

Formação académica

1998, Licenciatura em Engenharia Zootécnica, Universidade de Trás-os-Montes e Alto Douro, Portugal

2002, Mestrado em Produção Animal, Universidade de Trás-os-Montes e Alto Douro, Portugal

2006, Doutoramento em Genética e Melhoramento Animal, especialização em Estatística, Iowa State University, Estados Unidos da América

Percurso profissional

07/2006 – 02/2008: Postdoc, Department of Animal Science and Center for Animal Functional Genomics, Michigan State University, Estados Unidos da América

03/2008 – 08/2010: Bolseiro Marie Curie, Animal Breeding and Genomics Centre, Wageningen University, Holanda

09/2010 – 08/2012: Cientista, Department of Bioinformatics, Keygene NV, Holanda

07/2013 – 12/2014: Investigador FCT, Instituto Nacional de Investigação Agrária e Veterinária (INIAV), Portugal

01/2015 – 07/2021: Investigador Principal em Genómica Animal e Bioinformática, Centro de Biotecnologia Agrária e Agro-Alimentar do Alentejo (CEBAL), Portugal

08/2021 - Presente: CEO, Cientista Principal, Star Genomics, Portugal

Publicações selecionadas

GASPAR, D., GINJA, C., CAROLINO, N., LEÃO, C., MONTEIRO, H., TÁBUAS, L., BRANCO, S., PADRE, L., CAETANO, P., ROMÃO, R., MATOS, C., **RAMOS, A.M.**, BETTENCOURT, E., USIÉ, A. (2024) Genome-wide association study identifies genetic variants underlying footrot in Portuguese Merino sheep. *BMC Genomics*, 25: 100.

USIÉ, A., SERRA, O., BARROS, P., BARBOSA, P., LEÃO, C., CAPOTE, T., ALMEIDA, T., RODRIGUES, L., CARRASQUINHO, I., GUIMARÃES, J., MENDONÇA, D., NÓBREGA, F., EGAS, C., CHAVES, I., ABREU, I., SAIBO, N., MARUM, L., VARELA, M.C., MATOS, J., SIMÕES, F., MIGUEL, C., OLIVEIRA, M.M., RICARDO, C., GONÇALVES, S., **RAMOS, A.M.** (2023) An improved version of the Quercus suber reference genome including the first organelle genomes. *Tree Genetics and Genomes*, 19 (54).

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GASPAR, D., USIÉ, A., LEÃO, C., GUIMARÃES, S., PIRES, A.E., MATOS, C., **RAMOS, A.M.**, GINJA, C. (2023) Genome-wide assessment of the population structure and genetic diversity of four Portuguese native sheep breeds. *Frontiers in Genetics*, 14, 1109490.

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- GOMES-DOS-SANTOS, A., LOPES-LIMA, M., MACHADO, A., **RAMOS, A.M.**, USIÉ, A., BOLOTOV, I., VIKHREV, I., BRETON, S., CASTRO, F., FONSECA, R., GEIST, J., ÖSTERLING, M., PRIÉ, V., TEIXEIRA, A., GAN, H., SIMAKOV, O., FROUFE, E. (2021) The Crown Pearl: a draft genome assembly of the European freshwater mussel *Margaritifera margaritifera* (Linnaeus, 1758). *DNA Research*, 28 (2).
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- HU, Z.L., **RAMOS, A.M.**, HUMPHRAY, S.J., ROGERS, J., REECY, J.M., ROTHSCHILD, M.F., (2011). Use of genome sequence information for meat quality trait QTL mining for causal genes and mutations on pig chromosome 17. *Frontiers in Genetics* 2, 43.
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- RAMOS, A.M.**, MATOS, C.A.P., RUSSO-ALMEIDA, P.A., BETTENCOURT, C.M.V., MATOS, J., MARTINS, A., PINHEIRO, C., RANGEL-FIGUEIREDO, T., (2009). Candidate genes for milk production traits in Portuguese dairy sheep. *Small Ruminant Research* 82, 117-121

