

Vania Pereira, PhD

Adjunkt
Københavns Universitet
Retsmedicinsk Institut
Retsgenetisk Afdeling
Frederik V's Vej, 11
2100 København Ø

TEL +45 35 32 61 10
DIR +45 35 32 60 22

Vania.Pereira@sund.ku.dk
<http://retsmedicin.ku.dk/>



EXPERIENCE

2019 -
Associate Professor
Retsmedicinsk Institut - Københavns Universitet (Copenhagen, Denmark)

2015 – 2019
Assistant Professor
Retsmedicinsk Institut - Københavns Universitet (Copenhagen, Denmark)

2013 – 2015
Postdoctoral Researcher
Retsmedicinsk Institut - Københavns Universitet (Copenhagen, Denmark)

EDUCATION

2009 – 2012
PhD. in Biology
Faculty of Sciences – University of Porto

PhD studies carried out at:
- IPATIMUP – Institute of Molecular Pathology and Immunology of the University of Porto (Porto, Portugal)
- Retsmedicinsk Institut - Københavns Universitet (Copenhagen, Denmark)
- Laboratório de Genética Humana e Médica – Universidade Federal do Pará (Belém, Brazil)

2007 – 2008
MSc. in Forensic Genetics
Faculty of Sciences – University of Porto; IPATIMUP
Grade average of 19 out of 20

2006 – 2007
Traineeship in Population Genetics; IPATIMUP
Grade average of 19 out of 20

2003 – 2007
BSc. in Biology
Faculty of Sciences – University of Porto
Grade average of 16 out of 20

1988 – 2003
High school: Colégio Luso – Francês
Grade average of 19 out of 20

PUBLICATIONS

Antão-Sousa S, Gusmão L, Modesti LM, Feliziani S, Faustino M, Marcucci V, Sarapura C, Ribeiro J, Carvalho E, **Pereira V**, Tomas C, Pancorbo MM, Baeta M, Alghafri R, Almheiri R, Builes JJ, Gouveia N, Burgos G, Pontes ML, Ibarra A, Vieira da Silva C, Parveen R, Carbonell JC, Amorim A, Pinto N (2023) Microsatellites' Mutation Modeling Through the Analysis of the Y-Chromosome Transmission: results of a GHEP-ISFG Collaborative Study. Forensic Sci Int Genet (in press): 102999

Refn MR, Kampmann ML, Andersen MM, Morling N, Tfelt-Hansen J, Sørensen E, Hørup Larsen MA, Børsting C, **Pereira V** (2023) Longitudinal changes and variation in DNA methylation over time using the Illumina MethylationEPIC BeadChip assay and implications on age prediction. *Scientific Reports* 13: 21658

Köksal Z, Børsting C, Gusmão L, **Pereira V** (2023) SNPtree – Resolving the phylogeny of SNPs on non-recombining DNA. *Genes* 14(10), 1837

Köksal Z, Meyer OL, Andersen JD, Gusmão L, **Pereira V**, Børsting C (2023) Pitfalls and challenges with population assignments of individuals from admixed populations: applying Genogeographer on Brazilian individuals. *Forensic Sci Int Genet* 67: 102934

Nakanishi H, **Pereira V**, Børsting C, Tvedebrink T, Takada A, Saito K (2023) Development of an Okinawan Panel for biogeographic inference of Okinawans. *Ann Hum Biol* 50(1):436-441

Refn MR, Kampmann ML, Morling N, Tfelt-Hansen J, Børsting C, **Pereira V** (2023) Review: Prediction of chronological age and its applications in forensic casework: methods, current practices, and future perspectives. *Forensic Sciences Research* 8(2): 85-97

Pereira V, Kampmann ML, Børsting C (2022) Evaluation of the ForenSeq mtDNA Whole Genome Kit for massively parallel sequencing of mitochondrial genomes. *Forensic Science International Genetics: Supplement Series* 8:288-290

