

## Curriculum vitae Vera Valadas

### Personal Details

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### Summary

Coming from a solid background and able to face any challenges, I'm a responsible, highly motivated and experienced scientist in **molecular biology and biological sciences**, with 12 years working on research focused on agricultural, forest and crop cultures related to organisms that affect beneficially or negatively the relevant ecosystems. During my research I worked with **nematodes, insects, bacteria, plants and microalgae**, developing a set of skills ranging from various methodologies related to **DNA and RNA work, genomics, probe design, microbiology, metabolite extraction, cell line maintenance, nematode, fungi and bacteria cultivation, flow cytometry, microdissection, RT-PCR, time management and organization**. I attended several courses, trainings, seminars that improved all my achieved skills. I made several internships in international laboratories to improve my technical capacities and collaborated with other international researchers from Germany, Ireland and Check Republic. Moved to United Kingdom from 2016-2020 to improve my English and personal capacity building. During 3.5 years working for **Pharmaceutical industry** where I developed a new set of capacities working in Grade A environment compounding medicines following SOP, GMP, Quality Events and CAPA. From August 2019 to February 2020 working as a **Molecular Biology Scientist** at Novogene Ltd, a world-renowned sequencing company. In March 2020, I returned to Portugal to integrate a new challenge at Global Health and Tropical Medicine research Centre, at the Institute for Hygiene and Tropical Medicine, working as a Post- Doc Researcher in Vector Borne Diseases Group.

Personally, I consider myself a very dynamic person, capable of undertaking and carrying out all kind of tasks. I'm a highly motivated individual, who is very enthusiastic working with all kinds of different people and I know I'm well capable to work as a team. During my research activities, I have developed solid skills in molecular biology, microbiology and pharmaceutical compounding, that allow me to work in different subjects and in research laboratories and industries.

### Education

\*PhD in Biological Sciences (Évora University, Portugal; 2005-2012) - **PhD Thesis Title:** "Genetic Diversity of entomopathogenic nematodes (Nematoda: Steinernematidae and Heterorhabditidae) and the pinewood nematode *Bursaphelenchus xylophilus* (Nematoda: Aphelenchoididae) from Continental Portugal", **Approved with Distinction**.

Graduate in Biology (Évora University, Portugal; 1998-2004) - **Dissertation Title:** "Identification by ITS-RFLP of species from *Bursaphelenchus* genus", **Approved with Distinction**.

## **Career Profile**

***My academic career is strongly connected with research focused in agricultural, forest and crop cultures related to organisms that affect beneficially or negatively these ecosystems.***

**2020 – Currently** – From March 2020 until May 2022, I will be working as a Postdoc Researcher in Global Health and Tropical Medicine, from Nova University, Lisbon, Portugal. I integrated the group of Vector Borne diseases in the Project ARBOMONITOR, to determine the spreading routes and dissemination of *Aedes albopictus* in Europe, using different molecular approaches- namely, microsatellites, resistant genes to insecticides applied to mosquitoes together with genetic studies for the bacteria *Wolbachia*, a symbiont from the insect. During my stay in the group, I was also involved in the training of national and international master and doctorate students. I was the responsible for laboratory management as well as acquisition of reagents, material and equipment.

**2019-2020** – From August 2019 to February 2020 I worked as a Molecular Biology Scientist – Team Leader for RNA Library Preparation, in a Sequencing Company, based in Cambridge, UK (Novogene Ltd, UK), where I was responsible for RNA Library Preparation Team, involved in RNA, DNA (WGS and Metagenomic) Libraries preparation. Management of RNA Library Laboratory. Trained for Internal Auditing to ISSO/IEC 17025:2017.

**2018-2019** – From June 2018 to August 2019 I worked as Senior Assistant Technical Officer in a Oncological Clinic, London, UK (Leaders in Oncology Care, HCA Healthcare, UK), specialized in Oncological treatments. I assisting in the daily running of a safe and effective pharmacy aseptic service including the daily preparation of chemotherapy doses to clinic patients.

**2016-2018** – From July 2016 to May 2018 I worked as Technical Assistant at a pharmaceutical company in London, UK (ITH Pharma) that is specialized in the provision of aseptic compounding services for all therapy areas: Chemotherapy, CIVAS and Parental Nutrition.

