PERSONAL INFORMATION

Célia Ventura

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ORCID: 0000-0002-0637-2222

Date of birth 25/02/1971 | Nationality Portuguese

WORK EXPERIENCE

2015 - present

Researcher at the Genetic Toxicology Group

National Institute of Health Doutor Ricardo Jorge, Department of Human Genetics

Plans and executes *in vitro* and *in vivo* studies on the genetic and epigenetic effects caused by environmental or occupational exposure to toxic agents, as well as the mechanisms that lead to the onset and development of disease. These studies aim to better assess genetics as a health determinant (interaction between genes, environmental stress and disease causality), allowing for better prediction and prevention of diseases, as well as more effective therapeutic interventions.

2019 - present

Member of the Ethics Committee

National School of Public Health, NOVA University of Lisbon

2012 – 2023

Member of the Bioethics Committee

Portuguese Society of Human Genetics

1993 - 2015

Senior Technician of Clinical Analysis and Public Health

National Institute of Health Doutor Ricardo Jorge, Department of Human Genetics

EDUCATION

2015 - 2019

PhD in Public Health

National School of Public Health of Nova University of Lisbon

2007 - 2009

Master in Bioethics (*summa cum laudae*)

Bioethics Institute of the Portuguese Catholic University

1993-1995/ 2001

Bsc in Clinical Analysis and Public Health

Higher School of Health Technologies of Lisbon

JOB-RELATED SKILLS

Managerial Skills / Working groups

2023 – present	Member of the *Rede Lusófona de Biobancos* in representation of INSA
2021 - present	Member of the technical management and safety committee of INSA repository in representation of INSA
2019 – 2021	Member of the Managing Board of the Portuguese Society of Human Genetics
2022 - 2024	Coordinator of the module “Toxicology and Health” of the Master in Human Biology and Environment of the Faculty of Sciences of the University of Lisbon

Lab Quality Management System	2013 – 2018	Substitute for the Quality Manager of the Department of Human Genetics
	2016-2018	Quality Manager of the Lab Support Unit of the Department of Human Genetics
	2008 – 2022	Internal Quality Auditor of INSA for ISO 17025 (certification) and ISO 15189 (accreditation)

PARTICIPATION IN RESEARCH PROJECTS

National funding

- Identification of the molecular basis of deficiencies in coagulation factors of the factor IX family: factor VII, IX, X, protein C and Z, co-funded by JNICT (PECS/C/SAU/1588/92)
- INGESTnano project funded by the Foundation for Science and Technology (FCT) (PTDC/SAU-PUB/29481/2017)
- ToxApp4NanoCELFI project funded by FCT (PTDC/SAU-PUB/32587/2017)

European funding

- HBM4EU project (H2020 grant 733032)
- Partnership for the assessment of risks from chemicals (PARC), European Union's "Horizon Europe" framework program for 2021-2027
- Development of a Roadmap for Action for the Project: Advancing Aggregate Exposure to Chemicals in EU (ExpoAdvance), contract OC/EFSA/ED/2022/04

AWARDS

Young Investigator Award with the poster “Molecular pathology of factor XI deficiency on the Portuguese population”, XVIth Congress of the International Society on Thrombosis and Haemostasis, Florence, 1997.

