



CURRICULUM VITAE (CVA)

IMPORTANT – The Curriculum Vitae cannot exceed 4 pages. Instructions to fill this document are available in the website.

Part A. PERSONAL INFORMATION

CV date 2021/11/29

First name	Oier		
Family name	Etxebeste Juárez		
Gender (*)	Male	Birth date (dd/mm/yyyy)	21/02/1978
Social Security, Passport, ID number	72469732K		
e-mail	oier.echeveste@ehu.eus	URL Web	
Open Researcher and Contributor ID (ORCID) (*)		0000-0002-9786-6091	

(*) Mandatory

A.1. Current position

Position	Assistant Professor		
Initial date	2019/01/01		
Institution	University of the Basque Country		
Department/Center	Applied Chemistry	Faculty of Chemistry	
Country	Spain	Teleph. number	0034 943018517
Key words	molecular biology, genetics, filamentous fungi, development		

A.2. Previous positions (research activity interruptions, art. 14.2.b))

Period	Position/Institution/Country/Interruption cause
2013/01/06-2018/02/28	Lecturer

A.3. Education

PhD, Licensed, Graduate	University/Country	Year
PhD	UPV/EHU	2008

Part B. CV SUMMARY (max. 5000 characters, including spaces)

Etxebeste began his scientific career in the field of Microbiology in 2004, at the Univ. of the Basque Country (UPV/EHU). PhD in 2008, he published his first manuscript as the first author that year, with the functional characterization of two proteins controlling the development of filamentous fungi. His scientific career continued with two research contracts at CIC-Nanogune (2008) and CIB-CSIC (2009), being also granted with an EMBO short-term fellowship grant for a stay at the lab of R. Fischer in Karlsruhe (Germany, 2009). In 2009-2010, Etxebeste published two manuscripts as the first author and two as the second, followed by two reviews. The second review closes the first stage of his scientific career, since it updates the molecular models for the control of fungal development and provides with a new perspective based on the participation of a limited number of proteins with specific functions at each developmental stage. These works were acknowledged with the covers of the journals Microbiology (12/2009) and Trends in Microbiology (12/2010).

During his stay at CIB-CSIC, Etxebeste was introduced in the field of cargo trafficking between the nucleus and the cytoplasm. In 2011 and 2013, he published two manuscripts (2nd and 1st author, respectively) describing the dynamics of nuclear importers and exporters in fungal vegetative cells. The second one established similarities in the cytoplasmic dynamics of the main nuclear importers of neurons and fungal cells. Etxebeste's postdoctoral stage continued at UPV/EHU from 2010 to 2013. In 2013, he obtained a Lecturer position at the Faculty of Chemistry. He is now Assistant Professor (Microbiology).

In 2015, he published a second manuscript as senior author, which would lead to the first thesis supervised by Etxebeste (2016). The quality and impact of this work were acknowledged with the cover of the journal *Genetics* (04/2015). In another manuscript published in 2015, in which Etxebeste was the corresponding author, similarities between the long-distance subcellular dynamics of specific transcriptional regulators of neurons and hyphae were established. This made the two research fields Etxebeste had been working on converge: the control of fungal development and the cytoplasmic dynamics of nuclear importers. This research article was highlighted (Micro-commentary) by the journal *Molecular Microbiology* and the results led to the second thesis supervised by Etxebeste (2017). In 2016, Etxebeste published a review in *FEMS Microbiology Reviews* in which he proposed that filamentous fungi and neurons open multiple possibilities for the study of specific cellular processes of the other cell-type. Etxebeste continues working in the field of genetic control of fungal development and also in the identification of antifungal/fungistatic activities by lactic acid bacteria.

He has participated as researcher in projects of the Spanish Plan Nacional call and has been PI in projects funded by UPV/EHU and the Basque Government. Etxebeste teaches two topics in the Bachelor's Degree in Chemistry (12 ECTS/course) and another one in the Master in Chemistry and Polymers (3 ECTS/course). He has supervised 6 Master theses and 15 end-of-degree projects since 2012. He has supervised a third PhD thesis, passed with Cum Laude distinction in February 2021.

Part C. RELEVANT MERITS (sorted by typology)

C.1. Publications (see instructions) (last 10 years)

