



AYUDAS RAMÓN Y CAJAL CONVOCATORIA 2015

Turno de acceso general

Nombre: PAZOS PALMEIRO, MANUEL
Referencia: RYC-2015-18012
Área Científica: Ciencia y Tecnología de los Alimentos
Correo Electrónico: manuel_pazos@yahoo.es

Título:

Novel mechanisms involved in the oxidative stability and bioactivity of marine lipids

Resumen de la Memoria:

Previously to my doctoral research, I worked in the development of methods for the analysis of organic contaminants in foods at University of Santiago de Compostela (USC), with the support of a Collaboration fellowship, and later a Postgraduate grant. In 2001, I was awarded with a FPI fellowship to carry out doctoral research with Dr. Isabel Medina from Instituto de Investigaciones Marinas de Vigo (IIM-CSIC). My doctoral investigation addressed the physicochemical mechanisms involved in the oxidation of marine lipids in fish muscle and functional food systems. In this sense, the antioxidant capacity of polyphenolic compounds with different structure and in vitro antioxidant properties (partition coefficients in fish oil or fish membranes and chelating, electron-donating and antiradical activities) was evaluated in the different food systems. During my doctoral studies, I performed a 4-month stay with Prof. Herbert Hultin from University of Massachusetts (USA) to learn the techniques needed to extract fish hemoglobins and characterize their pro-oxidant activity.

Later, I carried out a 24-month postdoctoral stay with Prof. Lief Skibsted from University of Copenhagen to take advantage of the intrinsic ability of Electron Spin Resonance (ESR) spectroscopy to monitor very short half-life free radicals involved in the activation/inhibition of lipid oxidation, and with Prof. Ole Jensen from Southern Denmark University to develop a proteomic methodology to quantify and identify oxidized (carbonylated) proteins. In September 2007, I came back to IIM-CSIC with a JAE-DOC contract and started the supervision of a Ph.D. student to continue the study of the pro-oxidant mechanisms of fish hemoglobins and the use polyphenols as antioxidants. In this period, I also dedicated significant efforts in transferring to IIM-CSIC the knowledge gained in Denmark, as the redox proteomic methodology developed to evaluate protein oxidation. In 2010, I was awarded with an Isidro Parga Pondal contract to continue at IIM-CSIC in a more nutrition-orientated investigation. Redox proteomics was successfully applied to identify innovative in vivo effects of marine lipids, and in this context, I supervised a second Ph.D. thesis and collaborated in several European and National projects.

In 2014, I moved 5 months with Prof. Julian Griffin from University of Cambridge (UK) to incorporate metabolomics and lipidomics workflows in the investigation of the effect of marine lipids in preventing diet-induced disorders such as obesity and insulin resistance. Since October 2015, I carry out a two-year Marie Curie Talent Hub project at University of Cambridge (up to January 2017) and University of Cordoba (Feb-Sept 2017) about the capacity of dietary marine lipids to restore normal mitochondrial function and energy expenditure in obesity.

Resumen del Currículum Vitae:

Doctorate studies (2001-2005) were carried out at Instituto de Investigaciones Marinas (IIM-CSIC) with a FPI grant. During this period, I spent 4 months at Univ. Massachusetts (USA). After obtaining the Ph.D. with the highest score (Sobresaliente Cum laude), I spent 1.8 months at Univ. Copenhagen (Denmark) and I returned at IIM-CSIC for 3 months with a project fellowship. In October 2005, I moved again to Denmark to work in novel free radical reactions involved in the activation/inhibition of lipid oxidation and in a proteomic procedure to evaluate protein oxidation. In September 2007, I rejoined IIM-CSIC, first with a JAE-DOC contract, and later with an Isidro Parga Pondal contract. In 2014, I was awarded with a 5-month travel grant at University of Cambridge (UK) to apply metabolomics workflows to evaluate obesity and insulin resistance. In October 2015, I got a 2-year Marie Curie Talent Hub project to work at University of Cambridge (up to January 2017) and University of Cordoba (last 8 months). Throughout this research career supported by competitive fellowship programs from European, national and regional funding, I have completed 45-months of postdoctoral experience in top-class international institutions and achieved a multidisciplinary cutting-edge background in food chemistry, proteomics, animal and cellular models, metabolomics, and bioinformatics.