**2013-2015** – I worked at the EU Marie Curie Chair (Évora University, PT), focused on plants and on the development of molecular markers for specific phenotype and for animal feed certification using a candidate gene approach, under the project FEED-CODE; Project No. FP7-SME-2012-315464). Simultaneously I have initiated studies with microalgae and their associated microorganisms. In that frame, I was awarded with a STSM (by ECOST-STSM-FA1103-110715-058540) on “Maintenance of microalgae of commercial interest and its associated microorganisms” to GICON GmbH [DE]. I had also the opportunity to work with other researchers in projects related to mycorrhizas and to help to develop a new approach to applying a novel screening tool (calorespirometry) for efficient identification of genetic variability towards yield stability in wheat related to temperature responsiveness and/or drought.

In 2015, I participated in **COHITEC, a highly competitive training programme in technology commercialization**, with the project “**Predict4Growth**”, that present a new tool to select the most productive plants in agricultural environments. It offered me entrepreneurial training that allowed the development of skills towards a market approach of scientific research (<https://www.actbycotec.com/pt/cohitec.127.html>; <https://www.youtube.com/watch?v=jljX09A7CRI>).

**2011–2012** – time dedicated to thesis writing, papers preparation and publication and enhancing professional network towards finding a position in science. It leads to the current post-doc position.

**Before 2013 (between 2004-2012)** - I have worked 8 years in diversity and impact of nematodes, both as pests and biological control agents (pinewood nematode *Bursaphelenchus xylophilus* and entomopathogenic nematode) (includes my PhD at University of Évora [PT]).

*During my entire academic career, I attended several courses, trainings, seminars that improved all my achieved skills. I also present my research work in several national and international seminars and workshop. I made several internships in international laboratories to improve my skills and collaborate in research with other international researchers. In the last 10 years I worked in a Portuguese University where I had roles as an individual researcher and in a group as well. Simultaneously, I was teacher assistant giving some classes to graduated students (degree and master) and trained national and international students and researchers.*

**Specialization:** Molecular Biology, Teaching, Scientific Investigation, Environmental Sciences, Health Sciences, Conservation Biology and Natural Resources Management areas – Teaching, Researcher, Graduate Technician, Entrepreneur, Manager.

### **Key Skills and Technical aptitude**

- ❖ Proficient in PCR
- ❖ Proficient in DNA and RNA isolation
- ❖ Probe and Molecular Markers design
- ❖ Proficient in RFLP, RAPD, ISSR, Microsatellites for species identification and genetic studies
- ❖ Proficient in RNA and DNA Library Preparation
- ❖ Proficient in Microsatellites preparation and analysis
- ❖ Standard knowledge in qPCR, RT-PCR, DNA and RNA quality evaluation
- ❖ ELISA assay
- ❖ Trained in Flow cytometry, Microdissection and Calorespirometry techniques
- ❖ Experienced in in vitro cell line maintenance, in vivo cultures of monocots and dicots plant species
- ❖ Experienced in Microbiological techniques and isolation of microorganisms
- ❖ Experienced in microalgae cultivation for bioreactors and extraction of metabolites
- ❖ Cultivation of nematodes, bacteria, bacteria and microalgae and insects rearing
- ❖ Experienced in Microscopic techniques
- ❖ Experienced in soil and wood samples collection and processing
- ❖ Trained on Vaccination and blood collection of goats, for further studies and tests with Meningitis vaccine
- ❖ Experience in online servers and databases.
- ❖ Bioinformatics: BLAST, BioEdit, Mega, Chromas, Lasergene, MOSAIQ, MEDITECH, BD-CATO, GeneMarker, DNASP, Network, Arlequin, Bottleneck, Convert
- ❖ Depth experience on Lab management as well as new staff and student training and routine supervision
- ❖ Project planning, experimental design, data analysis and preparation of scientific reports as well as paper writing - Published researcher
- ❖ Aseptic compounding of pharmaceutical products in Grade A following SOP procedures and GMP

- ❖ Effective interpersonal skills and communication skills on both written and verbal
- ❖ ENGLISH: Read, write and conversation: fluent; FRENCH: Read, write and conversation: elementary; SPANISH: Read, write and conversation: elementary; PORTUGUESE: Read, write and conversation: native

### **Interests and Activities**

I've got a good communication and interacting skills, as in Portugal I dedicated some of my spare time doing communitarian work in hospitals, helping patients with cancer and Alzheimer's disease, doing basic things like feeding them, personal hygiene, reading for them, and talking. Basically, keeping company and comforting them in those critical moments of their lives.

