

Curriculum vitae

Surname: Dominguez Name: Angel

Passport N°: AA414380

Current position: Professor of Microbiology. Chairman Department of Microbiology and Genetics (April 2008-April 2012)

Address: Dep. of Microbiology and Genetics, Plaza de los Dres. De la Reina s/n, University of Salamanca, 37007 Salamanca, Spain.

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Fields of expertise: *Non-conventional yeast (mainly Candida, Yarrowia, Kluyveromyces), secretion (secretory pathway, heterologous protein secretion), Glycosylation, Chromatin, Genomics, Transcriptomic.*

Research Positions:

Associate Professor: Chemistry University of the Country Basque 1969-1973. Associate Professor. Microbiology. University of Salamanca 1977-1982 Associate Professor-Tenure- Microbiology, University of Salamanca 1982-2002. Full Professor (Chair) Microbiology. University of Salamanca 2002-Present.

Administrative positions.

Director Member of the Spanish National Accreditation Commission (from October 2007), Vicerrector (Vice-Chancellor) de Tecnologías de la Información y las Comunicaciones. University of Salamanca, 6 March 2006-14 March 2007. Member of the Govern Council of the University of Salamanca, 20 February 2004-23 March 2007. Titular of the UNESCO Chair "Dimorfismo en hongos. Implicaciones en patogenia", University of Salamanca; UNITWIN Programme in Ciencias Exactas y Experimentales, from June 1995. Adviser Vicerrectorado de Ordenación Académica, University of Salamanca 15 December 2004-5 March 2005. Adviser Vicerrectorado de Investigación University of Salamanca, 1 May 2003-31 July 2004. Vicedecano (Vice-Dean) Faculty of Biology. 13 May 1999-30 April 2003.

Expertise. The research team that is under my supervision have developed for more than 20 years a research line focused on "Fungal dimorphism" using *Candida albicans* and *Yarrowia lipolytica* as models. Our final goal will be to understand how the yeast-hypha switch contributes to virulence and also how the human host responds to the pathogen. The relevance our researches have allowed to obtain many grants from the Spanish Ministry of Education and Research and from the European Union. That fact permits a strong interaction with other research groups either from Europe, USA and Latin America.

Our research group have also experience in Genomic projects -participation in EUPON: European *Schizosaccharomyces pombe* genome sequencing project" (N° BIOT-CT-0159) and belong to the Spanish platforms for Genomic and Proteomic supported by Genoma España. I have also being one of the founders of the Spanish National DNA Bank. Our department of the University of Salamanca, Microbiology and Genetics,

share space, staff and equipment with the Institute of Microbial Biochemistry which belong to the Spanish Research Council, being myself an my work team members of both Institutions.

Participation and Direction of Research Projects

- Participation in 33 National and International Funded Projects as Principal Investigator (PI)).

A. MANAGEMENT & TRAINING ACTIVITIES AND OTHER MERITS

- Editorial Board Research in Microbiology (from 2003), FEMS Yeast Research (from 2006), Open Mycology (from 2007) and Open Microbiology (from 2008).
- Invited Editor special issue FEMS YEAST RESEARCH on *Kluyveromyces lactis*. 2006, Referee of scientific works for Archives of Microbiology, Biochimica Biophysica Acta, EMBO Journal, Eukaryotic Cell, FEMS Microbiology Letters, FEMS Yeast Research, International Microbiology, Journal of Antimicrobial Chemotherapy, Journal of Biotechnology, Microbiology, Molecular and General Genetics, Research in Microbiology, Yeast
- **Meetings as president:** Genetic Engineering of Industrial Microorganisms. Sectorial meeting of the Biotechnology Action Programme". Biotechnology Division of the European Union. Salamanca. 27-29 de September 1989. 7th Meeting on Biology of *Kluyveromyces*" Salamanca. 17-18 June 1994. British-Spanish "N+N" Yeast Molecular Biology Meeting. Salamanca 25-27 October 1990. Human Fungal Pathogens: Fungal Virulence Factors and Disease Giens, France, 3-8 September, 2003. VII Congreso Nacional de Micología Salamanca 10-13 July 2004. 17th Meeting on Biology of *Kluyveromyces* Salamanca 3-5 September 2004.
- **Referee Evaluation agencies:** Spanish agency for evaluation and scientific prospective. Comisión Interministerial de Ciencia y Tecnología. International Science Foundation. European Union. Key action 2 "Control of Infectious Diseases". V Program Marco Brussels (Belgium). FONCYT. National Agency for Scientific and Technologic Promotion Argentina. 2000- Present. Adviser Foundation Carolina 2000- Present. Referee for the Italian ministry of Universities for evaluation of visiting professors.
- 23 and 46 Invited Lectures to Specialized National Symposia and International Symposia on Fungal Biology
- Direction of 18 Ph.D. Thesis and 24 undergraduate Research Projects.
- Professor in the PhD program Microbiology and Molecular Genetics recognized as of excellence by the Spanish Ministry of Education and Research
- Member of the Spanish Societies for Microbiology, Biochemistry, Cell Biology and Biotechnology, American Society for Microbiology, American Genetic Society, and Society for Microbiology (UK).