My research activities have resulted in 51 peer-reviewed papers, 43 were articles published in SCI-indexed scientific journals and 6 were book chapters in renowned international publishers (3 Elsevier, ACS, CRC Press, Woodhead Publishing). A high ratio of SCI articles, 86%, was published in top-ranked journals from the first quartile of the scientific areas of Food Science, Analytical Chemistry, Metabolism and Nutrition, with a privileged position of authorship in 78% of the publications (first or corresponding author in 26 articles/book chapters and second author in 14). In four of the book chapters, I was personally invited for the editor to contribute. Additionally, one article is under evaluation and 3 more are forthcoming. I am also co-inventor of one licensed patent and other patent registered. I have 41 contributions, with a 50% of oral communications, to scientific congresses, noting that 40 of them were in international congresses. So far, I have participated in 19 research projects (5 European, 11 national and 3 regional), including the Marie Curie Talent Hub project of which I am principal investigator. I supervised two doctoral theses, the scientific work of a foreign Ph.D. student during her stay at IIM-CSIC and



MINISTERIO
DE ECONOMÍA
Y COMPETITIVIDAD



DIVISIÓN DE PROGRAMACIÓN
Y GESTIÓN ECONÓMICA Y
ADMINISTRATIVA

SUBDIVISIÓN DE
PLANIFICACIÓN Y GESTIÓN
ADMINISTRATIVA

AYUDAS RAMÓN Y CAJAL CONVOCATORIA 2015

Turno de acceso general

conducted the hands-on training of four postgraduate students and technical staff. I participated in teaching activities of Campus Científico de Excelencia Internacional Do Mar (Universidad de Vigo) and gave several seminars in a foreign institution by invitation. I have collaborated as reviewer of research projects and grants for the ANEP and an overseas institution. I was part of the organizing committee of a national workshop and I invited to be member of the organizing committee of an international congress. I got a positive certification for a prominent research career by the Programa Manuel Colmeiro (2014), and my doctorate thesis was awarded by the Diputación de Pontevedra . Currently, I am member of the editorial boarding committee of the International Journal of Bioinformatics & Biological Systems and reviewer for 13 SCI-indexed journals.



AYUDAS RAMÓN Y CAJAL CONVOCATORIA 2015

Turno de acceso general

Nombre: GÓMEZ CARAVACA, ANA MARIA
Referencia: RYC-2015-18064
Área Científica: Ciencia y Tecnología de los Alimentos
Correo Electrónico: anagomez@ugr.es

Título:

Characterization of bioactive compounds in food and food-by-products, sustainable technological techniques and design of functional foods

Resumen de la Memoria:

The applicant started her research career in 2004 after finishing the Bachelor Degree in Chemistry at the Univ. of Granada (UGR). In 2005 she got a FPU fellowship to carry out her PhD studies in the Depart. of Analytical Chemistry of UGR. During this period she learnt about the characterization of phenolic compounds in different food matrices by advanced separation techniques and the application of these optimized methodologies to understand the influence of food technology. She also acquired knowledge in HPLC-SPE-NMR to isolate and characterize phenolic compounds from food matrices.

After her PhD defense (2009) she began her postdoc period at the Food Science Depart. (Univ. of Bologna, Italy). She worked in the revalorization of food by-products. She studied different extraction methods to obtain bioactive compounds (phenolic compounds, phospholipids, fatty acids, sterols, tocopherols, etc) from olive oil, cereals, dairy by-products, etc., she optimized analytical methods to determine the compounds of interest in the extracts and evaluated the feasibility to use them to formulate new functional food. Besides, she also carried out different assays to evaluate the effects in vitro and in cell cultures of phytosterols from food by-products.