I like sports and I practice jogging as frequently as possible. I love music, cinema and travel.

I'm interest in scientific subjects and in everything that concerns environment.

**Peer reviewed Journals**

\* Pichler V. \*, Caputo B. \*, **Valadas V.** \*, Micocci M., Horvath C., Virgillito C., Aim-Cost Network Members, Arbomonitor Project Members, Schaffner F., Pinto J., della Torre A. Geographic distribution of the V1016G Knockdown Resistance Mutation in *Aedes albopictus*: a warning bell for Europe. (submitted on 18th March to *Parasite & Vectors*: Ref: Submission ID 8444b4b1-ce43-4ed2-abcb-42f6533d584f).

\*Campos, M.D., **Valadas, V.**, Campos, C., Morello, L., Braglia, L., Breviario, D., Cardoso, H.G. (2018). A TaqMan real-time PCR method based on alternative oxidase genes for detection of plant species in animal feed samples. *PLoS One*. (<https://doi.org/10.1371/journal.pone.0190668>).

\*Braglia, L., Morello, L., Gavazzi, F., Gianì, S., Mastromauro, F., Cardoso, H.G., **Valadas, V.**, Campos, M-D. (2017). Interlaboratory comparison of methods determining the botanical composition of animal feed. *The Journal of AOAC International*. (doi: 17-0150.R1).

\*Velada, I., Cardoso, H.G., Ragonezi, C., Nogales, A., Ferreira, A., **Valadas, V.** and Arnholdt-Schmitt, B. (2016). Alternative oxidase gene family in *Hypericum perforatum* L.: characterization and expression at the post-germinative phase. *Frontier in Plant Science*. (doi: 10.3389/fpls.2016.01043).

\*Nogales, A., Nobre, T., Cardoso, H.G., Muñoz-Sanhueza, L., **Valadas, V.**, Campos, M.D. and Arnholdt-Schmitt, B. (2015). Allelic variation on DcAOX1 gene in carrot (*Daucus carota* L.): an interesting simple sequence repeat in a highly variable intron. *Plant Gene*. (doi:10.1016/j.plgene.2015.11.001).

\*Nogales<sup>§</sup>, A., Nobre<sup>§</sup>T., **Valadas, V.**, Ragonezi, C., Döring, M, Polidoros, A. and Arnholdt-Schmitt, B. (2015). Can functional hologenomics aid tackling current challenges in plant breeding? *Briefings on Functional Genomics*. (doi:10.1093/bfgp/elv030).<sup>§</sup> indicate equal author contributions.

\*Arnholdt-Schmitt, B., **Valadas, V.** and Doering, M. (2014). Functional marker development is challenged by the ubiquity of endophytes – a practical perspective. *Briefings on Functional Genomics* 10.1093/bfgp/elu049.

\***Valadas, V.**, Laranjo, M., Mota, M. and Oliveira, S. (2014). A survey of entomopathogenic nematode species in continental Portugal. *Journal of Helminthology* 88(3): 327-41. (doi: 10.1017/S0022149X13000217).

\***Valadas, V.**, Laranjo, M., Mota, M. and Oliveira, S. (2013). Molecular characterization of Portuguese populations of *Bursaphelenchus xylophilus* using cytochrome b and cellulase genes. *Journal of Helminthology* 87(4): 457-66. (doi: 10.1017/S0022149X12000673).

\***Valadas, V.**, Laranjo, M., Barbosa, P., Espada, M., Mota, M. and Oliveira, S. (2012). The pinewood nematode, *Bursaphelenchu xylophilus*, in Portugal: possible introductions and spread routes of a serious biological invasion revealed by molecular methods. *Nematology* 14(8): 899-911. (doi:10.1163/156854112X632673).

\***Valadas, V.**, Mráček, Z., Oliveira, S. and Mota, M. (2011). Three species of entomopathogenic

nematodes of the family Steinernematidae (Nematoda: Rhabditida) new to Continental Portugal. *Nematologia Mediterranea* 39(2): 169-178. (<http://dspace.uevora.pt/rdpc/handle/10174/3679>).

\***Valadas, V.**, Vieira, P., Oliveira, S. and Mota, M. (2009). First report of the genus *Heterorhabditis* (Nematoda: Heterorhabditidae) from continental Portugal. *Journal of Helminthology* 46 (1): 45–48. (doi:10.2478/s11687-009-0009-8).

