

Part A. PERSONAL INFORMATION			CV date	16/02/2022
First and Family name	José Ignacio Ibeas Corcelles			
Social Security, Passport, ID number	25097730S	Age	54	
Researcher numbers	Researcher ID	B-7615-2015		
	Orcid code	0000-0002-2394-7075		

A.1. Current position

Name of University/Institution	Universidad Pablo de Olavide			
Department	Molecular Biology and Biochemical Engineering			
Address and Country	CABD. Carretera de Utrera Km 1			
Phone number	954 349379	email	joibecor@upo.es	
Current position	Full Professor	From	12/2016-	
Espec. cód. UNESCO				
Palabras clave	Ustilago maydis, Glycosylation, HDACs, S.cerevisiae, Flo11			

A.2. Education

PhD	University	Year
Ph. D. Biological Sciences	Universidad de Málaga	1996

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

Six year term production recognition by the National Committee for the Evaluation of Research Activities (CNEAI): Five “six year” periods recognized (1992-1997, 1998-2003, 2004-2009, 2010-2015 and 2016-2021)

Six year term production recognition by the National Committee for the Evaluation of Transference Activities (CNEAI): One “six year” period recognized 1995-2010

Supervised Ph.Ds: Six, five of them with Extraordinary Ph.D. Awards at Pablo de Olavide University, two of them with Seville City Hall Award and one of them “Premio Real Maestranza de Caballería de Sevilla”

Sum of the Times Cited: 2550

H index: 21

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

Doctor in Biology. January 1996. Extraordinary Doctorate Award. Malaga University.
 Full Professor of Genetics Pablo de Olavide University. December 2016
 I started my research career at the University of Malaga in 1992, where I did my Doctoral Thesis entitled "Analysis and genetic improvement of flor yeasts in the Osborne Winery", in collaboration with this company founded by a fellowship from the Spanish Ministry of Education and Sciences. The Doctoral Thesis dealt with the study of the yeasts responsible for the production of fine wines in the Osborne winery and resulted in the publication of 7 research papers in leading journals in the field. In October 1996 I joined Purdue University in Indiana, USA, as a researcher and in January 1998 I got a Postdoctoral fellowship from the Ministry of Education and Sciences to December 1999. The work during this period was to decipher the mechanisms by which an antifungal protein, isolated from tomato plants, kills

fungi. The result of this research was the publication of 10 papers in important journals in the field, highlighting two in *Molecular Cell* and five in *Plant Journal*.

In December 1999 I joined the Pablo de Olavide University with a contract as Doctor Assistant Professor, in March 2003 I obtained the position of Professor of University and in December 2016 that of Full Professor. In the summer of 2001 I went to the laboratory of Dr. Neil Gow at the University of Aberdeen, with a grant from the EMBO organization, to explore the world of pathogenic fungi, thinking about my future research. In the first years at the Pablo de Olavide University I collaborated with Dr. Jimenez Martinez in studies directed to the knowledge of the role of the FLO11 gene in the formation of biofilm in flor yeasts and I started my own research as a Principal Investigator in three grants focussed to the identification of antifungal compounds in plants, two of them funded by the Junta de Andalucía, and the other one by the Pablo de Olavide University. In January 2007, I started a grant as a Principal Investigator funded by the Ministry of Education and Sciences, renewed in 2010, 2013, 2016 and 2019, in which we began by analysing elements involved in dimorfism in yeasts and pathogenic fungi, essential for the infection of the latter. Nowadays we focus on the study of the role that protein glycosylation has in the infective process of *Ustilago maydis* as well as the mechanisms controlling the expression of genes involved in the virulence of this fungus. Between 2010 and 2014 I was also Principal Investigator of a grant of Excellence of the Junta de Andalucía aimed to the study of flor yeast populations in the Montilla-Moriles Denomination of Origin, which continued with a project aimed to the study of same type of yeasts in the Denominations of Origin Jerez and Sanlúcar de Barrameda, partially founded by Bodega Estévez. I am actually Principal Investigator for a grant from Retro Program of the Junta de Andalucía to Isolate, identify and characterize new yeast for beer production. I am currently supervising three Ph.D. Thesis.