In 2012 she got a contract (Proyectos de Excelencia) and returned to UGR. From December 2013, she continues working at UGR thanks to a Juan de la Cierva contract. In this last period, she has developed different research lines. She has continued developing analytical methodologies to determine bioactive compounds in new food matrices, but she has also performed metabolomic studies to understand the metabolism of bioactive compounds in human fluids. Indeed, she has paid special attention to study the influence of food technology processes on bioactive compounds. In fact, she has obtained 2 projects as PI to continue with the research line about characterization, extraction and purification of bioactive compounds of plant matrices and by-products to use them as ingredients in the design of functional food and a research contract also as PI for the development of GC-MS methodologies for the lipid fraction of cashew nuts. She has supervised a PhD thesis about the evaluation of phenolic compounds in *Olea europaea* products and by-products and she is supervising another PhD thesis about bioactive compounds in tropical fruits and by-products. Indeed, she is coordinator of Characterization of bioactive compounds research area at CIDAF.

Her scientific training has led to a wide knowledge and experience in food science and technology. She has dealt with numerous and different food matrices: olive oil, honey, cereals, milk, vegetables, fruits, food by-products, etc. To perform the analytical characterization of bioactive compounds in these matrices, she has established analytical protocols from sample preparation to data analysis. She has carried out the optimization of analytical methods using different advanced separation techniques: CE, HPLC and GC coupled to different detection systems (DAD, MS, SPE-NMR, FLD, ELSD, etc). She also has experience in data treatment and bioinformatics tools. She has applied the optimized methodologies to metabolomics and food matrices and its by-products obtained under different technological processes. Then, she has used food fractions obtained to design functional food.

Resumen del Currículum Vitae:

Ana María Gómez Caravaca earned the Bachelor Degree in Chemistry at the University of Granada (UGR), 2004. After that, she started her PhD studies thanks to a FPU fellowship (2005-2009) in the Depart. of Analytical Chemistry, UGR. In this predoctoral period she performed 3 stays in European Universities: Univ. of Bologna (Unibo), Italy; Univ. of Ioannina, Greece and Univ. Autònoma of Barcelona. In 2009 she defended the PhD thesis obtaining the highest mark (Cum Laude) and the European Doctorate mention. The PhD thesis was also awarded with the PhD thesis Award San Alberto Magno of the Chemists College.

Then, she obtained a contract from UGR Plan Propio and she continued working at UGR until she obtained a postdoctoral contract funded by a FP7 European project. Then she began her postdoc period at the Food Science Depart, Unibo (Italy). During this postdoc period she got an Alfonso Martín Escudero fellowship and a Postdoc contract from the Spanish Ministry of Education. She also was awarded with a Marie Curie-IEF-fellowship. Thus, she spent 27 months postdoc working in the group of Prof. Caboni about the revalorization of food by-products.

In 2012 she got a contract (Proyectos de Excelencia) and returned to UGR. Since December 2013 she has a Juan de la Cierva contract. After returning to UGR, she has performed 3 international short stays: 1 at Interdepart. Centre for Agri-Food Industrial Research (Unibo) and 2 at Depart. of Agro-Food Science and Technology (Unibo).

Concerning the total stays periods, she has performed stays for 45 months (14 pre-doctoral and 31 post-doctoral) from which 41 months in international research centers.

She has been involved in teaching and research since she began her PhD. She has wide experience in teaching in different Bachelor Degrees and also in international Bachelor, Master and PhD Degrees.

Regarding the research activity she is co-author of 54 scientific articles, 52 published in international journals SCI, including 14 as



MINISTERIO
DE ECONOMÍA
Y COMPETITIVIDAD



DIVISIÓN DE PROGRAMACIÓN
Y GESTIÓN ECONÓMICA Y
ADMINISTRATIVA
SUBDIVISIÓN DE
PLANIFICACIÓN Y GESTIÓN
ADMINISTRATIVA

AYUDAS RAMÓN Y CAJAL CONVOCATORIA 2015

Turno de acceso general

corresponding author. She is first or second author in 80% of her publications and 42 of the articles are published within the first quartile of the knowledge area. She is also author of 7 book chapters in prestigious editorials. The high citation of the articles results in an h-index 15 (total citations 1118). She also has 68 contributions to conferences (42 international and 15 national posters; 3 international and 8 national oral presentations).