\*Penas, A.C., Bravo, M.A., **Valadas, V.** and Mota, M. (2008). Detailed morphobiometric studies of *Bursaphelenchus xylophilus* and characterisation of other *Bursaphelenchus* species (Nematoda: Parasitaphelenchidae) associated with *Pinus pinaster* in Portugal. *Journal of Nematode Morphology and Systematic* 10(2): 137-163. (<http://dspace.uevora.pt/rdpc/handle/10174/6703>).

\*Akbulut, S., Vieira, P., Ryss, A., **Valadas, V.**, Keten, A. and Mota, M. (2008). *Bursaphelenchus* Fuchs, 1937 (Nematoda: Parasitaphelenchidae) species associated with *Pinus* species in northern Turkey. *Helminthologia* 45 (2). (<http://journals.tubitak.gov.tr/agriculture/issues/tar-08-32-4/tar-32-4-5-0708-8.pdf>).

\***Valadas, V.**, Boyle, S., Vieira, P., Kakouli-Duarte, T. and Mota, M. (2007). First report of an entomopathogenic nematode from Continental Portugal. *Helminthologia*, 44(4): 226-229. (doi 10.2478/s11687-007-0037-1).

\*Penas, A., Metge, K., Mota, M. and **Valadas, V.** (2006). *Bursaphelenchus antoniae* sp. n. (Nematoda: Parasitaphelenchidae) associated with *Hylobius* sp. from *Pinus pinaster* in Portugal. *Nematology* 8(5): 659-669. (<http://dspace.uevora.pt/rdpc/handle/10174/6712>).

\*Akbulut, S., Vieira, P., Ryss, A., Yuksel, B., Keten, A., Mota, M. and **Valadas, V.** (2006). Preliminary survey of the pinewood nematode in Turkey. *EPPO Bulletin* 36: 538-542. (<http://dspace.uevora.pt/rdpc/handle/10174/6683>).

## Thesis

\***Valadas, V.** (2012). Genetic diversity of entomopathogenic nematodes (Nematoda: Steinernematidae and Heterorhabditidae) and the nematode *Bursaphelenchus xylophilus* (Nematoda: Aphelenchoididae) from continental Portugal. PhD Thesis, University of Évora, 204p.

\***Valadas, V.** (2004). “Caracterização Molecular por PCR ITS-RFLP de espécies do género *Bursaphelenchus*.” Graduation Thesis, University of Évora, 98p.

\***Valadas, V.** (2003). “Prospecção de espécies de *Bursaphelenchus* em exemplares de *Pinus* sp. no Algarve.” LUSOTUR- University of Évora, PRODEP III Program.

## Book Chapters

\***Valadas V.**, Espada M., Nobre T., Mota M. and Arnholdt-Schmitt B. (2015). AOX goes risky - a way to application: AOX in parasitic nematodes – a matter of lifestyle? Sub-chapter in Arnholdt-Schmitt B.

*From AOX diversity to functional marker development*. Gupta K.J., Mur L.A.J. and Neelwarne B. (eds.) Alternative respiratory pathways in higher plants. John Wiley & Sons, Inc. Oxford pp: ISBN: 978-1-118-79046-5.

\*Cardoso H.G., Nogales A., Frederico A.M., Svensson J.T., Santos Macedo E., **Valadas V.** and Arnholdt-Schmitt B. (2015). Exploring natural AOX gene diversity. Sub-chapter in Arnholdt-Schmitt B. *From AOX diversity to functional marker development*. Gupta K.J., Mur L.A.J. and Neelwarne B. (eds.) Alternative respiratory pathways in higher plants. John Wiley & Sons, Inc. Oxford pp: 241-254. ISBN: 978-1-118-79046-5.

### **Conference Abstracts and Proceedings**

\*Vieira, P., Akbulut, S., Mota, M. and **Valadas, V.** (2003). First report of *Bursaphelenchus* sp. from Turkey, associated with *Pinus nigra*. *Journal of Nematology* 35(3): 369.

### **Communications at meetings**

#### **Oral Communications**

\*Pichler V., **Valadas V.**, Horvath C., Micocci M., AIM-COST network members, ARBOMONITOR Project contributors, Schaffner F., Caputo B., Pinto J., della Torre A. (2021). Invited as Meeting Participant to the 3rd AIM-COST Annual Conference of Aedes Invasive Mosquitoes, COST Action CA17108 - Session 2: Surveillance for precision control and for control assessment with the presentation "Novel PCR-based genotyping approach allows to map the spread of pyrethroid resistance in *Aedes albopictus* across Europe", 2-3rd September 2021, Istanbul, Turkey.