Part C. RELEVANT MERITS

C.1. Top 10 Publications (last 10 years)

1. Elías-Villalobos, A., Fernández-Alvarez, A., and **Ibeas J.I.** The General Transcriptional Repressor Tup1 Is Required for Dimorphism and Virulence in a Fungal Plant Pathogen (2011). **Plos Pathogens** doi:10.1371/journal.ppat.1002235.
2. Fernández-Álvarez A, Marín-Menguiano M, Lanver D, Jiménez-Martín A, Elías-Villalobos A, Pérez-Pulido AJ, Kahmann R, **Ibeas JI.** (2012). Identification of O-mannosylated virulence factors in *Ustilago maydis*. **PLoS Pathogens** 8 e1002563. doi: 10.1371/journal.ppat.1002563. Epub 2012 Mar 1.
3. Barrales RR, Korber P, Jimenez J, **Ibeas JI.** (2012). Chromatin Modulation at the FLO11 Promoter of *Saccharomyces cerevisiae* by HDAC and Swi/Snf Complexes. **Genetics**. 191: 791-803
4. Fernández-Álvarez A, Elías-Villalobos A, Jiménez-Martín A, Marín-Menguiano M, **Ibeas JI.** (2013) Endoplasmic reticulum glucosidases and protein quality control factors cooperate to establish biotrophy in *Ustilago maydis*. **Plant Cell**. Nov 2013 doi:10.1105/tpc.113.115691
5. Elías-Villalobos, A., Fernández-Alvarez, A., Moreno-Sanchez, I Helmlinger D. and **Ibeas J.I.** (2015) The Hos2 Histone Deacetylase Controls *Ustilago maydis* Virulence through Direct Regulation of Mating-Type Genes. **PLoS Pathogens** 11 :e1005134. doi: 10.1371/journal.ppat.1005134.
6. Marín-Menguiano M, Romero-Sanchez, S, Barrales RR, and **Ibeas J.I.** (2017) Population analysis of biofilm yeasts during fino sherry wine aging in the Montilla-Moriles D.O. región. **Int. Jour. Food. Microbiol.** 244: 67 - 73.
7. Elías-Villalobos A, Barrales RR, **Ibeas JI.** (2019) Chromatin modification factors in plant pathogenic fungi: Insights from *Ustilago maydis*. **Fungal Genet Biol.** 129:52-64. doi: 10.1016/j.fgb.2019.04.006.

8. Marín-Menguiano M, Moreno-Sanchez, I, Barrales RR, Fernández-Álvarez A, and **Ibeas J.I.** (2019) N-glycosylation of the protein disulfide isomerase Pdi1 ensures full *Ustilago maydis* virulence. **PLoS Pathogens**. Nov 15;15(11):e1007687. doi: 10.1371/journal.ppat.1007687
9. Lourdes Morales, M., Ochoa M., Valdivia M., Ubeda C., Romero-Sanchez S., **Ibeas, J.I.**, Valero E. (2020) Volatile metabolites produced by different flor yeast strains during wine biological ageing. **Food Research International** 128:108771
10. Moreno-Sánchez, I., Pejenaute-Ochoa, M.D., Navarrete, B., R Barrales., R, **Ibeas, J.I.** (2021). *Ustilago maydis* Secreted Endo-Xylanases Are Involved in Fungal Filamentation and Proliferation on and Inside Plants. **Journal of Fungi**, 7(12), 1081; <https://doi.org/10.3390/jof7121081>

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

1. Title: “Aplicación de técnicas genéticas a la selección y mejora de levaduras de flor, y a la detección y erradicación de contaminantes en las bodegas de la Denominación de Origen Montilla-Moriles”

P.I.: Jose Ignacio Ibeas Corcelles

Funding institution: Junta de Andalucía Proyecto de Excelencia AGR 05241.

From - to: 2/2010-1/2014. Funding: 203000 €. Researcher number:1

2. Title: “Análisis de la regulación de genes y proteínas implicadas en la transición levadura-hifa en *Saccharomyces cerevisiae* y en el hongo patógeno *Ustilago maydis*”

P.I.: Jose Ignacio Ibeas Corcelles

Funding institution: Ministerio de Economía y Competitividad BIO2010-16787.

