

Part A. PERSONAL INFORMATION		CV date		01/10/2018
First and Family name	Ana María Rodríguez Guerrero			
Social Security, Passport, ID number	43087686S	Age	44	
Researcher numbers	Researcher ID	H-6678-2015		
	Orcid code	0000-0002-1559-6279		

A.1. Current position

Name of University/Institution	University of the Balearic Islands (UIB)			
Department	Laboratory of Molecular Biology, Nutrition and Biochemistry			
Address and Country	Cra. Valldemossa, Km 7.5			
Phone number	+34971259617	E-mail	amrodriguez@uib.es	
Current position	TU (Associate Professor)	From	25/9/2008	
UNESCO codes	230221 – Molecular Biology / 2403 - Biochemistry / 310406 - Nutrition			
Key words	Perinatal Nutrition, Leptin, Metabolic Programming, Nutrigenomics			

A.2. Education

Bachelor/PhD	University	Year
Bachelor in Sciences (Biology)	University of the Balearic Islands (UIB)	1997
Bachelor in Biochemistry	University of the Balearic Islands (UIB)	2000
PhD in Biochemistry	University of the Balearic Islands (UIB)	2001

A.3. Quality indexes (JCR articles, h Index, thesis supervised...)

- Number of 6-year research periods accredited (*sexenios*) and date of the last: 3 consecutive *sexenios*, the last recognized until December 31, 2015.
- Number of thesis directed (last 10 years): 2 finished, 1 in progress.
- Total of citations: 607 (without self citations: 566). Source: Web of Science.
- Average of citations/year during the last 5 years (2018 not included): 48.8 (Source: Web of Science).
- Publications in first quartile (Q1): 14 (of them 6 in first decile (D1) (source: JCR in Web of Science).
- h-index: 14 (source: Researcher ID).

Part B. CV SUMMARY (max. 3500 characters, including spaces)

Bachelor in Biology (extraordinary award) and Biochemistry by the University of the Balearic Islands. University specialist in Molecular Biomedicine, and PhD in Biochemistry with European Mention. Her thesis was focused on the molecular mechanisms related with the sex differences in response to obesity. Her education was in the UIB, with foreign stays in Argentina and Sweden. At present, is Assistant Professor in the UIB, in the area of Biochemistry and Molecular Biology. Is lecturer at the degree of Biochemistry, and in the Master and PhD of Nutrigenomics and Personalised Nutrition, as well as lecturer of Ethics and Bioethics in the Doctoral School of the UIB (EDUIB). She is also co-Director of the Master in Nutrigenomics and Personalised Nutrition (MNNP) and Secretary of the Academic Commission of the PhD studies in Nutrigenomics and Personalised Nutrition.

Her present research in the Laboratory of Molecular Biology, Nutrition and Biotechnology is focused on nutrients/genes interactions, metabolic programming and perinatal nutrition, in relation with the prevention of non-communicable diseases such as obesity and its metabolic disorders. She is going to deepen in the molecular and epigenetic basis of metabolic imprinting by nutrients, specially focused on perinatal nutrition and the prevention of chronic diseases. She has more than 20 research papers in scientific journals, most of them in first quartile or tertile. She has directed two doctoral thesis, with a third one in progress, and has directed an important number of Final Master Works. She has participated in more than 20 research projects, and is member of the European excellence network on Nutrigenomics NuGO (Nutrigenomics Organization) and of "Centro de Investigación

Biomédica en Red (CIBER) Fisiopatología de la Obesidad y Nutrición (CIBEROBN)” (Instituto de Salud Carlos III). She has presented original research work in numerous national and international congresses, and is co-author of a textbook in the field of Analytical Biochemistry, and other two about Plant Sterols and a White Book on Fats in Functional Food.

She has also participated in collaborating projects with enterprises and promoted the signature of collaboration contracts with entities/enterprises related with the master and PhD programmes in Nutrigenomics and Personalised Nutrition. She is also founding member of the spin-off biotechnological company Alimentómica S.L.

