

Part A. PERSONAL INFORMATION

CV date	May 26th, 2020
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First and Family name	Abelardo Margolles Barros		
Researcher codes	WoS Researcher ID *	H-3871-2012	
	SCOPUS Author ID *	6602833523	
	Open Researcher and Contributor ID (ORCID) **	0000-0003-2278-1816	

(*) At least one of these is mandatory

(**) Mandatory

A.1. Current position

Name of University/Institution	Dairy Research Institute of Asturias (IPLA) Spanish National Research Council (CSIC)		
Department	Microbiology and Biochemistry of Dairy Products		
Address and Country	Paseo Río Linares s/n. 33300 Villaviciosa. Asturias, Spain		
Phone number	+34 985893356	E-mail	amargolles@ipla.csic.es
Current position	Profesor de Investigación del CSIC		
Key words	Food Microbiology, Probiotics, Prebiotics, Microbiota, Health		

A.2. Education

	University	Year
Pharmacy Graduate	Santiago de Compostela	1991
Doctor of Pharmacy	Santiago de Compostela	1997

A.3. JCR articles, h Index, thesis supervised...

Source: Web of Science Core Collection (WoS) and Scopus

Total number of citations: 8,554 (WoS) / 8,807 (Scopus)

Total number of publications in JCR journals: 187

h-index: 51 (WoS) / 53 (Scopus)

Thesis supervised: 9 (five of them awarded with "Premio Extraordinario de Doctorado concedido por la Universidad de Oviedo").

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

Abelardo Margolles received his Ph.D. in Pharmacy at the University of Santiago de Compostela, Spain, in 1997. After a postdoctoral stay in the University of Groningen, The Netherlands (1997 to 2000), in 2001 he became Staff Scientist of CSIC. Currently, he holds a "Profesor de Investigación" position in IPLA-CSIC (<http://www.ipla.csic.es/microhealth>). He has had the opportunity to carry out his research thanks to competitive grants funded by regional, national and international funding agencies, as well as several contracts with the industry. Since 2016 he is Scientific Founder of the CSIC star-up MicroViable Therapeutics (www.microviable.com). His present research interest focuses on technological and health applications of food and intestinal microbiomes, mechanistic studies of the health-promoting effects of food and intestinal bacteria, as well as the understanding of the molecular interactions between the gut microbiota and the host.

Professional experience

Doctoral fellowship, IPLA-CSIC. 1992-1997.

Postdoctoral contract (Marie Curie, Category 30). University of Groningen, The Netherlands. 1997-2000.

Postdoctoral contract (Marie Curie, Category R). IPLA-CSIC. 2000-2001.

Staff Research Scientist of CSIC since 2001.

Head of the Department of Microbiology and Biochemistry of Dairy Products (IPLA-CSIC) (2009-2012).



Member of the “Comisión de Área de Ciencia y Tecnología de Alimentos del CSIC” (2008-2012).

Collaborator of the Ministry of Economy and Competitiveness in the management of the National Plan of R&D for the Food Science and Technology Area (2012-2016).

Main scientific achievements:

- Elucidation of the molecular response behind the adaptation phenomena of probiotic bacteria to gastrointestinal stress factors.
- Development of probiotics with robust phenotypes, adapted to survive under the technological conditions used in the food industry.
- Clarification of the cross-talk mechanisms involved in the communication between bifidobacteria and human cells.
- Determination of the gut microbiota composition and functionality under different physiological conditions.

Other relevant activities

Examiner of more than 20 Ph.D. Theses (in Spanish and foreign universities).

More than 40 invited lectures in national and international meetings.

Project evaluator of several national and international funding agencies.

Principal Investigator (PI) of 16 projects funded through competitive public grants (European Union, National and Regional R&D programs).

Four patent applications.

Part C. RELEVANT MERITS

C.1. 10 selected publications

Martínez N, Hidalgo-Cantabrana C, Delgado S, Margolles A, Sánchez B. 2019. Filling the gap between collection, transport and storage of the human gut microbiota. *Scientific Reports* 9:8327. DOI: 10.1038/s41598-019-44888-8.

Molinero N, Ruiz L, Milani C, Gutiérrez-Díaz I, Sánchez B, Mangifesta M, Segura J, Cambero I, Campelo AB, García-Bernardo CM, Cabrera A, Rodríguez JI, González S, Rodríguez JM, Ventura M, Delgado S, Margolles A. 2019. The human gallbladder microbiome is related to the physiological state and the biliary metabolic profile. *Microbiome* 7:100. DOI: 10.1186/s40168-019-0712-8.

Martínez N, Luque R, Milani C, Ventura M, Bañuelos O, Margolles A. 2018. A gene homologous to rRNA methylase genes confers erythromycin and clindamycin resistance in *Bifidobacterium breve*. *Applied and Environmental Microbiology* 84:e02888-17. DOI: 10.1128/AEM.02888-17.

