



UNIVERSIDADE
DE ÉVORA

**III International Meeting of the
Portuguese Society of Genetics**

27th > 28th June 2022

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27th and 28th June 2022

Auditorium of the Colégio Espírito Santo, University of Évora

Book of abstracts

(Draft Version)

Title: III International Meeting of the Portuguese Society of Genetics

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Published:

UE – Universidade de Évora

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ISBN (to be added)

Dear participants,

It is our great pleasure to welcome you to the **III International Meeting of the Portuguese Society of Genetics**, held in Évora on the 27th and 28th of June 2022. We have put together a two-day program, organised in five different sessions and focused on encouraging scientific discussion.

As in the previous editions, this Meeting is dedicated those who work or are interested in the different areas of Genetics. The program will reflect the diversity of subjects within Genetics, with special focus on Animal Genetics, Plant Genetics, Microbial Genetics, Biomedical Genetics and Evolutionary Genetics. Invited speakers with outstanding careers will set the tone to a Meeting that we hope will be a great opportunity to present and discuss the latest advances in Genetics.

The III International Meeting of the Portuguese Society of Genetics (IMPSG) will take place at an Auditorium located at the most emblematic building of the University of Évora, the Colégio Espírito Santo.

The organizing committee, on behalf of the University of Évora and of the Portuguese Society of Genetics, welcomes researchers and also students working in the field of Genetics to this two-day Meeting, in which we will get back to the interactions of an in-person meeting, sharing experiences and knowledge, and enjoying the scientific atmosphere of Évora.

Finally, we wish to thank the scientific committee for their key role in many important aspects of this meeting. We hope that all the participants enjoy the IMPSG and appreciate the beautiful city of Évora, an UNESCO World Heritage. In this book of abstracts you will find all the detailed information regarding the meeting, including the scientific program and a list of all participants.

Welcome to Évora!

The Organizing Committee,

Ana Alexandre

Hélia Cardoso

Fátima Duarte

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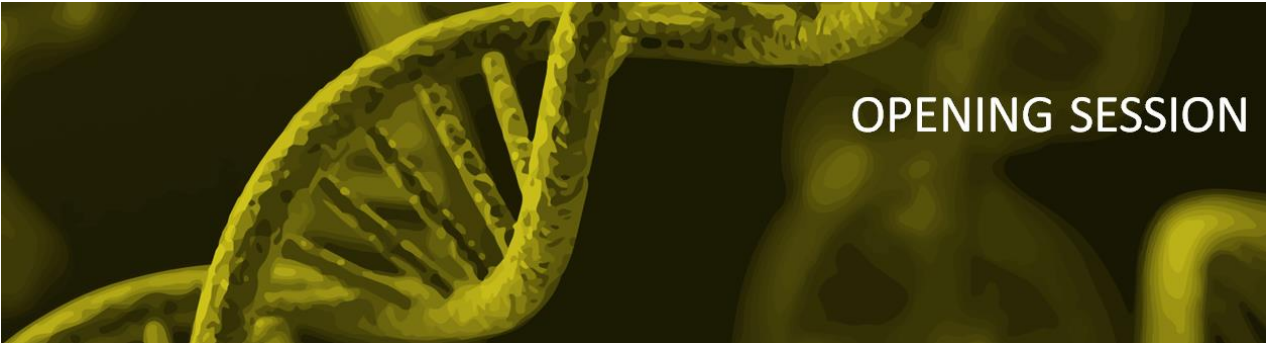


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Are Western Iberian Roe deer populations hotspots of genetic diversity?

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Given its geographic isolation, and after the last glaciation, the Iberian Peninsula, become a sanctuary of plants and animal's diversification, being considered a hotspot of genetic diversity specially for mammal species. The roe deer (*Capreolus capreolus* - CCR), an herbivore ungulate, has a widespread geographical distribution which extends from the Iberian Peninsula to the north of Scandinavia, being found as well in Turkey, Israel, and Jordan. *C. capreolus* populations have been subject to a significant number of fluctuations, especially due to anthropogenic activities, which led to a decrease in size and distribution. These alterations combined with translocations of animals of the same species, can lead to meaningful consequences on the genetic structure, diversity, and fitness of populations.

In this study we aimed to outline the genetic diversity and structure of Western Iberian roe deer populations using mitochondrial DNA (mtDNA) molecular analysis. Previous studies in Western Iberian roe deer populations using this genetic marker, showed a high degree of genetic diversity, with shared gene pools with other European and Iberian regions, but also with unique genetic elements. Here we present preliminary results from the analysis of 65 roe deer samples from different Western Iberian areas (wild and fenced populations). From 60 samples it was possible to amplify the mtDNA fragment of interest, with a length of 436 bp. The sequencing analysis of 30 of these 60 samples revealed the presence of 13 haplotypes already identified in other populations of roe deer.

These studies are of great importance to obtain information about the phylogeography, which can be used to design appropriate strategies for the conservation and management of populations, but as well to maintain the genetic heritage of roe deer in Europe.

This work was supported by the projects Project 029947IC&T 02/SAICT/2017-SAICT funded by the Portuguese Foundation for Science and Technology (FCT). This work was supported by the projects UIDB/CVT/00772/2020 and LA/P/0059/2020 funded by the Portuguese Foundation for Science and Technology (FCT). This work was supported by the projects UIDB/04033/2020 funded by the Portuguese Foundation for Science and Technology (FCT).