Part C. RELEVANT MERITS

C.1. Publications (including books) (last 10 years)

- **Authors:** Serrano A, Asnani-Kishnani M, Rodríguez AM, Palou A, Ribot J, Bonet ML.

Title: Programming of the Beige Phenotype in White Adipose Tissue of Adult Mice by Mild Resveratrol and Nicotinamide Riboside Supplementations in Early Postnatal Life.

Journal: Mol Nutr Food Res

Volume: Aug 10:e1800463. doi: 10.1002/mnfr.201800463. [Epub ahead of print] **Year:** 2018

Impact Factor: 5.151 (2017) **Category and rank:** FOOD SCIENCE & TECHNOLOGY, 5/133.

- **Authors:** García-Carrizo F, Nozhenko Y, Palou A, Rodríguez AM.

Title: Leptin Effect on Acetylation and Phosphorylation of Pgc1 α in Muscle Cells Associated With Ampk and Akt Activation in High-Glucose Medium.

Journal: J Cell Physiol

Volume: 231(3) **Pages:** 641-9 **Year:** 2016 **Impact Factor:** 4.080 **Category and rank:** Cell Biology: 68/190; Physiology: 16/84.

- **Authors:** Nozhenko Y, Asnani-Kishnani M, Rodríguez AM, Palou A.

Title: Milk Leptin Surge and Biological Rhythms of Leptin and Other Regulatory Proteins in Breastmilk.

Journal: PLoS One

Volume: 10(12):e0145376. doi: 10.1371/journal.pone.0145376. eCollection 2015 **Impact**

Factor: 3.057 **Category and rank:** Multidisciplinary Sciences: 11/63

- **Authors:** Nozhenko, Y.; Rodríguez, A.M.; Palou, A.

Title: Leptin Rapidly Induces the Expression of Metabolic and Myokine Genes in C2C12 Muscle Cells to Regulate Nutrient Partition and Oxidation

Journal: Cellular Physiology and Biochemistry

Volume: 35(1) **Pages:** 92-103 **Year:** 2015 **Impact Factor:** 2.875 **Category and rank:** Physiology, 31/83.

- **Authors:** Sánchez, J.; Nozhenko, Y.; Palou, A.; Rodríguez, A.M.

Title: Free fatty acid effects on myokine production in combination with exercise mimetics

Journal: Molecular Nutrition & Food Research

Volume: 57 **Pages:** 1456-1467 **Year:** 2013 **Impact Factor:** 4.909 **Category and rank:** FOOD SCIENCE & TECHNOLOGY, 3/123.

- **Authors:** Rodríguez, A.M.; Sánchez, J.; Tobaruela, A.; Priego, T.; Picó, C.; Palou, A.

Title: Time-course effects of increased fatty acid supply on the expression of genes involved in lipid/glucose metabolism in muscle cells

Journal: Cellular Physiology and Biochemistry

Volume: 25 **Pages:** 337-346 **Year:** 2010 **Impact Factor:** 3.585 **Category and rank:** PHYSIOLOGY: 18/78; CELL BIOLOGY: 81/178

- **Authors:** Palou, M.; Sánchez, J.; T.; Rodríguez, A.M.; Picó, C.; Palou, A.

Title: Regional differences in the expression of genes involved in lipid metabolism in adipose tissue in response to short-and medium-term fasting and refeeding

Journal: Journal of Nutritional Biochemistry

Volume: 21 **Pages:** 23-33 **Year:** 2010 **Impact Factor:** 4.538 **Category and rank:** BIOCHEMISTRY & MOLECULAR BIOLOGY: 67/286; NUTRITION & DIETETICS: 5/70.

- **Authors:** Palou, M.; Priego, T.; Sánchez, J.; Rodríguez, A.M.; Palou, A.; Picó, C.

Title: Gene expression patterns in visceral and subcutaneous adipose depots in rats are linked to their morphologic features

Journal: Cellular Physiology and Biochemistry

Volume: 24 **Pages:** 547-556 **Year:** 2009 **Impact Factor:** 3.563 **Category and rank:** PHYSIOLOGY: 21/75; CELL BIOLOGY: 73/162

- **Authors:** Palou, M.; Sánchez, J.; Rodríguez, A.M.; Priego, T.; Picó, C.; Palou, A.