B. RECENT PUBLICATIONS (FROM 70 PUBLISHED IN PEER REVIEWED JOURNALS)

WOOD, W., GWILLIAM, R., RAJANDREAM, M-A.,.....DOMINGUEZ, A.,BARRELL, B.G-, NURSE, P. The genome sequence of *Schizosaccharomyces pombe*. Nature 414: 871–880. 2002.

HERRERO, A.B., UCELLETTI, D., HIRSCHBERG, C.B., DOMINGUEZ, A., ABEIJON, C. "The Golgi GDPase of the fungal pathogen *Candida albicans* affects morphogenesis, glycosylation and cell wall properties. Eukaryotic Cell. 1: 420-431. 2002.

GARCÍA, S., PRADO, M., DEGANO, R., DOMÍNGUEZ A. "A copper-responsive transcription factor, *CRF1*, mediates copper and cadmium resistance in *Yarrowia lipolytica*." J. Biol. Chem. 277: 37359-37368. 2002.

- DOMÍNGUEZ, A. "Induction of the yeast-hypha transition in *Yarrowia lipolytica*". En: Non-conventional yeasts in Genetics, Biochemistry and Biotechnology (Wolf , K., Breunig, K., and Barth, G eds.). Springer-Verlag Berlin Karger Heilderberg. pp 339-342. 2003.
- DOMÍNGUEZ, A. "Flow cytometry of *Yarrowia lipolytica*". En: Non-conventional yeasts in Genetics, Biochemistry and Biotechnology (Wolf , K., Breunig, K., and Barth, G eds.). Springer-Verlag Berlin Karger Heilderberg. pp 365-368. 2003.
- DOMÍNGUEZ, A., PRADO, M., GARCÍA, S. "A copper-regulated *Yarrowia lipolytica* vector for the expression of heterologous proteins". En: Non-conventional yeasts in Genetics, Biochemistry and Biotechnology (Wolf , K., Breunig, K., and Barth, G eds.). Springer-Verlag Berlin Karger Heilderberg. pp 369-371. 2003.
- MORIN, M., GONZALEZ, F.J., CHOUPINA, A., BURGUILLO, F.J., DOMINGUEZ, A. "Lipase assay in *Yarrowia lipolytica*". En: Non-conventional yeasts in Genetics, Biochemistry and Biotechnology (Wolf , K., Breunig, K., and Barth, G eds.). Springer-Verlag Berlin Karger Heilderberg. pp 373-377. 2003.
- RUÍZ, T., DE LA ROSA, J.M., DOMÍNGUEZ, A., RODRÍGUEZ, L. "The *Pichia anomala* SEC61 gene complements the mutant phenotype of a *Saccharomyces cerevisiae* sec61 strain.". Curr. Microbiol.46: 340-344. 2003.
- TEBARTH, B., DOET, T., KRISHNAMURTHY, S., WEIDE, M., MONTEROLA, F., DOMINGUEZ, A., ERNST, J. "Adaptation of the Efg1p morphogenetic pathway in *Candida albicans* by negative autoregulation and PKA-dependent repression of the *EFG1* gene". J. Mol. Biol. 329: 949-962. 2003.
- BARTH, G., BECHKERICH, J.M., DOMINGUEZ, A., KERSCHER, S., OGRYDZIAK, D., TITORENKO, V., GAILLARDIN C. "Functional genetics of *Yarrowia lipolytica*". Topics in Current Genetics 2: 227-272. 2003.
- DOMINGUEZ, A. "Heterologous protein expression and secretion in noncoventional yeast". En: Microorganisms for health care, food and enzyme production (Barredo, J.L. ed.). Research Singpost. Pp 187-200. 2003.
- GONZALEZ-PRIETO, J.M., DOMÍNGUEZ, A., ROSAS-QUIJANO, R., CERVANTES-CHAVEZ, J.A. RUIZ-HERRERA, J. "Isolation and molecular analysis of *Umhda2* a gene encoding a histone deacetylase from *Ustilago maydis*". DNA sequences 15: 44-50. 2004.
- D'ENFERT, C., GOYARD, S., RODRIGUEZ-ARNAVEILHE, S., FRANGEUL, L., JONES, L., TEKAIA, F., BADER, O., ALBRECHT, A., CASTILLO, L., DOMINGUEA, A., ERNST, J., FRADIN C., GAILLARDIN, C., GARCIA-SANCHEZ, S., DE GROOT, P. DE., HUBE, B., KLIS, F.M., KRISHNAMURTHY, S., KUNZE, D., LOPEZ, M-C., MAVOR, A., MARTIN, N., MOSZER, I., ONÉSIME, D., PEREZ MARTIN, J., SENTANDREU, R., VALENTIN, E., BROWN, A.J.P. "CandidaDB": a genome database for *Candida albicans* pathogenomics" Nucleic Acid Research. 33: D353-D357. 2005