PUBLICATIONS AND COMMUNICATIONS

Main Publications

- Ventura C. et al. (2000). Molecular genetic analysis of factor XI deficiency: Identification of five novel gene alterations and the origin of type II mutation in Portuguese families. Thrombosis and Haemostasis, 84: 833-40
- David D et al. (2003). Female haemophiliac homozygous for the factor VIII intron 22 inversion mutation, with transcriptional inactivation of one of the factor VIII alleles. Haemophilia, 9: 125-130
- David D. et al. (2006). Spectrum of mutations and molecular pathogenesis of hemophilia A in 181 portuguese patients. Haematologica, 91(6): 840-843
- Ventura C. (2011). “Bioethics in biobanks for genetic reserach”. In Ana Sofia Carvalho e Walter Osswald (Ed.) Ensaios de Bioética 2., Porto: Bioethics Institute of the Portuguese Catholic University. ISBN 978-989-97313-0-1
- Ventura C. (2011). Biobanks and genetic research: ethical recommendations. Lisboa: Instituto Nacional de Saúde Doutor Ricardo Jorge. ISBN 978-972-8643-65-2
- David D. et al. (2011). Genetic defects in Portuguese families with inherited protein C deficiency. Thrombosis Research, 128: 299-302
- Ventura C. (2017). Ethical and legal issues of personalized medicine. Boletim Epidemiológico Observações. maio-agosto; 6(19):44-47
- Menezes J. et al. (2017). PROS1 novel splice-site variant decreases protein S expression in patients from two families with thrombotic disease. Clinical Case Reports 5(12):2062-2065
- Ventura C. et al. (2018). Conventional and novel "omics"-based approaches to the study of carbon nanotubes pulmonary toxicity. Environmental Molecular Mutagenesis 59(4):334-362
- Ventura C. et al. (2018). Evaluating the genotoxicity of cellulose nanofibrils in a co-culture of human lung epithelial cells and monocyte-derived macrophages. Toxicology Letters 291:173-183.
- Ventura C. et al. (2020). Cytotoxicity and genotoxicity of MWCNT-7 and crocidolite: assessment in alveolar epithelial cells versus their coculture with monocyte-derived macrophages. Nanotoxicology 14(4):479-503.
- Ventura C. et al. (2020). On the toxicity of cellulose nanocrystals and nanofibrils in animal and cellular models. Cellulose 27(10):5509-5544 https://doi.org/10.1007/s10570-020-03176-9
- Ventura C. et al. (2020). Functional effects of differentially expressed microRNAs in A549 cells exposed to MWCNT-7 or crocidolite. Toxicological Letters 1;328:7-18. doi: 10.1016/j.toxlet.2020.04.002.
- Ventura C. et al. (2021). Biomarkers of effect as determined in human biomonitoring studies on hexavalent chromium and cadmium in the period 2008-2020. Environmental research, 197, 110998.
- Pinto F. et al. (2022). Analysis of the In Vitro Toxicity of Nanocelluloses in Human Lung Cells as Compared to Multi-Walled Carbon Nanotubes. Nanomaterials (Basel, Switzerland),12(9):1432.
- Tavares A. et al. (2022). HBM4EU Chromates Study-Genotoxicity and Oxidative Stress Biomarkers in Workers Exposed to Hexavalent Chromium. Toxics, 10(8), 483.
- Vital N. et al. (2022). Toxicological Assessment of Cellulose Nanomaterials: Oral Exposure. Nanomaterials (Basel), 12(19), 3375.
- Louro H. et al. (2022) The Use of Human Biomonitoring to Assess Occupational Exposure to PAHs in Europe: A Comprehensive Review. Toxics, 10, 480.
- Rolo D. et al. (2022). Adverse Outcome Pathways Associated with the Ingestion of Titanium Dioxide Nanoparticles—A Systematic Review. Nanomaterials 12, 3275
- Ventura C. et al. (2022). Genotoxicity of Three Micro/Nanocelluloses with Different Physicochemical

Characteristics in MG-63 and V79 Cells. J Xenobiot. 2022 Apr 21;12(2):91-108.

- Ventura C. et al. (2022). New "Omics" Approaches as Tools to Explore Mechanistic Nanotoxicology. In: Adv Exp Med Biol. 2022;1357:179-194.
- Valente A. et al. (2023) The Effect of Nanomaterials on DNA Methylation: A Review. Nanomaterials (Basel). 13(12):1880.
- Ventura C. et al. (2023) Assessing the Genotoxicity of Cellulose Nanomaterials in a Co-Culture of Human Lung Epithelial Cells and Monocyte-Derived Macrophages. Bioengineering (Basel). 2023 Aug 21;10(8):986.
- Lamon L. et al. (2024) Roadmap for action for advancing aggregate exposure to chemicals in the EU. EFSA supporting publication 2024: 21(7):EN-8971. 364 pp.
- Guerreiro B. et al. (2024) Investigating the genotoxic effects of the Alternaria toxin tenuazonic acid in human cells. Toxicology Letters, 399S2, September 2024
- Ventura C. et al. (2024) Assessment of genome-wide methylation changes caused by TiO2 nanoparticles on human intestinal caco-2 cells. Toxicology Letters, 399S2, September 2024

Posters

- More than 30 posters on conferences and congresses

Conferences and courses

- More than 70 attendances

Oral presentations

- More than 30 oral communications.