\***Valadas, V.** Ragonezi, C. and Arnholdt-Schmitt, B.(2014).Invited as Meeting Participant to COST Action: Joint Meeting of COST FA1206 (WP3) and FA1103 Exo- and Endogenous Signalling, 14-18th September, Kraków, Poland (available <http://katarzynaturnau.wix.com/streamkrakow>) "Endophytes in biotechnology and agriculture" with the presentation "Studying *Chlorella vulgaris* and its associated consortium".

\***Valadas, V.**, Barbosa, P., Espada, M., Oliveira, S., and Mota, M. (2011). The pinewood nematode, *Bursaphelenchus xylophilus*, in Portugal: possible introductions and spread routes of a serious biological invasion revealed by molecular methods. XLIII ONTA Annual Meeting, 4-9th September, Coimbra, Portugal. (available in <http://hdl.handle.net/10174/4656>).

\***Valadas, V.**, Boyle, S., Vieira, P., Kakouli-Duarte, T., Figo, F. and Mota, M. (2007). First report of an entomopathogenic nematode from continental Portugal. V Congresso da Sociedade Portuguesa de Fitopatologia, 22-23th November, Coimbra, Portugal.

#### **Panel Communication (Poster)**

\***Valadas, V.**, Pichler, V., Horvath, C., Akiner, M., Castro, A., Capinha, C., Caputo, B., della Torre A., Schaffner, F., Pinto, J.. Invited as Meeting Participant to 5<sup>th</sup> international workshop on *Aedes Albopictus*. Molecular survey of the F1534C knockdown mutation in *Aedes albopictus* from Europe,

11-13<sup>rd</sup> May 2022, Montpellier, France.

\*Horváth, C., **Valadas, V.**, Pinto, P. and Mihalca, A. D. (2022). Biology Days in Cluj-Napoca”, 22nd edition, (organised by Babeş-Bolyai University ) Cluj-Napoca (Romania), "Molecular phylogeny and fragment analysis of kdr mutations V1016G/ F1534C of the invasive *Aedes albopictus* from Romania. 8th- 9th of April 2021.

\***Valadas, V.**, Vieira, P., Oliveira, S. and Mota, M. (2009). Entomopathogenic nematodes from Continental Portugal. "**Forty-eighth Annual Meeting of the Society of Nematologists and the Twelfth Biennial Meeting of the Soil Ecology Society**" July 12-15th, 2009 The Davis Center, University of Vermont Burlington, Vermont, USA.

\*Vieira, P., Ryss, A., Akbulut, S., **Valadas, V.**, Keten, A., Yuksel, B. and Mota, M. (2006). Survey of *Bursaphelenchus* species (Nematoda: Parasitaphelenchidae) in north regions of Turkey. *XL Meeting of the Portuguese Society of Electron Microscopy and Cell Biology*. 8-9th December, Lisboa, Portugal.

\*Vieira, P., Ryss, A., Akbulut, S., **Valadas, V.**, Keten, A., Yuksel, B. and Mota, M. (2006). Survey of *Bursaphelenchus* species (Nematoda: Parasitaphelenchidae) in north regions of Turkey. *XXVIII International Symposium*, 5-9th June, Blagoevgrad, Bulgaria.

\*Ryss, A., Zhao, B., Kulinich, O., Vieira, P. and **Valadas, V.** (2005). New interesting records of the species of the plant parasitic genus *Bursaphelenchus* in China and the use of morphological and molecular approaches for the species identification. *1st Symposium of the Scandinavian-Baltic Society for Parasitology*. 26-29th May, Vilnius, Lituania.

\*Mota, M., Vieira, P., **Valadas, V.**, Figo, F., Espada, M. and Santos, A.R. (2005). *Bursaphelenchus xylophilus*: uma séria ameaça aos ecossistemas florestais em Portugal e na Europa. *II Congresso Nacional da Ordem dos Biólogos*. 3-5th March. Porto, Portugal.

\*Vieira, P., **Valadas, V.**, Akbulut, S., Mota, M. and Ryss, A. (2004). First report of *Bursaphelenchus mucronatus* from Turkey, associated with *Pinus nigra*. *XXVII ESN International Symposium*. 14-18th June, Rome, Italy.