She has participated in 23 projects funded in competitive calls (11 regional (2 as PI), 7 national and 5 European projects (1 as PI)). She has also been PI of a research contract.

Moreover, she has supervised 7 Bachelor theses, 1 Master thesis and 1 PhD thesis. Another PhD, Master and Bachelor theses are in progress. She has collaborated as reviewer in 17 international journals SCI, 1 European PhD and she has evaluated 1 project for the Chilean CONICYT. She has national and international collaborations with several research centers.

She is guest Editor of Int. J. Molec. Sci. (IF 2.862) and member of the Editorial Board of J. Food Sci. and Nutr. Therapy. She is coordinator of **Characterization of bioactive compounds** research area at CIDAF. She has obtained the National Accreditation as **Profesor Universidad Privada**, **Profesor Ayudante Doctor**, **Profesor Contratado Doctor** and **Profesor Titular de Universidad** from ANECA.



AYUDAS RAMÓN Y CAJAL CONVOCATORIA 2015

Turno de acceso general

Nombre: VERARDO , VITO
Referencia: RYC-2015-18795
Área Científica: Ciencia y Tecnología de los Alimentos
Correo Electrónico: vito.verardo@unibo.it

Título:

Use of green technologies to develop functional foods and nutraceuticals

Resumen de la Memoria:

Vito Verardo started his scientific career in 2004. The first year he carried out an industrial research project as PI about the formulation of bakery products and pasta using barley flours. Then, Vito Verardo started his career at the University of Bologna and, in January 2006, he began the PhD studies. During this period, his research was focused in cereal based food and nuts. In this context, he worked with green technologies to obtain new functional cereal flours and carried out the formulation of new bakery products with them. At the same time, he studied the influence of formulation, processing, packaging and shelf on lipid oxidation in pasta and bakery. Finally, during the predoctoral period, Vito Verardo improved his abilities in the use of separative techniques thanks also to two stays in other research groups. Due to the experience about cereal food production, Vito Verardo was consultant of a company and a technological park where develops two projects aimed to the formulation of new cereal products and the quality of pasta.

During the postdoctoral period, Dr. Verardo expanded his research activity from food and food wastes to biological samples. Firstly, the attention was concentrated on healthy bioactive compounds, because of that he developed different analytical methods for the determination of hydrophilic and lipophilic bioactive compounds. Simultaneously, he carried out two postdoctoral stays developing different analytical methods for the determination of furans and acrylamide, and bioactive lipids in different foodstuff. Currently, he is developing his postdoctoral research (Juan de la Cierva grant) at the Department of Chemistry and Physics of University of Almeria, investigating new sources of bioactive compounds and use of sustainable processes for functional food production. During the Juan de la Cierva postdoctoral period, he carried out three stays in international research centers (Inter-Departmental Centre for Agri-Food Industrial Research of University of Bologna and TEC of Monterrey); moreover he participated in several projects, in two of them as PI. From 2015 he is also a research collaborator of Functional Food Research and Development Centre (CIDAF) of Granada (Spain) where he has spent a national stay.

Dr. Verardo main area of expertise is in the field of food chemistry and food technology. Dr. Verardo has acquired a multidisciplinary knowledge on the characterization of bioactive and potentially toxic compounds in food and biological samples by advanced analytical techniques; development of new food enriched of bioactive compounds and characterization and valorization of food by-products; study of lipid oxidation and strategies to limit it, use of green technologies for nutraceutical production.

Resumen del Currículum Vitae:

Vito Verardo earned his Bachelor degree in Food Science and Technology at University of Bologna (Italy) in February 2004. In May 2004, he obtained a fellowship to develop a technological project about the features of new cereal products enriched with phenolic compounds in collaboration with food companies. From 2005 to 2006, he worked at the University of Bologna and Scientific and Technological Park of Molise in research projects about the antioxidants and lipid oxidation in different cereal foods.