1. Etxebeste, O. 2021. Transcription Factors in the Fungus *Aspergillus nidulans*: Markers of Genetic Innovation, Network Rewiring and Conflict between Genomics and Transcriptomics *Journal of Fungi*. 7-8, pp.1-30. <https://doi.org/10.3390/jof7080600>
2. Uranga, J.; Llamas-Arriba, MG.; Agirrezabala-Urkia, Z.; Dueñas-Chasco, MT.; Etxebeste, O.; Guerrero, P.; de la Caba, K. 2020. Compression Molded Soy Protein Films with Exopolysaccharides Produced by Cider Lactic Acid Bacteria. *Polymers*. 12-9, pp.2106. <https://doi.org/10.3390/polym12092106>
3. Markina-Iñarrairaegui, A.; Spielvogel, S.; Etxebeste, O.; Ugalde, UO.; Espeso, EA. 2020. Tolerance to alkaline ambient pH in *Aspergillus nidulans* depends on the activity of ENA proteins. *Scientific Reports*, 10 (14325). <https://doi.org/10.1038/s41598-020-71297-z>
4. Picazo, I.*; Etxebeste, O.*; Requena, E.; Garzia, A.; Espeso, EA. 2020. Defining the transcriptional responses of *Aspergillus nidulans* to cation/alkaline pH stress and the role of the transcription factor SlfA. *Microbial Genomics*. 6-8 (000415). <https://doi.org/10.1099/mgen.0.000415>. *Equal contribution.
5. Etxebeste, O.; Espeso, EA. 2020. *Aspergillus nidulans* in the post-genomic era: a top-model filamentous fungus for the study of signaling and homeostasis mechanisms *International microbiology*. 23: 5-22 <https://doi.org/10.1007/s10123-019-00064-6>
6. Etxebeste, O.; Otamendi, A.; Garzia, A.; Espeso, EA.; Cortese, MS. 2019. Rewiring of transcriptional networks as a major event leading to the diversity of asexual multicellularity in fungi. *Critical Reviews in Microbiology*. 45: 548-563. <https://doi.org/10.1080/1040841X.2019.1630359>
7. Otamendi, A.; Espeso, EA.; Etxebeste, O. 2019. Identification and Characterization of *Aspergillus nidulans* Mutants Impaired in Asexual Development under Phosphate Stress. *Cells*. 8-12. <https://doi.org/10.3390/cells8121520>
8. Otamendi, A.; Perez de Nanclares-Arregi, E.; Oiartzabal-Arango, E.; Cortese, MS.; Espeso, EA.; Etxebeste, O. 2019. Developmental regulators FlbE/D orchestrate the polarity site-to-nucleus dynamics of the fungal bZIP transcription factor FlbB. *Cellular and Molecular Life Sciences*. 76. 4369-4390. <https://doi.org/10.1007/s00018-019-03121-5>

9. Pandit, SS.; Lohmar, JM.; Ahmed, S.; Etxebeste, O.; Espeso, EA.; Calvo, AM. 2018. UrdA controls secondary metabolite production and the balance between asexual and sexual development in *Aspergillus nidulans*. Genes. 9-12, pp.570. <https://doi.org/10.3390/genes9120570>
10. Villarino, M.; Etxebeste, O.; Mendizabal, G.; Garzia, A.; Ugalde, UO.; Espeso, EA. 2017. Boron tolerance in *Aspergillus nidulans* is sustained by the SlrA pathway through the SLC-family transporters SbtA and SbtB. Genes. 8-7, pp.188. <https://doi.org/10.3390/genes8070188>
11. Etxebeste, O.; Espeso, EA. 2016. Neurons show the path: tip-to-nucleus communication in filamentous fungal development and pathogenesis. FEMS Microbiology Reviews. 40-5, pp.610-624. <https://doi.org/10.1093/femsre/fuw021>
12. Oiartzabal-Arango, E.; Perez de Nanclares-Arregi, E.; Espeso, EA.; Etxebeste, O. 2016. Apical control of Conidiation in *Aspergillus nidulans*. Current Genetics. 62-2, pp.371-377. <https://doi.org/10.1007/s00294-015-0556-0>
13. Oiartzabal-Arango, E.; Garzia, A.; Gorostidi, A.; Ugalde, UO.; Espeso, EA.; Etxebeste, O. 2015. Modifications in the gene expression profile caused by the absence of the *Aspergillus nidulans* transcription factor FlbB: Beyond asexual development. Genetics. 199-4, pp.1127-1142. <https://doi.org/10.1534/genetics.115.174342>
14. Herrero, E.; Perez de Nanclares-Arregi, E.; Cortese, MS.; Markina, A.; Oiartzabal-Arango, E.; Etxebeste, O.*; Ugalde, UO.; Espeso, EA. 2015. Tip-to-nucleus migration dynamics of the asexual development regulator FlbB in vegetative cells. Molecular Microbiology. 98-4, pp.607-624. <https://doi.org/10.1111/mmi.13156>. *Corresponding author.
15. Perez-de-Nanclares-Arregi, E.; Etxebeste, O. 2014. Photo-convertible tagging for localization and dynamic analyses of low-expression proteins in filamentous fungi. Fungal Genetics and Biology. 70, pp.33-41. <https://doi.org/10.1016/j.fgb.2014.06.006>
16. Etxebeste, O.; Villarino, M.; Markina-Iñarrairaegui, A.; Araújo-Bazán, L.; Espeso, E.A. 2013. Cytoplasmic dynamics of the general nuclear import machinery in apically growing syncytial cells. PLoS ONE. 8-12, e85076. <https://doi.org/10.1371/journal.pone.0085076>
17. Garzia, A.; Etxebeste, O.; Rodríguez-Romero, J.; Fischer, R.; Espeso, E.A.; Ugalde, UO. 2013. Transcriptional changes in the transition from vegetative cells to asexual development in the model fungus *Aspergillus nidulans*. Eukaryotic Cell. 12:311-321. <https://doi.org/10.1128/EC.00274-12>
18. Etxebeste, O.; Herrero-García, E.; Cortese, M.S.; Garzia, A.; Oiartzabal-Arango, E.; de los Ríos, V.; Ugalde, UO.; Espeso, E.A. 2012. GmcA is a putative glucose-methanol-choline oxidoreductase required for the induction of asexual development in *Aspergillus nidulans*. PLoS ONE. 7-7, e40292. <https://doi.org/10.1371/journal.pone.0040292>
19. Etxebeste, O.; Takeshita, N. 2015. Fluorescence-based methods for the study of protein localization, interaction and dynamics in filamentous fungi. Advanced Microscopy in Mycology Springer, International Publishing. pp.27-46. ISBN978-3-319-22436-7.