- VESES, V., CASANOVA, M., MURGUI, A., DOMINGUEZ, A., GOW, N., A., R., MARTINEZ, J., P.
 "Characterization of *ABG1*, a novel and essential gene of *Candida albicans* coding for a vacuolar protein involved in cytokinesis and hyphal branching. *Eukaryotic Cell*. 4: 1088-1101. 2005.
- REINOSO, C., SORAIS, F., NIÑO-VEGA, G.A., FERMIÑÁN, E., SAN-BLAS, G., DOMÍNGUEZ, A. Cloning and functional analysis of the orotidine-5'-phosphate decarboxylase gene (*PbrURA3*) of the pathogenic fungus *Paracoccidioides brasiliensis*. *Yeast*. 22: 739-743. 2005
- PEÑAS, M.M., AZPARREN, G., DOMINGUEZ, A., SOMMER, H., RAMIREZ, L., PISABARRO, G.
 Identification and functional characterization of *ctr1*, a *Pleorotus ostratus* gene coding for a copper transporter. *Molecular and General Genomics* 274: 402-409. 2005
- REINOSO, C., NIÑO-VEGA, G., SAN-BLAS, G., DOMINGUEZ, A. "Random sequencing of *Paracoccidioides brasiliensis* genes" *Medical Mycology*, 43: 681-689. 2005
- BANERJEE, D., MARTIN, N., NANDI, S., SHUKLA, S., DOMINGUEZ, A., MUKHOPADHYAY, G., PRASAD, R. "A genome-wide steroid response study of the major human fungal pathogen *Candida albicans*". *Mycopathologia*. 164: 1-17. 2007
- MORÍN, M., MONTEOLIVA, L., INSENSER, M., GIL, C., DOMÍNGUEZ, A. "Proteomic analysis reveals metabolic changes during yeast to hypha transition in *Yarrowia lipolytica*" . *Journal of Mass Spectrometry*, 42 1453-1462. 2007.
- RUIZ-PAVÓN, L. DOMÍNGUEZ, A. "Characterization of the *Yarrowia lipolytica* *YLSRP72* gene, a component of the yeast signal recognition particle". *International Microbiology* 10, 283-289. 2007
- RAMÍREZ-ZAVALA, B., DOMINGUEZ, A. "Evolution and phylogenetic relationships of APSES proteins from hemiascomycetes". *FEMS Yeast Research* 8, 511-519. 2008

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