From 2006 to 2008 he developed his PhD studies thanks to an Italian Ministry grant and in 2009 he received his Ph.D. degree with European mention in Food Sciences at the University of Bologna obtaining the highest qualification. In 2010 the PhD thesis was awarded by Federalimentare, SISTAL and SIMTREA. During his pre-doctoral stage, Vito Verardo obtained two Leonardo Da Vinci-Lifelong Learning Programme fellowships performing his pre-doctoral stays at Verbiotech S.L. and Department of Analytical Chemistry of University of Granada. From 2009 to 2013 he was postdoctoral researcher at University of Bologna; in this period he spent research stages at the University of Granada and at the CIDAF in Granada. In 2013, he obtained a Juan de la Cierva contract and in 2014 he joined the group of Prof. Antonia Garrido-Frenich at University of Almeria. In 2014 and 2015 he was visiting researcher at the Interdepartmental Centre for Agri-Food Industrial Research of University of Bologna, at the CIDAF in Granada and at the TEC of Monterrey.

He has participate in 17 R&D&I projects funded in competitive calls (in two of them was PI), three of them financed in European calls, and in 12 R&D&I non-competitive projects/contracts where food or pharmaceutical producers were partners of the projects (in one of them was PI). He has been supervisor of 26 Bachelor/Postgraduate Master theses. At the moment, he is supervising two doctoral theses and 1 master thesis.

Vito Verardo has worked as scientific consultant in Biosphere S.p.A. in 2008 and 2012.

At the present, Vito Verardo is author of 47 scientific papers and 7 abstracts in journals with impact factor, 3 articles in journal without impact factor, 9 international book chapters (being 22 as first author, 23 as second author and 24 as corresponding author). Moreover he has presented 62 communications in national and international congresses (3 invited oral communications, 3 oral presentations, 56 posters).

Vito Verardo is Lead guest Editor in Journal of Chemistry (SCI impact factor 0.772) for the special issue **Bioactive Compounds in Dairy Products from Conventional and Unconventional Milk** and guest editor in International Journal of Molecular Science (I.F. 2.862) for the



MINISTERIO
DE ECONOMÍA
Y COMPETITIVIDAD



DIVISIÓN DE PROGRAMACIÓN
Y GESTIÓN ECONÓMICA Y
ADMINISTRATIVA
SUBDIVISIÓN DE
PLANIFICACIÓN Y GESTIÓN
ADMINISTRATIVA

AYUDAS RAMÓN Y CAJAL CONVOCATORIA 2015

Turno de acceso general

special issue "Lipidomics and Glycomics: New Advances in Food Science and Nutrition"; furthermore he is member of the editorial board of Journal of Analytical Methods in Chemistry (SCI impact factor 0.792) and Journal of Food Science and Nutrition Therapy.

He is member of Rodriguez team in the European Network on Oxysterols Research (ENOR).

Vito Verardo is reviewer for 42 international journals, 37 of them with SCI impact factor. In addition, he was reviewer of 2 PhD theses and 6 times member of committee of evaluation of international PhD theses.

He is also accredited as Associate professor by the Italian Ministry of Education, Universities and Research.



AYUDAS RAMÓN Y CAJAL CONVOCATORIA 2015

Turno de acceso general

Nombre: REGUEIRO TATO, JORGE EDUARDO

Referencia: RYC-2015-17575

Área Científica: Ciencia y Tecnología de los Alimentos

Correo Electrónico: je.regueiro@gmail.com

Título:

New analytical and technological approaches for securing safety, quality and functionality of foods

Resumen de la Memoria:

Jorge Regueiro is currently a postdoctoral researcher at the European Commission's Joint Research Centre (JRC) in Belgium, where he is involved in several EU-funded research projects, mainly dealing with Food Safety issues.

During his career, the applicant has addressed several research topics across different fields, but always keeping food science as his major research area. This inter-disciplinary cutting-edge background provides him outstanding versatility that will be essential to success in attracting funds from competitive calls and to create his own research group in a near future. His research activities in the field of Food Science and Technology have been mainly focused on Food Safety and Food Quality.