C.2. Congress (last 10 years)

1. Etxebeste, O. Transcriptional networks controlling asexual development in *Aspergillus nidulans*: An evolutionary perspective. Asperfest17. Aspergillus Genome Research Policy Committee (AGRPC). 2020. Rome, Italy. Oral communication.
2. Perez de Nanclares-Arregi, E.; Abad, IL.; Espeso, EA.; Ugalde, UO.; Etxebeste, O. Tip-to-nucleus communication and control of conidiation in vegetative hyphae of *Aspergillus nidulans*. ECFG13. French Society for Plant Pathology. 2016. Paris, France. Oral Communication.
3. Etxebeste, O. Hyphal tips control conidiation in *Aspergillus nidulans*. ECFG13. French Society for Plant Pathology. 2016. Paris, France. Plenary Lecture.

4. Herrero,E.; Perez de Nanclares-Arregi,E.; Cortese,MS.; Markina,A.; Etxebeste,O.; Espeso, EA.; Ugalde,UO.. Functional domains of the developmental regulator FlbB mediate the tip-to-nucleus communication in *Aspergillus nidulans* vegetative hyphae. 28th Fungal Genetics Conference. Genetics Society of America. 2015. Asilomar, CA, USA. Oral Communication.
5. Etxebeste, O.; Nowrousian, M. Chairman of the session “Multicellular development: Crosstalk between morphogenetic and developmental pathways in filamentous fungi”. 28th Fungal Genetics Conference. Genetics Society of America. 2015. Asilomar, CA, USA.
6. Oiartzabal-Arano, E.; Cortese, MS.; Espeso, EA.; Ugalde, UO.; Etxebeste, O.. The expression of a secondary metabolite cluster is strongly repressed by the asexual development regulator FlbB in *Aspergillus nidulans*. XI International Fungal Biology Conference. Karlsruhe Institute of Technology. 2013. Karlsruhe, Germany. Oral Communication.
7. Etxebeste,O.; Garzia,A.; Herrero,E.; Cortese,MS.; Espeso,EA.; Ugalde,UO. The bZIP-type transcription factor FlbB: A versatile regulator of *Aspergillus nidulans* asexual development. Asperfest 9, Satellite meeting of the ECFG11. 2012. Marburg, Germany. Oral Communication.

C.3. Research projects (last 10 years)

1. Microbiología y Química de los Alimentos. Mecanismos genético-moleculares de control del crecimiento y desarrollo microbiano: Bacterias y hongos como fuente de compuestos bioactivos. PI: Etxebeste, O.; Dueñas, MT. UPV/EHU. 01/01/2020-31/12/2022. 18.765 €.
2. Microbiología y Química de los Alimentos. Mecanismos genético-moleculares de control del crecimiento y desarrollo microbiano: Bacterias y hongos como fuente de compuestos bioactivos. PI: Etxebeste, O.; Dueñas, MT. Basque Government (EJ/GV). 01/01/2020-31/12/2022. 49.397 €.
3. MOSAIC: Enzimas hidrolizadoras de polisacáridos marinos: Aplicaciones biotecnológicas. PI: Etxebeste, O. EJ/GV. 28/02/2021- 31/12/2021. 27.868,45 €.
4. Interconexiones entre la homeostasis de cationes y el tráfico intracelular en *Aspergillus nidulans* (InTraffiCatHom). PI: Espeso, EA (CIB Margarita Salas-CSIC). Ministerio de Ciencia e Innovación. Universidades. 01/01/2019-31/12/2021. 110.000 €.
5. EXopolímeros Microbianos: diversidad, función y aplicaciones (XMILE). PI: Laura Alonso (AZTI-TECNALIA). EJ/GV. 07/2019-12/2020. 628.737 €.
6. Control Molecular y Celular del Crecimiento y Reproducción de Hongos. PI: Ugalde, UO. EJ/GV. 01/01/2013-31/12/2018. 181.999 €.
7. Mapa de interacción de los reguladores del desarrollo. PI: Etxebeste, O. UPV/EHU. 01/11/2015-31/10/2017. 2.752 €.
8. Control molecular del desarrollo en el hongo modelo *Aspergillus nidulans*. PI: Ugalde, UO. Ministerio de Ciencia e Innovación. 01/01/2011-31/12/2014. 110.000 €.

C.4. Contracts, technological or transfer merits