Title: Induction of NPY/AgRP Orexigenic Peptide Expression in Rat Hypothalamus is an early Event in Fasting: Relationship with Circulating Leptin, Insulin and Glucose

Journal: Cellular Physiology and Biochemistry

Volume: 23 **Pages:** 115-124 **Year:** 2009 **Impact Factor:** 3.563 **Category and rank:** PHYSIOLOGY: 21 de 75; CELL BIOLOGY: 73 de 162

- **Authors:** Palou, M.; Priego, T.; Sánchez, J.; Villegas, E.; Rodríguez, A.M.; Palou, A.; Picó, C. **Title:** Sequential changes in the expression of genes involved in lipid metabolism in adipose tissue and liver in response to fasting.

Journal: Pflügers Archiv-European Journal of Physiology

Volume: 456 **Pages:** 825-836 **Year:** 2008 **Impact Factor:** 3.526 **Category and rank:** PHYSIOLOGY, 19 de 74.

C.2. Research projects and grants (last 10 years)

- **Title:** *La interacción entre nutrientes/bioactivos de los alimentos como determinante de la programación metabólica en la prevención de la obesidad y sus complicaciones (INTERBIOBES).* AGL2015-67019-P. **Funding agency:** Spanish Government. MINECO. **Amount:** 183.799 €. **Duration:** 01/01/2016 - 31/12/2018. **PI:** Andreu Palou & Catalina Picó.

- **Title:** BIOMarkers of Robustness of Metabolic Homeostasis for Nutrigenomics-derived Health CLAIMS Made on Food (BIOCLAIMS). FP7-244995. **Type of contract/Program:** VII Framework Programme. **Funding agency:** European Union. **Amount:** 5.999.965 € (998.532,00 € UIB) **Duration, from:** 01/03/2010 **till:** 28/02/2015. **Principal Investigator (PI) UIB (and consortium coordinator):** Andreu Palou Oliver.

- **Title:** Detección y caracterización de compuestos bioactivos en la leche. Un enfoque nutriepigenético contra la obesidad (EPIMILK). AGL2012-33692. **Program:** Proyectos de investigación, subprograma de proyectos de investigación fundamental no orientada. **Funding agency:** Ministerio de Economía y Competitividad. **Amount:** 444.600 € **Duration, from:** 01/01/2013 **till:** 31/12/2015. **PI:** Andreu Palou Oliver.

- **Title:** Determinants of eating behaviour in European children, adolescents and their parents (I. FAMILY). Ref 266044. **Program:** VII Framework Programme. **Funding Agency:** European Union. **Amount:** 379.561,76 € (UIB). **Duration, from:** 01/03/2012 **till:** 28/02/2017. **PI UIB:** Andreu Palou Oliver.

- **Title:** Recruitment and activation of brown adipocytes as preventive and curative therapy for type 2 diabetes (DIABAT). HEALTH-F2-2011-278373. **Program:** VII Framework Programme. **Funding Agency:** European Union. **Amount:** 211.260 € (UIB) **Duration, from:** 01/10/2011 **till:** 30/09/2015. **PI UIB:** Andreu Palou Oliver.

- **Title:** Biomarcadores nutrigenómicos de salud/desequilibrio homeostático de interés para potenciales declaraciones de propiedades saludables en alimentos. Estudio enfocado en la obesidad y sus complicaciones (BIOBESMARKERS). AGL 2009-11277. **Program:** Programa Nacional de Tecnologías de los Alimentos. **Funding Agency:** Ministerio de Ciencia e Innovación. **Amount:** 630.410,01 € **Duration, from:** 01/01/2010 **till:** 31/12/2012. **PI:** Andreu Palou Oliver.

- **Title:** Identification and prevention of dietary and lifestyle-induced health effects in children and infants (IDEFICS). FOOD-CT-2006-16181. **Program:** VI Framework Programme. **Funding Agency:** European Union. 150.000,00 € (UIB). **Duration, from:** 01/09/2006 **till:** 28/02/2012. **PI:** Andreu Palou Oliver and Catalina Picó Segura in the UIB.