The main research lines conducted by the applicant are briefly described in the following points:

1. Environmental and agricultural pollutants in food

The study of the occurrence of anthropogenic contaminants in food is of paramount importance to guarantee food safety. One of the main research lines of the applicant is indeed the development of analytical methodologies based on gas chromatography and/or liquid chromatography coupled to mass spectrometry for the determination of different families of environmental and agricultural pollutants (PCBs, PAHs, PBDEs, phthalates, bisphenols, pesticides, etc.) in a variety of food matrices. The subsequent monitoring studies provide highly valuable information on the dietary exposure that can be used by the European Food Safety Agency (EFSA) for the establishment of Acceptable Daily Intakes (ADI) and Maximum Residue Limits (MRL).

2. Marine biotoxins in seafood

In order to protect consumers, EU regulation has established maximum levels for several marine biotoxins in shellfish products. In this regard, the applicant is involved in the study of occurrence of several families of marine biotoxins (DSP, ASP, PSP, etc.) in the shellfish as well as in the study of depuration processes of these toxins. Therefore, seeking innovative strategies to accelerate toxin elimination in contaminated seafood is the main aim of this research line, which could result in significant benefits to the shellfish aquaculture industry.

3. Phenolics and other phytochemicals in foods

In recent years, phenolic compounds and other bioactive phytochemicals have become an important topic within Food Science and Technology. Thus, another major research line of the applicant is the study of several families of phytochemicals such as polyphenols and carotenoids in a variety of foods (fruits, vegetables, nuts, spices, wine, etc.), as well as the effect of different technological processes in their content and antioxidant capacity. The development of nutraceuticals and innovative food formulations with functional properties, and the establishment of a causal link between their consumption and health benefits is a major aim of this research line. To this end, metabolomics approaches based on high-resolution mass spectrometry allow discovering specific biomarkers of food consumption to be used during controlled feeding trials. This line presents noteworthy relevance within his research as it has implications for exploiting potential health beneficial roles of phytochemicals, contributing to a Safe & Healthy Diet, one of the key areas supported under Horizon 2020.

Resumen del Currículum Vitae:

Jorge Regueiro graduated from the University of Santiago de Compostela (USC) in 2004 with a Bachelor's Degree in Chemistry, receiving an Outstanding Bachelor's Degree Award. His research career started in the Department of Analytical Chemistry, Nutrition and Food Science with a collaboration grant. In 2005, he was awarded with a FPU grant to perform his PhD at the Institute of Research and Food Analyses (USC), under the supervision of Dr. Carmen García-Jares and Dr. María Llompart. During his dissertation, the applicant developed new methods for the analysis of emerging contaminants and pesticides in environmental and food samples. He completed his PhD in Chemistry in 2009 with summa cum laude honors, receiving an Outstanding Dissertation Award.

After his predoctoral stage, he obtained a two-year postdoctoral position in the Department of Marine Toxins at the Centre for Marine Research (CIMA). During this time, Jorge Regueiro was involved in the development of analytical methods for different families of marine biotoxins and their subsequent application to the study of depuration processes of bivalve mollusks.

In 2011, he was awarded with a postdoctoral grant Juan de la Cierva in the area of Food Science and Technology to join the research group of Prof. Jesús Simal Gándara at the University of Vigo. The applicant participated in several research projects involving both food safety and food quality issues, being principal investigator in one of them. He was actively involved in teaching activities, including lecturing on several subjects of the Food Science and Technology degree and the Agricultural and Food Industries Engineering degree, as well as on



MINISTERIO
DE ECONOMÍA
Y COMPETITIVIDAD



DIVISIÓN DE PROGRAMACIÓN
Y GESTIÓN ECONÓMICA Y
ADMINISTRATIVA
SUBDIVISIÓN DE
PLANIFICACIÓN Y GESTIÓN
ADMINISTRATIVA

AYUDAS RAMÓN Y CAJAL CONVOCATORIA 2015

Turno de acceso general

the university masters in Agro-Food Science and Technology and Industrial Pollution. The applicant is accredited as **Profesor Contratado Doctor** by the National Agency for Quality Assessment and Accreditation (ANECA). Over this period, he did several postdoctoral stays in the University of Salamanca (Group of Prof. Julián Rivas Gonzalo), the Biomedical Research Institute of Barcelona (Group of Dr. Cristina Suñol) and the University of Barcelona (Group of Dr. Rosa Lamuela-Raventós) to deepen his expertise in the field of Food Science and Technology.

