mathers JC, Lovegrove JA. Association between Diet-Quality Scores, Adiposity, Total Cholesterol and Markers of Nutritional Status in European Adults: Findings from the Food4Me Study. *Nutrients*. 2018 Jan 6;10(1). pii: E49.

Goni L, Qi L, Cuervo M, Milagro FI, Saris WH, MacDonald IA, Langin D, Astrup A, Arner P, Oppert JM, Svendstrup M, Blaak EE, Sørensen TI, Hansen T, Martínez JA. Effect of the interaction between diet composition and the PPM1K genetic variant on insulin resistance and  $\beta$  cell function markers during weight loss: results from the Nutrient Gene Interactions in Human Obesity: implications for dietary guidelines (NUGENOB) randomized trial. *Am J Clin Nutr*. 2017 106(3):902-908.

González-Muniesa P, Martínez-González MA, Hu FB, Després JP, Matsuzawa Y, Loos RJF, Moreno LA, Bray GA, Martinez JA. Obesity. *Nat Rev Dis Primers*. 2017 Jun 15;3:17034.

Ramos-Lopez O, Milagro FI, Allayee H, Chmurzynska A, Choi MS, Curi R, De Caterina R, Ferguson LR, Goni L, Kang JX, Kohlmeier M, Marti A, Moreno LA, Pérusse L, Prasad C, Qi L, Reifsnider R, Riezu-Boj JJ, San-Cristobal R, Santos JL, Martínez JA. Guide for Current Nutrigenetic, Nutrigenomic, and Nutriepigenetic Approaches for Precision Nutrition Involving the Prevention and Management of Chronic Diseases Associated with Obesity. *J Nutrigenet Nutrigenomics*. 2017;10(1-2):43-62.