From - to: 1/2011-12/2013. Funding: 121.000 €. Researcher number:1

3. Title: “Identificación y caracterización de glicoproteínas del hongo fitopatógeno *Ustilago maydis* implicadas en el proceso infectivo de la planta de maíz.”

P.I.: Jose Ignacio Ibeas Corcelles

Funding institution: Ministerio de Economía y Competitividad MEC BIO2013-- 48858--P

From - to: 1/2014-12/2017. Funding: 225.000 €. Researcher number:1

4. Title: “Identificación de elementos implicados en el establecimiento del biotrofismo y la virulencia en el patógeno de maíz *Ustilago maydis*”.

P.I.: Jose Ignacio Ibeas Corcelles

Funding institution: Ministerio de Economía y Competitividad MEC BIO2016-80180-P.

From - to: 1/2017-06/2020. Funding: 230.000 €. Researcher number: 2

Title: Plataforma de conservación, caracterización y experimentación en levaduras y hongos

P.I.: Jose Ignacio Ibeas Corcelles

Funding institution: EQC2019-005774-P. Ministerio de Economía y Competitividad

From - to: 2019- hasta: 2021 Funding:430.000 € Researcher number: 6

5. Title: Regulación transcripcional y post-traducciona l de proteínas implicadas en la virulencia de *Ustilago maydis*

P.I.: Jose Ignacio Ibeas Corcelles

Funding institution: Ministerio de Economía y Competitividad PID2019-110477GB-I00.

From- to: 6/2020- 5/2023. Funding: 160.000 €. Researcher number: 2

6. Title: “Selección y optimización del uso de levaduras para la diversificación y mejora de la producción de cerveza artesana en Andalucía”

P.I.: Jose Ignacio Ibeas Corcelles

Funding institution: Junta de Andalucía Proyecto Reto PY20_00821.

From - to: 10/2021-12/2022. Funding: 114.000 €. Researcher number:3

C.3. Contracts (last 10 years)

1. Title: Aislamiento y caracterización de levaduras de flor en uvas y durante las fases de fermentación y maduración de los vinos finos

P.I. Jose Ignacio Ibeas Corcelles

Company: Bodegas Estevez. From - to: 2015-2017 Funding: 12.000 €.

C.4. Patents

Inventors (p.o. de firma): Fidalgo M.A, Ibeas JI, Ramos R y Jimenez J

Title: Levaduras modificadas genéticamente con capacidad de flotación en un medio líquido, Procedimiento de obtención y uso de las mismas

Application number: PCT ES03/00048 Country: España, Australia, EEUU, Italia, EU.

Organization: Universidad Pablo de Olavide/Osborne

C.5, C.6, C.7... (e. g., Institutional responsibilities, memberships of scientific societies...)

Reviewer activity

Grant Reviewer for National Agency for Assessment and Prospective (ANEP) in 2001, 2004, 2007, 2008, 2009, 2010, 2011, 2012, 2014, 2015, 2016, 2017, 2018 and 2019, Ramón y Cajal and Juan de la Cierva 2007, INIA 2009 and 2015 and DFG-Heisenberg, 2019.

Reviewer for “Applied and Environmental Microbiology”, “Acta Biochimica et Biophysica Sinica”, “Microbiology SGM”, “Molecular Genetics and Genomics”, Plos Pathogens”, “Plos Genetics”, “Plos One”, “Archives of Microbiology”, “CyTA - Journal of Food”, “Molecules”, “Fungal Genetics and Biology”, “Genetics”, “Plant Cell”, “International Journal of Food Microbiology”, “European Journal of Plant Pathology”, “Journal of Fungi”, “Current Microbiology”.....

Institutional responsibilities

Head of Molecular Biology and Biochemical Engineering Department 1/2012 to 12/2019

Vicehead of Molecular Biology and Biochemical Engineering Department 12/2007 to 1/2012

Coordinator for Master for environmental, industrial and food biotechnology. Universidad Pablo de Olavide. 1/ 2010 - Present

Coordinator for Master for Science and technology for oil and fermented beverages. Universidad Pablo de Olavide. 3/ 2011- 9/ 2016

Academic Head for Especialista Universitario en Sumilleria. Universidad Pablo de Olavide. 1/ 2009-11/ 2014