\***Valadas, V.**, Correia, P., Penas, A. C., Mota, M. and Tenreiro, R. (2004). Identificação e diferenciação molecular de espécies próximas de nemátodes por PCR-RFLP's . *IV Congresso da Sociedade Portuguesa de Fitopatologia*.

\*Vieira, P., Akbulut, S., Mota, M and **Valadas, V.** (2003). First report of *Bursaphelenchus* sp. from Turkey, associated with *Pinus nigra*. *42th Annual Meeting of the Society of Nematologists*. 12-17<sup>th</sup> July, Cornell University, Ithaca, New York, USA.

## **Funding History**

### ***Grants and Fellowships***

\***March 2020- May 2022**: Postdoc Researcher by the project “ARBOMONITOR - Dengue, Chikungunya and Zika vector in Europe: cost effective optimization of surveillance and control”, in Instituto de Higiene e Medicina Tropical, from Universidade Nova de Lisboa, Portugal; Project No. PTDC/BIA-OUT/29477/2017.



\*May 2013 – November 2015: Postdoc fellowship by the project “FEED-CODE - Animal feed certification instrument and procedure to guarantee the quality of meat and dairy products through automatic, simple and rapid DNA barcode method based on tubulin-based polymorphism (TBP)”, in EU Marie Curie Chair from University of Évora, Portugal, ICAAM; Project No. FP7-SME-2012-315464.

\*July - November 2010: Fellowship of technical researcher by the project "National Program to Pinewood Nematode Control" (“Programa de acção Nacional para controlo do Nemátode da Madeira do Pinheiro- AFN”) in University of Évora, Portugal.

\*2005-2009: PhD-scholarship from Portuguese Foundation for Science and Technology (FCT), under the subject “Genetic Diversity of entomopathogenic nematodes (Nematoda: Steinernematidae and Heterorhabditidae) and the pinewood nematode *Bursaphelenchus xylophilus* (Nematoda: Aphelenchoididae) from Continental Portugal” at University of Évora, Portugal; Project No. SFRH/BD/22086/2005.

### **Awards**

\*July – August 2015: Short Term Scientific Mission grant from the European COST Action: COST-STSM-FA1103-Endophytes in Biotechnology and Agriculture, in Hochschule Anhalt, Anhalt University of Applied Science, Department of Applied Biosciences and Process Engineering, Institute of Algae Biotechnology, Kothen, under the supervision of Dr. Martin Ecke (Fellowship No COST-STSM-ECOST-STSM-FA1103-110715-058540).

### **Innovation/Commercialization Activity (e.g., relevant industry collaborations, invention disclosures, patents, spin-out)**

Between March and July 2015, I participated on the COHiTEC program, a free but highly competitive training program in technology commercialization aimed at supporting the valuation of the knowledge produced at Portuguese R&D institutions. It offered me a entrepreneurial ship training that allowed the development of skills towards a market approach of scientific research.

During the training I developed several skills and competences that allow conceiving and present an innovative research idea to market investors towards financing of a spin-off creation. It was a very exciting and enriching experience. Under the development of our project, a provisional patent has been applied (Register number: 20151000033192. Deposit date 21/04/2015. Number of deposit PCT: 20151000033192. Deposit date PCT: 21/04/2015. Grant date).

### **Courses**

**2015** – From March until July 2015 – participation in COHITEC, Portuguese stakeholder industrial association for innovation, as member of the **Predict4Growth** team - <https://www.actbycotec.com/pt/cohitec.127.html> and <https://www.youtube.com/watch?v=jljX09A7CRI>  
Video Final Presentation – Pavilhão do Conhecimento: <https://www.youtube.com/watch?v=GNm0JcrnjyE>

**2014** – Course on “Experimental Design and Statistical Data Analysis: applications in R-software for endophyte-related data”, in University of Évora, Portugal, between 20<sup>th</sup>–24<sup>th</sup> October 2014, organized

by “EU COST FA1103 Training School 2014.