Mogensen HS, Tvedebrink T, **Pereira V**, Eriksen PS, Morling N (2022) Update of AIMs population data and test with the Genogeographer admixture module. *Forensic Science International Genetics: Supplement Series* 8:15-16

Köksal Z, Burgos G, Carvalho E, Ossa H, Parolin ML, Quiroz A, Toscanini U, Vullo C, Børsting C, Gusmão L, **Pereira V** (2022) Targeted Y chromosome capture enrichment in admixed South American samples with haplogroup Q. *Forensic Science International Genetics: Supplement Series* 8:97-98

Köksal Z, Burgos G, Carvalho E, Loiola S, Parolin ML, Quiroz A, Ribeiro-Dos-Santos A, Toscanini U, Vullo C, Børsting C, Gusmão L, **Pereira V** (2022) Testing the Ion AmpliSeq™ HID Y-SNP Research Panel v1 for performance and resolution in admixed South Americans of haplogroup Q. *Forensic Sci Int Genet* 59:102708

Taib, RA, Mejri, A, Børsting C, **Pereira V**, Elkamel, S, Herrera, RJ, Benammar-Elgaaied, A, Fadhlaoui-Zid, K (2021) Genetic analysis of sixteen autosomal STR loci in three Tunisian populations from Makthar, Nabeul and Sousse. *Ann Hum Biol.* 48(7-8):590-597

Truelsen DM, Freire-Aradas A, Nazari M, Aliferi A, Ballard D, Phillips C, Morling N, **Pereira V**, Børsting C (2021) Evaluation of a custom QIAseq™ Targeted DNA Panel with 164 ancestry informative markers sequenced with the Illumina MiSeq. *Scientific Reports* 11, 21040.

Truelsen DM, Tvedebrink T, Mogensen HS, Farzad MS, Shan MA, Morling N, **Pereira V**, Børsting C (2021) Assessment of the effectiveness of the EUROFORGEN NAME and Precision ID Ancestry panel markers for ancestry investigations of individuals from Europe, the Middle East, North Africa, North-East Africa, and South-Central Asia. *Scientific Reports* 11:18595.

Truelsen DM, **Pereira V**, Phillips C, Morling N, Børsting C (2021) Evaluation of a custom GeneRead™ massively parallel sequencing assay with 210 ancestry informative SNPs using the Ion S5™ and MiSeq platforms. *Forensic Sci Int Genet* 50:102411.

Pereira V, Santangelo R, Børsting C, Tvedebrink T, Almeida APF, Carvalho EF, Morling N, Gusmão L (2020) Evaluation of the precision of ancestry inferences in South American admixed populations. *Frontiers in Genetics*. doi: 10.3389/fgene.2020.00966

Andersen JD, Simão F, Januzzi J, Carvalho E, Andersen MM, Børsting C, **Pereira V**, Morling N, Gusmão L (2020) Skin pigmentation and pigmentary variants in an admixed Brazilian population of primarily European ancestry. *Int J Legal Med* 134(5):1569-1579

Pereira V, Gusmão L (2020) X-chromosomal STRs in Pilli E and Berti A (editors) *Forensic Genetics: New Technology and Applications*. Apple Academic Press (in press, published October 2020)

Pinto N, **Pereira V**, Tomas C, Loiola S, Carvalho EF, Modesti N, Maxzud M, Marcucci V, Cano H, Cicarelli R, Januario B, Bento A, Brito P, Burgos G, Cruz E, Díez-Juárez L, Vannelli S, Rebelo ML, Berardi G, Furfuro S, Fernandez A, Sumita D, Bobillo C, García G, Gusmão L (2020) Paternal and maternal mutations in X-STRs: a GHEP-ISFG collaborative study. *Forensic Sci Int Genet* 46:102258

