CURRICULUM VITAE (CVA)

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

CV date	24/10/2023

Part A. PERSONAL INFORMATION

First name	BALBINA		
Family name	NOGALES FERNANDEZ		
Gender (*)	Woman	Birth date (dd/mm/yyyy)	22/12/1967
ID number	46642353D		
e-mail	bnogales@uib.es	URL Web	www.uib.es
Open Research and Contributor ID (ORCID)(*)	0000-0001-5769-9500		

(*) Mandatory

A.1. Current position

Position	Lecturer in Microbiology		
Initial date	30/12/2011		
Institution	University of the Balearic Islands		
Department/Center	Biology		
Country	Spain	Teleph. number	+34971172068
Key words	Biodegradation, hydrocarbon, plastic, marine microbial diversity		

A.2. Previous positions (research activity interruptions, art. 45.2.b))

Period	Position/Institution/Country/Interruption cause
1991-1994	FPU Fellowship/Autonomous Univ. Barcelona (UAB)/Spain
1995-1996	Assistant profesor (Ayudante)/UAB/Spain
1996-1999	Postdoc (fellowship 2 years plus contract 6 months)/GBF National Center for Biotechnology Research/Germany
1999-2001	Senior Research Scientist (Postdoc)/University of Essex/United Kingdom
2001-2003	Postdoc contracted cap.VI/UIB/Spain
2003-2008	Ramon y Cajal Researcher/UIB/Spain
2008-2011	Associate Professor contract (Prof. Contratado Doctor)/UIB/Spain

A.3. Education

PhD, Licensed, Graduate	University/Country	Year
Bsc Biological Sciences Honors	Autonomous University of Barcelona	1990
Master in Basic Microbiology	Autonomous University of Barcelona	1992
PhD Biological Sciences	Autonomous University of Barcelona	1996

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

My research career has been in the field of environmental microbiology, mainly studying microbiota of contaminated environments. Some scientific achievements of my research are: the most comprehensive description, at the time of its publication, of bacterial diversity in contaminated soils based on rRNA; the demonstration of the utility of mRNA analysis in the analysis of functional diversity in environmental samples before the introduction of metatranscriptomic techniques; the broadest study (spatially and temporarily) at the time of publication of comparative diversity of bacterial communities in coastal environments subject to anthropogenic impact, and the use of Geographic Information Systems (GIS) techniques

applied to their study; the demonstration of the relevance of the Roseobacter group in marine environments chronically contaminated with hydrocarbons and their response to pollution with moderate levels of hydrocarbons; the use of genomic and proteomic techniques to understand the biology and diversity of the Roseobacter group; or the demonstration of their hydrocarbon catabolic capacities towards aromatic hydrocarbons and monoaromatic compounds. Most recently I am working in plastic degradation by marine microbes and the definition of microbial bioindicators of environmental status in coastal habitats. During my career I have been principal investigator (or Co-PI) of several research projects (national and international, such as an ongoing Interreg SUDOE project with academic, administration and private sector partners), trained PhD students and participated regularly in scientific conferences (including invited lectures and session convener). I have experience in editorial activities (co-editor of a book series) and I am member of the Editorial Board of journals Environmental Microbiology/Environmental Microbiology Reports and FEMS Microbiology Ecology. I am reviewer and participated in evaluation panels for the national research agency (AEI) and ERA-Net calls on biotechnology. As lecturer I haves duties in Bsc degree (Biology) and master degree (Advanced Microbiology) at UIB and has mentored master and degree students final projects as well as undergraduate fellows (introduction to research). Since 2018 I am coordinator of the UIB PhD program on Environmental and Biomedical Microbiology and is tutor of an Erasmus+ Agreement with the University of Babes-Bolyai University of Cluj-Napoca (2020-2023, Romania) for postgraduate students. I participate in activities for dissemination of research to the general public. I have experience in collaborations with the private sector (agreements/contracts under Article 83) and I am co-author of a patent (not licensed). Between 2011-2015 I was Director of the Office for Suport to Research at UIB. As such, I was head of the Office for Technology Transfer of Research (OTRI) of the UIB, dealing directly with personnel of the FUEIB (entrusting management duties) on patent application, licensing and royalties, technology valorization, etc. During this period I attended annual meetings of the Network of university OTRIs (Red OTRI-CRUE), meetings of the sectoral committee for R+D of the CRUE (including units for R+D management and OTRIs), and sectoral committees for R+D of the G9 universities network. I have also attended workshops/courses on technology transfer and intellectual property.