C.3. Contracts (last 10 years)

- **Title:** ALIÓPTIMA. Identificación de necesidades específicas de nutrientes y otros bioactivos en relación con actuales y posibles health claims, y sus combinaciones, para el diseño de alimentos y complementos multifuncionales apropiados en nutrición personalizada. Estudio de posible validación in vitro. **Type of contract:** Included as sub-project (competitive selection) in the project SMARTFOODS, (IDI-20141208). **Funding Agency:** Centro para el Desarrollo Tecnológico Industrial (CDTI). PROGRAMA ESTRATÉGICO CIEN. **Participating entities:** Universitat de les Illes Balears and Alimentómica SL. **Amount:** 67.500 € **Duration, from:** 17/07/2014 **till:** 17/07/2018. **PI:** Dra. M.Luisa Bonet y Dr. Andreu Palou.

- **Title:** Identificación y caracterización nutrigenómica de marcadores de alteraciones articulares en el sobrepeso y la obesidad y su potencial control por mucopolisacáridos. **Funding Agency:** Centro para el Desarrollo Tecnológico e Industrial. **Reference:** CENIT-2008-1004. **Participating entities:** Bioibérica S.A. Palafoll-Barcelona. **Duration, from:** 2008

till: 2013. PI: María Luisa Bonet Piña y Andreu Palou Oliver Number of participating researchers: 9.

- **Title:** Investigación científica dirigida al desarrollo de una nueva generación de alimentos para el control del peso y prevención de la obesidad. **Funding entity:** Puleva Biotech. **Reference:** CENIT-2008-1004 PRONAOS. **Duration, from:** 2008 **till:** 2011. **PI:** Catalina Picó Segura and Andreu Palou Oliver **Number of participating researchers: 9.**

- **Title:** Estudio de posibles propiedades de GAGs desarrollados por la empresa en la adipogénesis y su implicación en la obesidad. **Funding Agency:** Centro para el Desarrollo Tecnológico e Industrial. **Reference:** CENIT PRONAOS. **Participating entities:** Bioibérica S.A. Palafoll-Barcelona. **Duration, from:** 2010 **till:** 2011. **PI:** María Luisa Bonet Piña and Andreu Palou Oliver **Number of participating researchers: 9.**

- **Title:** El papel de algunas grasas vegetales en la alimentación y la salud y aspectos mecanísticos de sus potenciales efectos durante el desarrollo y a largo plazo. **Funding entity:** Unilever España S.A. (Instituto Flora). **Duration, from:** 2008 **till:** 2009. **PI:** Catalina Picó Segura.

- **Title:** Componentes funcionales de la leche materna de interés en la prevención de la obesidad en etapas posteriores (LEO). **Funding entity:** Centre Català de la Nutrició de l'Institut d'Estudis Catalans. **Participating entities:** Mercadona. **Duration, from:** 2007 **till:** 2008. **PI:** Andreu Palou Oliver **Number of participating researchers: 9.**

C.5 Others

- Reviewer of European Projects: JPI "A Healthy Diet for a Healthy Life", ERA-HDHL, Call for Transnational Research Proposals: "Nutrition & the Epigenome". 2018.

- Reviewer in international journals such as: Diabetologia, International Journal of Obesity, Clinical Nutrition, International Journal of Biochemistry and Cell Biology, Journal of Nutrition, British Journal of Nutrition, AJP-Regulatory, Integrative and Comparative Physiology, Annals of Nutrition and Metabolism, Physiological Genomics, Science Reports, Pediatric Research.

- Founding partner of the enterprise, biotechnology-based spin-off of the UIB, Alimentómica S.L. (NIF B57730582). Alimentómica focuses on the research and development of new components, technologies and innovative practices to allow the improvement of the binomium food/health in humans. Alimentómica initiated its activities in 2011.

- Member of SEEDO (Sociedad Española para el Estudio de la Obesidad) and SEBBM (Sociedad Española de Bioquímica y Biología Molecular).