Mogensen HS, Tvedebrink T, Børsting C, **Pereira V**, Morling N (2020) Ancestry prediction efficiency of the software GenoGeographer using a z-score method and the ancestry-informative markers in the Precision ID Ancestry Panel. *Forensic Sci Int Genet* 44, 102154

Truelsen DM, **Pereira V**, Phillips C, Morling N, Børsting C (2019) The EUROFORGEN NAME Ampliseq™ custom panel: a second tier panel developed for differentiation of individuals from the Middle East/North Africa. *Forensic Science International: Genetics Supplement Series* 7(1): 846-848 (<https://doi.org/10.1016/j.fsigss.2019.10.199>)

Shan MA, Refn M, Morling N, Børsting C, **Pereira V** (2019) Genetic portrait of the Punjabi population from Pakistan using the Precision ID Ancestry Panel. *Forensic Science International: Genetics Supplement Series* 7(1): 87-89 (<https://doi.org/10.1016/j.fsigss.2019.09.034>)

Haase HT, Mogensen HS, Petersen CB, Petersen JF, Holmer A, Børsting C, **Pereira V** (2019) Optimization of the collection and analysis of touch DNA traces. *Forensic Science International: Genetics Supplement Series* 7(1): 98-99 (<https://doi.org/10.1016/j.fsigss.2019.09.038>)

Pakstis A, Gurkan C, Dogan M, Balkaya HE, Dogan S, Neophytou PI, Cherni L, Boussetta S, Khodjet-El-Khil H, El Gaaied ABA, Salvo NM, Janssen K, Olsen GH, Hadi S, Almohammed EK, **Pereira V**, Truelsen DM, Bulbul O, Soundararajan U, Rajeevan H, Kidd JR, Kidd KK (2019) Genetic relationships of European, Mediterranean, and SW Asian populations using a panel of 55 AISNPs. *Eur J Hum Genet* 27(12): 1885-1893

Pereira V, Freire-Aradas A, Ballard D, Børsting C, Diez V, Pruszkowska P, Ribeiro J, Achakzaiv NM, Bulbul O, Perez Carceles MD, Triki-Fendri S, Rebai A, Syndercombe-Court D, Morling N, Lareu MV, Carracedo A, The EUROFORGEN-NoE Consortium, Phillips C (2019) Development and validation of the EUROFORGEN NAME (North African and Middle Eastern) ancestry panel. *Forensic Sci Int Genet* 42: 260-267

Pereira V, Gusmão L (2019) Análisis de marcadores STRs de cromosoma Y in Crespillo Marquez M and Barrio Caballero P (editors) *GENÉTICA FORENSE. Del laboratorio a los Tribunales*. 217-241. Diaz de Santos ED

Pereira V, Longobardi A, Børsting C (2018) Sequencing of mtDNA genomes with the Precision ID mtDNA whole genome panel. *Electrophoresis* 39: 2766-2775

Nakanishi H, **Pereira V**, Børsting C, Yamamoto T, Takada A, Saito K, Morling N (2018) Analysis of mainland Japanese and Okinawan populations using the Precision ID Ancestry Panel. *Forensic Sci Int Genet* 33: 106-109

Truelsen DM, Farzad MS, Mogensen HS, **Pereira V**, Børsting C, Morling N (2017) Typing of two Middle Eastern populations with the Precision ID Ancestry Panel. *Forensic Science International: Genetics Supplement Series* 6: e301-e302

Santangelo R, González-Andrade F, Børsting C, Torroni A, **Pereira V**, Morling N (2017) Analysis of Ancestry Informative Markers in three main ethnic groups from Ecuador supports a trihybrid origin of Ecuadorians. *Forensic Sci Int Genet* 31: 29-33

Mikkelsen LH, Andreasen S, Melchior LC, Persson M, Andersen JD, **Pereira V**, Toft PB, Morling N, Stenman G, Heegaard S (2017) Genomic and immunohistochemical characterisation of a lacrimal gland oncocytoma and review of literature. *Oncology Letters* 14(4): 4176-4182