Part C. RELEVANT MERITS *(sorted by typology)*

C.1. Most important publications in books and journals with "peer review" and in conferences *(see instructions).*

- Timmis K, Cavicchioli R, Garcia JL, et al. (2019) The urgent need for microbiology literacy in society. Environmental Microbiology, 21: 1513-1528. Position B Nogales (4/32).
- Nogales B, Bosch R (2018). Microbial communities in hydrocarbon-polluted harbors and marinas. In: McGenity T. (eds) Microbial communities utilizing hydrocarbons and lipids: members, metagenomics and ecophysiology. Handbook of Hydrocarbon and Lipid Microbiology. Springer, Cham.
- Mulet M, Sánchez D, Rodríguez AC, Nogales B, Bosch B, Busquets B, Gomila M, Lalucat J, García-Valdés E. (2018). *Pseudomonas gallaeciensis* sp. nov., isolated from crude-oil contaminated intertidal sand samples after the Prestige oil spill Systematic and Applied Microbiology, 41:340-347.
- Pomar F; Gómez-Pujol L; Fornós JJ; Del Valle L; Nogales B. (2017) Limestone biopitting in coastal settings: a spatial, morphometric, SEM and molecular microbiology sequencing study in the Mallorca rocky coast (Balearic Islands, Western Mediterranean). Geomorphology 276:104-115.
- Mas-Lladó, M., Piña-Villalonga, J.M., Brunet-Galmés, I., Nogales, B., Bosch, R. (2015). Draft genome sequences of *Thalassobacter* strains 1CONIMAR09 and 16PALIMAR09, two

members of the Roseobacter lineage isolated from coastal areas of the Mediterranean Sea around Mallorca Island. Genome Announcement 3: e00041-15.
- Alejandro-Marín, C.M., Bosch, R., Nogales, B. (2014). Comparative genomics of the protocatechuate branch of the β-ketoadipate pathway in the Roseobacter lineage. Marine Genomics. 17:25-33.
- Christie-Oleza, J.A., Piña-Villalonga, J.M., Guerin, P., Miotello, G., Bosch, R., Nogales, B., Armengaud. (2013). Shotgun nanoLC-MS/MS proteogenomics to document MALDI-TOF biomarkers for screening new members of the *Ruegeria* genus. Environmental Microbiology. 15: 133-147.
- Suarez-Suarez, L.Y., Brunet-Galmes, I., Piña-Villalonga, J.M., Christie-Oleza, J.A., Peña, A., Bennasar, A., Armengaud, J., Nogales, B., Bosch, R. (2012). Draft genome sequence of Citreicella aestuarii strain 357, a member of the Roseobacter clade isolated without xenobiotic pressure from a petroleum-polluted beach. Journal of Bacteriology. 194:5464- 5465.
- Christie-Oleza, J.A.; Fernandez, B.; Nogales, B.; Bosch, R.; Armengaud, J. (2012). Proteomic insights into the lifestyle of an environmentally relevant marine bacterium. ISME J. 6:124-135.
- Christie-Oleza, J.A.; Piña-Villalonga, J.M.; Bosch, R.; Nogales, B.; Armengaud, J. (2012).Comparative proteogenomics of twelve *Roseobacter* exoproteomes reveals different adaptive strategies among these marine bacteria. Molecular & Cellular Proteomics. 11: M111.013110.
- Book series edition (2016-2017). McGenity, T.J., Timmis, K.N., Nogales, B (eds.). Hydrocarbon and lipid microbiology protocols. Springer Protocol Series. ISBN (17 volumes). 978-3-662-49140-9; 978-3-662-53115-0; 978-3-662-53111-2; 978-3-662-53118-1; 978-3-662-50428-4; 978-3-662-50435-2; 978-3-662-53108-2; 978-3-662-52793-1; 978-3-662-45179-3; 978-3-662-50450-5; 978-3-662-52778-8; 978-3-662-49131-7; 978-3-662-49134-8; 978-3-662-49310-6; 978-3-662-50432-1; 978-3-662-49127-0; 978-3-662-49137-9.

C.2. Congress.