Since 2013, the applicant is working as a postdoctoral researcher at the European Commission's Joint Research Centre (JRC) in Belgium, where he is involved in several EU-funded research projects on the estimation of the dietary exposure of the European population to different contaminants through Total Diet Study approaches.

The research activities of the applicant have resulted in a total of 43 peer-reviewed articles in SCI journals (37 in the first quartile of the category), being first author in 22 papers, second author in 14 papers and corresponding author in 4 of them. He has co-authored 2 book chapters, 1 book, 19 communications in national/international conferences and 2 international scientific-technical reports. The h-index and g-index of the applicant are 18 and 36 respectively, accounting for over 1354 citations from 2006. Moreover, he has participated in a total of 23 research projects (5 of them EU-funded), being principal investigator in one of them. He is a reviewer for 13 SCI journals, member of the editorial board of Journal of Chemistry and associate editor of Food Science Journal.



AYUDAS RAMÓN Y CAJAL CONVOCATORIA 2015

Turno de acceso general

Nombre: LAPARRA LLOPIS, JOSÉ MOISÉS
Referencia: RYC-2015-18083
Área Científica: Ciencia y Tecnología de los Alimentos
Correo Electrónico: j.moises.laparra@uv.es

Título:

Influencia de componentes bioactivos en el eje entero-hepático

Resumen de la Memoria:

En 1998 me licencié en Farmacia y las deficiencias nutricionales centraron mi tesis de licenciatura. En 2002 inicié en el IATA-CSIC los estudios de seguridad alimentaria para la defensa de mi Tesis doctoral. En 2005 gané un contrato público en la Universitat de Valencia para el desarrollo técnicas de estudio del efecto de distintos ingredientes funcionales en la salud gastrointestinal. En 2006 participé en el programa Fulbright de excelencia investigadora con una estancia postdoctoral en Cornell Univ. (NY, USA). El uso de alimentos funcionales en estrategias de intervención nutricional en desórdenes metabólicos e inmunológicos motivó mi incorporación en el grupo de Ecofisiología Microbiana, Nutrición y Salud del IATA-CSIC. Hasta aquí disfruté de contratos precompetitivos financiados por el MICINN y CSIC y amplí mi experiencia internacional con estancias en centros de reconocido prestigio. En 2014 me incorporé al centro médico en la Johannes-Gutenberg Univ. (Alemania) como investigador-científico para la evaluación de estrategias nutricionales en el ámbito clínico-terapéutico. En 2015 me incorporé al IU Ing^a de Alimentos para el Desarrollo en la UP-Valencia y en 2016 a la Universidad Internacional de Valencia como director del Máster en Nutrición y Salud. La experiencia adquirida me ha permitido participar en proyectos nacionales e internacionales en el marco de los programas FP7 y H2020.

En mi trayectoria investigadora en el ámbito nacional tengo reconocidos dos trienios por la labor profesional desarrollada en el CSIC, Universidad de Valencia y UP-Valencia. Mi labor investigadora ha ido acompañada de una activa implicación en funciones docentes y la codirección de tesis doctorales, de master y de licenciatura.

Mi línea de investigación centrada influencia de nutrientes y componentes immunoreguladores en la salud gastrointestinal y hepática proporciona a nivel científico innovadoras herramientas experimentales que favorecen, en el ámbito de la salud, el reducir el riesgo, severidad y consecuencias de patologías metabólicas e inmunológicas potenciando la mejora tecnológica industrial y desarrollo de alimentos más seguros y eficaces para su favorable aceptación en el mercado. La relevancia de mis estudios se avala por su utilización por agencias nacionales (AESAN) como internacionales (FAI, EFSA) para establecer sus recomendaciones. Los contratos con empresas y financiación pública, obtenida de modo independiente, para llevar a cabo acciones bilaterales internacionales (UK y GER) y subproyectos en una acción CONSOLIDER avalan mis capacidades de liderazgo y pensamiento independiente para alcanzar una posición de madurez investigadora. Entre los logros alcanzados más remarcables destacar 1) el demostrar por primera vez la capacidad de la microbiota intestinal para reducir el potencial inmunógeno de proteínas alimentarias, 2) el desarrollo de innovadoras estrategias para la mejora de la calidad nutricional de alimentos que fructificó en la solicitud de dos patentes, 3) el desarrollo de innovadoras herramientas biológicas para estudios de seguridad alimentaria, 4) el desarrollo de un nuevo modelo animal para el estudio de patologías de base inmunitaria