**2014** – Course on “Bioinformatics, microbial genomes and mobile elements: New perspectives and applications”, in Aveiro University between 21<sup>th</sup> - 25<sup>th</sup> July 2014, under the coordination of Dr. Denise Carvalho-Silva, Dr. Tom Hancocks and Dr. Sandra Orchard from EMBL-EBI, UK; Dr. Cláudia Oliveira, Dr. Ana Sofia Duarte and Dr. António Correia from DeBio & CESAM, Aveiro University, Portugal; Dr. Fernando Tavares and Dr. Pedro Albuquerque from CIBIO, Porto University, Portugal; Dr. Pedro Alberto and Dr. Pedro Almeida from Laboratory of Advanced Computing, Coimbra University, Portugal; Dr. Sónia Martins from Coimbra Genomics, Biocant, Portugal; Dr. Joel P. Arrais from DEI, Coimbra University, Portugal; Dr. Alexandra Moura from Institute Pasteur, France.

**2013** – Short Course on “Molecular Biotechnology”, in University of Évora between 29<sup>th</sup> April – 3<sup>rd</sup> May 2013, under the coordination of Professor of Molecular Biotechnology at the University of Waterloo, Canada, Prof. Bernard Glick. The course was prepared by ICAAM (“Instituto de Ciências Agrárias e Ambientais Mediterrâneas”).

**2007** – “Molecular Phylogeny: Principles, techniques, and problem solving” course, in Aveiro University between 10-14 September 2007, under the coordination of Dr. Gonzalo Giribet and Dr. Ward Wheeler.

**2004** – Initial teacher training of trainer’s course, in Montemor, with the final classification of Very Good.

**2003** – Molecular Biology course: “Molecular Biological Techniques and Practical Applications in Plant Sciences”, under the coordination of Dr. Birgit Arnholdt-Schmitt from Biocenter Klein Flottbek, Botanical Institute – University of Hamburg. The course was prepared by ICAAM (“Instituto de Ciências Agrárias e Ambientais Mediterrâneas”).

### **Previous Activities**

**2010** – Biology Department, University of Évora, March 2010 and July 2010, collaboration in the discipline of Phytonematology, from the “European Master of Science in Nematology (EUMAINE)”, teaching the practical classes in Molecular Biology applied to nematodes; Coordinator of the developed project by some students, in the subject: “Entomopathogenic nematodes in continental Portugal;

**2009** - Biology Department, University of Évora, March 2009 and July 2009, collaboration in the discipline of Phytonematology, from the “European Master of Science in Nematology (EUMAINE)”, teaching the practical classes in Molecular Biology applied to nematodes.

**2008-2009** - Biology Department, University of Évora, semester and odd, teaching the classes “Molecular Biology Applied to Nematology”, discipline from Biology Course.

**2007-2008** - Biology Department, University of Évora, semester and odd, teaching the classes “Molecular Biology Applied to Nematology”, discipline from Biology Course.

**2006-2007** - Biology Department, University of Évora, semester and odd, teaching the classes

“Molecular Biology Applied to Nematology”, discipline from Biology Course.

**2004-2005** - Biology Department, University of Évora, January 2004 and April 2005, collaboration in the practical classes of Phytonematology, in the “Plant Diseases and Pest Biology” Master.

**2004** - Biology Department, University of Évora, from 01 March 2004 to 4 June 2004, teacher hired in practical classes of Biotechnology, to Biology Course and Biochemistry Course.

### **Other Activities - Training**

**2010** – In charge, in collaboration with Professor Manuel Mota, for the course “Molecular Characterization of Phytoparasitic Nematodes in Portugal”, ministered to two colleagues from “Direcção de Serviços de Agricultura e Pecuária” from Ponta Delgada, Azores between 12 to 21 May 2010.

**2006-2009** – Participation in dissemination activities of Biology Course from University of Évora, to secondary school students, under the supervising of Professor Manuel Mota.

**2004-2003** - Participation in dissemination activities of Biology Course from University of Évora, to secondary school students, under the supervising of Professor Carlos Sinogas.

**2004** – Support for training in Molecular Biology of nematodes, under the European Program TWINNING, to colleagues from Check Republic.

### **Experience in supervising - Professional School students:**

Miss. Jessica Canário (2014). Graduation work for clinical analysis degree, on molecular laboratory techniques with the work subject “Isolamento, clonagem e caracterização de um gene da família da Oxidase Alternativa (AOX) na espécie *Cucurbita maxima*”

### **Projects Participation**

#### **International**

**2020** March – until May 2022 - Postdoc Researcher by the project “ARBOMONITOR - Dengue, Chikungunya and Zika vector in Europe: cost effective optimization of surveillance and control”, in Instituto de Higiene e Medicina Tropical, from Universidade Nova de Lisboa, Portugal; Project No. PTDC/BIA-OUT/29477/2017.