- 2022. Nogales, B. Pollutant degradation in the environment: who is doing the job? Ecotoxicomic, Montpellier, Francia. Conferencia inaugural.
- 2022- Aguiló-Ferretjans, M.M., Obrador-Viel, T., Bosch, R., Nogales, B., Christie-Oleza, J.A. Biodegrading potential within the plastisphere. 18th International Symposium on Microbial Ecology, Lausanne, Suiza. Póster.
- 2021. Nogales, B., Alejandro-Marín, C., Christie-Oleza, J.A., Bosch, R. Proteomics unveils the cellular response of marine roseobacters to hydrocarbons. World Microbe Forum ASM&FEMS (online). Online poster.
- 2021. Coll-García, G., Bustos-Caparrós, E., Busquets, A., Christie-Oleza, J.A., Nogales, B., Bosch, R. Alkane degradation by the Roseobacter lineage: the model of *Salipiger aestuarii* 357. ASLO 2021 Aquatic Sciences Meeting (online). Oral communication.
- 2020. Nogales, B. Functional diversity of chronically hydrocarbon-polluted communities. Colloquium on Systems and Synthetic Biology “Mapping, understanding and engineering the microbiome”, CNB-CSCI, Madrid. Invited conference.
- 2019. Nogales B, Busquets, A., Alejandro-Marín, C., Mas-Lladó, M. Bosch, R. Marine microbial communities facing hydrocarbons: victims, survivors and opportunists. 2nd International Meeting on New Strategies in Bioremediation Processes (BioREmid2019), Porto, Portugal. Invited conference.

- 2019. Busquets, A., Nogales, B., Bosch, R. (2019). Characterization of Roseobacter clade isolates with high capacities for aromatic compound degradation. 8th Congress of European Microbiologists (FEMS 2019). Poster.

C.3. Projects or research lines in which you have participated.

- Mecanismos iniciales de colonización y biodegradación de plásticos recalcitrantes. PID2022-139042NB-I00 PI. Joseph A. Christie-Oleza; Co-PI. Rafael Bosch. 197.500,00€. 2023-2025.
- Plásticos vivos que se autodegradan al final de su vida útil. TED2021-129739B-I00. Spanish Ministry for Science, Innovation and Education. PI. Joseph A. Christie-Oleza; Co-PI. Rafael Bosch. 179.400,00€. 2022-2024.
- Poliésteres autodegradables en ecosistemas marinos. PDC2022-133849-I00. Spanish Ministry for Science, Innovation and Education. PI. Joseph A. Christie-Oleza; Co-PI. Balbina Nogales. 148.350,00€. 2022-2024
- New approaches for improving the biodegradation of plastics by marine microbes (polyDEmar). PID2019-109509RB-100. Spanish Ministry for Science, Innovation and Education. PI. Joseph A. Christie-Oleza; Co-PI. Balbina Nogales. 196 020€. 2020-2023.
- Microbial and trophic bioindicators of the ecological state of the ecosystem in the coastal zones of SUDOE (BIOMIC). SOE4/P1/F0993. Interreg-SUDOE. Coordinator. Cristiana Cravo-Laureau, Université de Pau et Pays de l'Adour, France. PI-UIB: Balbina Nogales. 132600€. 2020-2023.
- Physiological and proteogenomic characterization of effcient hydrocarbon degrades of the Roseobacter lineage. CTM2015-70180-R. MINECO. PI: Rafael Bosch, Co-IP B.Nogales. UIB. 2016-2019. 157300€.
- Emergent hydrocarbon degraders in marine environments: proteogenomics and metagenomics of the bacterial group Roseobacter. CTM 2011-24886. MINECOPI: Balbina Nogales Fernández, UIB. 2012-2014. 142780€.

C.4. Participation in technology/knowledge transfer activities and exploitation of results.

Contracts/agreements with private companies:

- Program for university support to SMEs (Accelera Program) with Garau Ingenieros SLU. CICERO: development of a system for the improvement of water quality in harbors. Fundació Universitat-Empresa de les Illes Balears MP. 31.868,60 €. 2023.
- - Program for university support to SMEs (Accelera Program) with MenorcaLab, Soc. Coop. de iniciativa social. Fundación Universitat Empresa de les Illes Balears MP. 7425,12€. 2022.
- Contract Art. 83 LOU. Garau Ingenieros SL. Scientific assessment in project CICERO. Ports4.0, Ports of Spain Tradetech Fund, call 2021. 1250€. Ongoing collaboration.
- Agreement (núm 2127). Development of a microbiological tool for Acuicultura Balear SAU. 2011. 16.000€.

Management:

- 2011-2015. Director of the Office for Support to Research (OSR) of the UIB. As such, I was head of the Office for Technology Transfer of Research (OTRI) of the UIB, dealing directly with personnel of the FUEIB (entrusting management duties) on patent application, licensing and royalties, technology valorization, etc.
- 2018-2023. Director of the PhD program Environmental and Biomedical Microbiology, UIB.

Dissemination:

- "Setmana de la Ciència I la Tecnologia a la UIB2012" (FCT-12-3423). FECYT project. PI: Balbina Nogales.