Resumen del Currículum Vitae:

El candidato se licenció en Farmacia (orientación biosanitaria) en 1998. Las deficiencias nutricionales en micronutrientes y su absorción (biodisponibilidad, BD) desde los alimentos centraron su tesis de licenciatura. En 2002 inicié en el IATA-CSIC los estudios de seguridad alimentaria con respecto al contenido y BD de las distintas especies arsenicales en alimentos para la defensa de su Tesis doctoral, la cual, realizó en 2005 con calificación Sobresaliente Cum Laude. En 2005, mediante concurso público, obtuvo un contrato de Técnico Superior de Investigación en la Universitat de Valencia en el que desarrollo técnicas de estudio del efecto de distintos ingredientes funcionales en la salud gastrointestinal y amplió su experiencia con estancias en centros de investigación [CINVESTAV (MEX), IFI-CSIC (ESP)]. En 2006 participó en el prestigioso programa Fulbright con una estancia postdoctoral en Cornell University (USA) para el estudio in vitro e in vivo de los efectos de prebióticos y otros factores dietéticos en la BD de micronutrientes esenciales y su homeostasis hepática, así como la respuesta reguladora génica. Las estrategias de intervención nutricional, basadas en el uso de alimentos funcionales para desórdenes metabólicos e inmunológicos motivaron su incorporación en el grupo de Ecofisiología microbiana, nutrición y salud del IATA-CSIC con contratos precompetitivos financiados por el MICINN y CSIC y ampliar su experiencia internacional con estancias en centros de reconocido prestigio. A finales de 2013 se incorporó al Institute of Translational Immunology (GER) como investigador-científico para la evaluación de estrategias nutricionales en el ámbito clínico-terapéutico. En 2015 se incorporó al IU Ing^a de Alimentos para el Desarrollo en la UP-Valencia y en 2016 a la Universidad Internacional de Valencia como director del Máster en Nutrición y Salud. Su línea principal de investigación es la influencia de nutrientes y componentes immunoreguladores en la salud gastrointestinal y hepática. Su labor investigadora se refleja en más de 50 publicaciones internacionales (SCI, índice h=16) con más de 888 citas y 10 capítulos de libro. Ha participado en conferencias internacionales de seguridad alimentaria, micronutrientes y biodisponibilidad, y estrategias de uso de nuevos pre/probióticos en desordenes inmunológicos y metabólicos. Ha sido investigador principal en 1 proyecto financiado por el gobierno regional, 2 acciones internacionales financiadas por el CSIC, 1 subproyecto de una acción CONSOLIDER y 2 contratos con empresa. Como investigador, ha participado en diversos proyectos nacionales e internacionales de los programas FP7 y H2020. Su contribución a la propiedad intelectual incluye la solicitud de 2 patentes. Completando su labor investigadora ha llevado a cabo funciones docentes en



MINISTERIO
DE ECONOMÍA
Y COMPETITIVIDAD



DIVISIÓN DE PROGRAMACIÓN
Y GESTIÓN ECONÓMICA Y
ADMINISTRATIVA
SUBDIVISIÓN DE
PLANIFICACIÓN Y GESTIÓN
ADMINISTRATIVA

AYUDAS RAMÓN Y CAJAL CONVOCATORIA 2015

Turno de acceso general

cursos de doctorado, especialista universitario y máster, así como la codirección de tesis doctorales, Máster y trabajos de licenciatura