Milani C, Duranti S, Bottacini F, Casey E, Turrone F, Mahony J, Belzer C, Delgado S, Arbolea S, Mancabelli L, Lugli GA, Rodríguez JM, Bode L, de Vos W, Gueimonde M, Margolles A, van Sinderen D, Ventura M. 2017. The first microbial colonizers of the human gut: composition, activities and health implications of the infant gut microbiota. *Microbiology and Molecular Biology Reviews* 81:e00036-17. DOI: 10.1128/MMBR.00036-17.

Castro-Bravo N, Hidalgo-Cantabrana C, Rodríguez-Carvajal MA, Ruas-Madiedo P, Margolles A. 2017. Gene Replacement and Fluorescent Labeling to Study the Functional Role of Exopolysaccharides in *Bifidobacterium animalis* subsp. *lactis*. *Frontiers in Microbiology* 8:1405. DOI: 10.3389/fmicb.2017.01405.

Sánchez B, Delgado S, Blanco-Míguez A, Lourenço A, Gueimonde M, Margolles A. 2017. Probiotics, gut microbiota and their influence on host health and disease. *Molecular Nutrition & Food Research* 61:1600240. DOI: 10.1002/mnfr.201600240.

López P, de Paz B, Rodríguez-Carrio J, Hevia A, Sánchez B, Margolles A, Suarez A. 2016. Th17 responses and natural IgM antibodies are related to gut microbiota composition in systemic lupus erythematosus patients. *Scientific Reports* 6:24072. DOI: 10.1038/srep24072.



Hevia A, Delgado S, Margolles A, Sánchez B. 2015. Application of density gradient for the isolation of the fecal microbial stool component and the potential use thereof. *Scientific Reports* 5:16807. DOI: 10.1038/srep16807.

Hidalgo-Cantabrana C, Sánchez B, Álvarez-Martín P, López P, Martínez-Álvarez N, Delley M, Martí M, Varela E, Suárez A, Antolín M, Guarner F, Berger B, Ruas-Madiedo P, Margolles A. 2015. A single mutation in the gene responsible for the mucoid phenotype of *Bifidobacterium animalis* subsp. *lactis* confers surface and functional characteristics. *Applied and Environmental Microbiology* 81:7960-7968. DOI: 10.1128/AEM.02095-15.

Hevia A, Milani C, López P, Cuervo A, Duranti S, Foroni E, González S, Turroni F, Suárez A, Gueimonde M, Ventura M, Sánchez B, Margolles A. 2014. Intestinal dysbiosis associated with Systemic Lupus Erythematosus. *mBio* 5:e01548-14. DOI: 10.1128/mBio.01548-14.

C.2. Selected research projects (as PI or Co-PI)

TITLE: Microbiome Applications for Sustainable food systems through Technologies and Enterprise (MASTER).

TOPIC: H2020-SFS-2018-1.

ACTION: IA.

FUNDING AGENCY: UE, H2020 Programme.

DURATION: 4 years.

COORDINATING INSTITUTION: Teagasc, Ireland.

TITLE: “Nuevos métodos para el cultivo y caracterización de probióticos de próxima generación con potencial aplicación en la enfermedad inflamatoria intestinal”.

FUNDING AGENCY: MINECO.

Ref: AGL2016-78311-R.

DURATION: 3 years.

TITLE: “La microbiota de la bilis humana: ecología, funcionalidad y relación con la dieta y algunos trastornos biliares”.

FUNDING AGENCY: MINECO.

Ref: AGL2013-44761-P.

DURATION: 4 years.

TITLE: “Caracterización funcional de la microbiota intestinal en algunos trastornos inmunológicos”.

FUNDING AGENCY: MICINN.

Ref: AGL2010-14952.

DURATION: 3,5 years.

TITLE: “Determinación de los factores implicados en las interacciones de las bifidobacterias con células intestinales humanas”.

FUNDING AGENCY: MEC.

Ref: AGL2007-61805.

DURATION: 3 years.

C.3. Patents being exploited by companies

INVENTORS: S. Delgado, B. Sánchez, C. Hidalgo, A. Margolles, JI Rodríguez.

TITLE: Device for collecting and transferring samples in anaerobiosis.

APPLICATION NUMBER: PCT/ES2017/070087.

NUMBER OF INTERNATIONAL PATENT: WO 2017140935 A1.

INVENTORS: B. Sánchez, A. Margolles, D. Bernardo, S. Knight, OH. Al-Hassi.

TITLE: Peptide secreted by *Lactobacillus plantarum* with immunomodulating function.

APPLICATION NUMBER: PCT/ES2012/070643.

NUMBER OF INTERNATIONAL PATENT: WO 2013034795 A1.