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Apresentações selecionadas

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- GASPAR, D., USIÉ, A., LEÃO, C., MATOS, C., **RAMOS, A.M.**, GINJA, C. (2022) Whole-genome analysis of diversity and population structure in Portuguese native sheep breeds. 73rd Annual Meeting of the European Federation of Animal Science. Porto, Portugal, 4-9 September.
- USIÉ, A., LEÃO, C., MENDES, B., GASPAR, D., HERNANDEZ, F., GUDIÑO, J., IZQUIERDO, M., **RAMOS, A.M.** (2021) Identification of high quality SNPs for traceability purposes in the pig using whole genome resequencing analyses. XXII Congresso Nacional de Zootecnia, 29-30 October.
- RAMOS, A.M.** (2020) Genomic tools and their application in the traceability of Mediterranean traditional products. RealMed Webinar "Mediterranean Food Challenges, Tradition and Innovation", 4th December.
- B. MENDES, M. ANTUNES, A. USIÉ, C. LEÃO, **A. M. RAMOS** (2020) Characterization of the stone pine (*Pinus pinea*) needle transcriptome: de novo assembly and SNP identification. 9th Bioinformatics Open Days, Braga, Portugal, 19-21 February
- M. ANTUNES, B. MENDES, H. MAGALHÃES, A. USIÉ, T. SAMPAIO, F. SIMÕES, H. ALMEIDA, **AM RAMOS** (2020) Identification of genetic markers for traits of economic importance in cork oak using high throughput SNP genotyping. 9th Bioinformatics Open Days, Braga, Portugal, 19-21 February
- A. USIÉ, H. MAGALHÃES, C. LEÃO, D. GASPAR, B. MEIRELES, P. BARBOSA, L. CACHUCHO, A. ALBUQUERQUE, R. CHARNECA, J. MARTINS, E. JERONIMO, **AM RAMOS** (2020). Whole Genome Analysis of Alentejano Pigs with Contrasting Meat Quality Phenotypes. Plant & Animal Genome XXVIII Conference. San Diego, USA, 11-15 January

- RAMOS, A.M.** (2019). Genome analysis of local agricultural and forest genetic resources, 1st Bioinformatic Talking Sessions @ UTAD, Vila Real, Portugal, 20 November
- RAMOS, A.M.** (2019). Cork oak genomics in the post-genome sequence era. 8th Bioinformatics Open Days, Braga, Portugal, 20-22 February
- BARROS, P.M., BARBOSA, P., USIÉ, A., OLIVEIRA, M.M., PESQUITA, C., **RAMOS, A.M.** (2017). Alternative splicing detection across different tissues in cork oak. 6th Bioinformatics Open Days, Braga, Portugal, 22-24 February
- VARELA, M.C., GENOSUBER CONSORTIUM (2014). Controlled pollination in cork oak (*Quercus suber* L.) to support its genome sequencing project 23rd International Congress on Sexual Plant Reproduction, Porto, Portugal, 13-18 July.
- VAN TUNEN, A., TRUONG, L., **RAMOS, A.M.**, HOGERS, R., VAN ORSOUW, N., VAN EIJK, M., JANSSEN, A. (2012). Application of random sequence-based genotyping (rSBG) in crops. Plant & Animal Genome XX Conference. San Diego, USA, 14-18 January
- RAMOS, A.M.**, MEGENS, H.J., CROOIJMANS, R.P.M.A., SCHOOK, L.B., GROENEN, M.A.M. (2010). The use of next generation sequencing technology in the identification of specific SNPs for breed assignment and traceability of animal products. 9th World Congress on Genetics Applied to Livestock Production, Leipzig, Germany, 1-6 August.
- ERNST, C.W., STEIBEL, J.P., ROSA, G.J.M., TEMPELMAN, R.J., BATES, R.O., RILINGTON, V.D., RAGAVENDRAN, A., RANEY, N.E., **RAMOS, A.M.**, CARDOSO, F.F., EDWARDS, D.B. (2010). Genome-Wide Expression QTL (eQTL) Analysis Of Loin Muscle Tissue Identifies Candidate Genes In Pigs. Plant & Animal Genome XVIII Conference. San Diego, USA, 9-13 January
- RAMOS, A.M.**, HU, Z.L., HUMPHRAY, S.J., ROGERS, J., REECY, J., ROTHSCCHILD, M.F. (2006). Using large scale porcine genome sequence information to find the underlying mutations associated with chromosome 17 QTL for meat quality. 8th World Congress on Genetics Applied to Livestock Production, Belo Horizonte, Brazil, 13-18 August.
- RAMOS, A.M.**, HU, Z.L., HUMPHRAY, S.J., ROGERS, J., REECY, J., ROTHSCCHILD, M.F. (2006). From genome scan to fine mapping to sequence information: steps towards the clarification of the mechanisms controlling porcine chromosome 17 QTL for meat quality. Plant & Animal Genome XIV Conference, San Diego, USA, 14-18 January.
- HU, Z.L., HUMPHRAY, S.J., SCOTT, C., ROGERS, J., **RAMOS, A.M.**, REECY, J., ROTHSCCHILD, M.F. (2006). Regional genome sequence assembly for a targeted segment on porcine chromosome 17. Plant & Animal Genome XIV Conference, San Diego, USA, 14-18 January.
- RAMOS, A. M.**, STALDER, K. J., NGUYEN, N. T., ROTHSCCHILD, M. F. (2004). Molecular markers for fresh and dry-cured ham processing quality traits: effect of three cathepsin genes. 29th International Conference on Animal Genetics, Tokyo, Japan, 11-16 September.
- RAMOS, A. M.**, MATOS, C., BETTENCOURT, C., PINHEIRO, C., RANGEL-FIGUEIREDO, T. (2002). Influence of α s1-casein, β -lactoglobulin and prolactin genotypes on milk production traits in two Portuguese sheep breeds. 7th World Congress on Genetics Applied to Livestock Production, Montpellier, France, 19-23 August.
- RAMOS, A. M.**, MATOS, C. A. P., BETTENCOURT, C. M. V., RUSSO-ALMEIDA, P., CHAVEIRO, M. P., RANGEL-FIGUEIREDO, T. (2000). Associations between milk protein polymorphisms and milk production traits in Portuguese Merino sheep. 51st Annual Meeting of the EAAP (European Association of Animal Production), The Hague, Netherlands, 21-24 August.