**2013** May – until November 2015 - Post-PhD grant by the project “FEED-CODE - Animal feed certification instrument and procedure to guarantee the quality of meat and dairy products through automatic, simple and rapid DNA barcode method based on tubulin-based polymorphism (TBP)” - FP7- SME-2012-315464, in EU Marie Curie Chair from University of Évora in ICAAM center under the scientific coordination of Professor Birgit Arnholdt-Schmitt.

**2013-2014** - Participation as a team member - Project investigation entitled: Characterization of alternative oxidase (AOX) polymorphisms in *Hypericum perforatum L.* – A novel approach to advance breeding on yield stability in a medicinal plant. Fundo para a Ciência e Tecnologia (FCT). Ref: PTDC/AGR-GPL/099263/2008. Évora - Portugal.

**2010** – Research scholarship under the project “National Action Program to Control Pinewood Nematode – AFN” Desktop 1: Detection, identification and quantification of PWN, National Project, under the main supervision of Professora Doutora Isabel Maria de Oliveira Abrantes, “Instituto do Mar - Centro Interdisciplinar de Coimbra (IMAR-CIC)” Zoology Department, Coimbra University.

**2007–2009** - “Pinewood nematode (PWN) *Bursaphelenchus xylophilus* “, Desktop 1: Detection, identification and quantification of PWN, National Project, under the main supervision of Professora Doutora Isabel Maria de Oliveira Abrantes, “Instituto do Mar - Centro Interdisciplinar de Coimbra (IMAR-CIC)” Zoology Department, Coimbra University

**2004-2006** - “Development of generic ‘on site’ molecular diagnostics for EU quarantine pests and pathogens” (PORTCHECK), 6th FW- EU.

**2004** – Tests with Meningitis vaccine to evaluate the “*Inter-changeability of anti-meningococcal vaccines for human use*” under the coordination of Professor Doutor Carlos Sinogas.

**2003-2004** – Work limit developed in collaboration with European Project “*Development of Improved Pest Risk analysis techniques for quarantine pests, using pinewood nematode, Bursaphelenchus xylophilus, in Portugal as a model system*” – Project PHRAME (QLKS–CT–2002–00672).

### **National**

2014 - Proposta para reforço da capacidade científica das equipas do ICAAM – Call 2014 – Grupo de Investigação: EU MARIE CURIE CHAIR – Elvas – Group of Madeira – “Applying a novel screening tool (calorespirometry) for efficient identification of genetic variability towards yield stability in wheat and other genetic resources related to temperature responsiveness and/or drought”; Coordinator: Amaia Nogales (Pos dos Researcher); Other team member: Rita Costa, Miguel Carvalho, Mahnaz Khadem, Vera Valadas, Carla Lopes, Tânia Nobre, Hélia Cardoso, Catarina Campos, Birgit Arnholdt-Schmitt.

### **Travelling (Stay in Laboratories/Collaborations)**

**2015** – Germany - Short Term Scientific Mission grant from the European COST Action: COST-STSM-FA1103-Endophytes in Biotechnology and Agriculture, in Hochschule Anhalt, Anhalt University of Applied Science, Department of Applied Biosciences and Process Engineering, Institute of Algae Biotechnology, Kothen, under the supervision of Dr. Martin Ecke (Fellowship No COST-STSM-ECOST-STSM-FA1103-110715-058540) (July – August).

**2010** - Azores, "Azores University; Campus of Ponta Delgada", under the supervision of Dr Nelson José de Oliveira Simões (November).

**2009**- Germany: "Institute for Resource Conservation and Plant Science in the Faculty of Agriculture at the University of Bonn", in Bonn, under the supervision of Professor Doutor Richard Sikora and Professor Doutor Alexander Schouten (26 August-12 September).

**2008** – Check Republic: "Biologické centrum AV CR Entomologický ústav" in Branisovská, České Budejovice, under the supervision of Dr. Zdenek Mráček (19-31 October).

**2006** - Ireland: "Institute of Technology Carlow" em Carlow, Irlanda, under the supervision of Dr

Thomae Kakouli-Duarte, (27 November - 7 December).

**2005** - Azores: "Azores University; Campus of Ponta Delgada", under the supervision of Dr Nelson José de Oliveira Simões (November).

### Languages

Portuguese – Read, write and conversation: native

English – Read, write and conversation: proficiency

French – Read, write and conversation: elementary

Spanish - Read, write and conversation: elementary