Projetos de investigação

Projecto ALT20-03-0145-FEDER-000032 – “SelectPorAl: Seleção e melhoramento genómico de características produtivas do Porco Alentejano”, financiado pelo programa Alentejo 2020. CEBAL, Beja, Portugal. (2016-2020) (Coordenação)

Projecto ALT20-03-0145-FEDER-000041 – “SelectPinea : Desenvolvimento de marcadores genéticos para características de interesse em Pinheiro manso (Pinus pinea)”, financiado pelo programa Alentejo 2020. CEBAL, Beja, Portugal. (2016 – 2020) (Coordenação)

Projecto FCT IF/00574/2012/CP1209/CT0001: “Genetic characterization of national animal and plant resources using next-generation sequencing”. CEBAL, Beja, Portugal. (2013-2018) (Coordenação)

Projecto ALENT-07-0224-FEDER-001754: “Genosuber - Sequenciação do genoma do sobreiro”, CEBAL, Beja, Portugal. (2012-2021) (Coordenação Março 2016 – Julho 2021)

Projecto 3/3.2/CA/2005/95 — “Estudo da Diversidade em Raças Autóctones Bovinas e Ovinas Pela Análise do DNA” — financiado pelo Programa PRAXIS XXI, coordenado pela Dra. Maria Teresa Rangel de Figueiredo – UTAD, Vila Real, Portugal. 1997-2000.

Projecto CVT/34664/99-00 – “Associações entre o polimorfismo de proteínas do leite e parâmetros de produção e qualidade do queijo, em raças Portuguesas de ovinos” – financiado pelo programa SAPIENS da Fundação para a Ciência e Tecnologia, coordenado pela Dra. Teresa Rangel de Figueiredo – UTAD, Vila Real, Portugal. 1999-2002.

Projecto ALT20-03-0145-FEDER-000037 – “GEN-RES-ALENTEJO - Utilização da genómica para apoio à seleção de ovinos resistentes a parasitoses e peeira no Alentejo”, financiado pelo programa Alentejo 2020, coordenado pelo Dr. Claudino Matos, ACOS, Beja, Portugal. (2016-2020)

Projecto nº 22231 "Biodata.pt – Infraestrutura Portuguesa de Dados Biológicos", co-financiado pelo POR Lisboa, através do programa FEDER e por fundos nacionais através da FCT/MEC (PIDDAC). (2017-2021)

Projecto PBIO4 – CT 98 – 0188, “Characterization of genetic variation in the European pig to facilitate the maintenance and exploitation of biodiversity”, financiado pela União Europeia e coordenado pelo Dr. Louis Ollivier – INRA – Jouy en Josas – França. 1999-2000.

Projecto INNOACE – Innovación Abierta e Inteligente em la EUROACE (REF: 049_INNOACE_4_E), financiado pelo POCTEP_INTERREG (INTERREG 2014-2020), através do Fundo Europeu de

Desenvolvimento Regional (FEDER). Coordenação da Atividade 3, Ação 2 - Tarefa 8 - Identificación y desarrollo de marcadores moleculares para la selección en el cerdo ibérico". (2015-2019)