Pereira V, Mogensen HS, Børsting C, Morling N (2017) Evaluation of the Precision ID Ancestry Panel for crime case work: a SNP typing assay developed for typing of 165 ancestral informative markers. *Forensic Sci Int Genet* 28: 138-145

Weiler NEC, Baca K, Ballard D, Balsa F, Bogus M, Børsting C, Brisighelli F, Červenáková J, Chaitanya L, Coble M, Decroyer V, Desmyter S, van der Gaag KJ, Gettings K, Haas C, Heinrich J, Porto MJ, Kal AJ, Kayser M, Kúdelová A, Morling N, Mosquera-Miguel A, Noel F, Parson W, **Pereira V**, Phillips C, Schneider PM, Syndercombe-Court D, Turanska M, Vidaki A, Woliński P, Zatkálíková L, Sijen T, (2017) A collaborative EDNAP exercise on SNaPshot™-based mtDNA control region typing. *Forensic Sci Int Genet* 26: 77-84

Lopopolo M, Børsting C, **Pereira V**, Morling N (2016) A study of the peopling of Greenland using next generation sequencing of complete mitochondrial genomes. *Am J Phys Anthropol*. 161: 698-704

Børsting C, **Pereira V**, Andersen JD, Morling N (2016) Single Nucleotide Polymorphism in Jamieson, A. and Bader, S. (editors) *A Guide to Forensic DNA Profiling*: 205-222. John Wiley & Sons Ltd, Chichester, UK

Andersen JD, Pietroni C, Johansen P, Andersen MM, **Pereira V**, Børsting C, Morling N (2016) Importance of non-synonymous OCA2 variants in human eye colour prediction. *Molecular Genetics & Genomic Medicine* 4(4): 420-430

Poulsen L, Tomas C, Drobnič K, Ivanova V, Mogensen HS, Kondili A, Miniati P, Bunokiene D, Jankauskiene J, **Pereira V** and Morling N (2016) NGMSelect™ and Investigator® Argus X-12 analysis in population samples from Albania,

Iraq, Lithuania, Slovenia, and Turkey. *Forensic Sci Int Genet* 22: 110-112

Pereira V (2016) *Genética Forense in Dinis-Oliveira RJ and Magalhães T (editors) O que são as Ciências Forenses? - Conceitos, Abrangência e Perspectivas Futuras: 89-96. PACTOR; ISBN: 978-989-693-055-4*

Pereira V, Gusmão L (2016) Types of genomes, sequences and genetic markers in Budowle B and Amorim A (editors) *Handbook of Forensic Genetics: Biodiversity and Heredity in Civil and Criminal Investigation: 163-191. Security Science and Technology, Volume 2). Imperial College Press; ISBN: 1786340771*

Ribeiro J, **Pereira V**, Kondili A, Miniati P, Børsting C, Morling N, EuroforGen-NoE (2015) Typing of 11 Ancestry Informative Markers in an Albanian population. *Forensic Science International: Genetics Supplement Series* 5(1): e9-e10

Gomes V, Pala M, Salas A, Álvarez-Iglesias V, Amorim A, Pardo-Seco J, Carracedo A, Clarke DJ, Hill C, Mormina M, Shaw M-A, David D, Pereira R, **Pereira V**, Prata MJ, Sánchez-Diz P, Rito T, Soares P, Gusmão L, Richards MB (2015) Mosaic maternal ancestry in the Great Lakes region of East Africa. *Human Genetics* 134(9):1013-27

Poulsen L, Farzad MS, Børsting C, Tomas C, **Pereira V** and Morling N (2015) Population and forensic data for three sets of forensic genetic markers studied in four ethnic groups from Iran: Persians, Lurs, Kurds and Azeris. *Forensic Sci Int Genet* 17: 43-46

Olofsson JK, **Pereira V**, Børsting C, Morling N (2015) Peopling of the North Circumpolar Region - Insights from Y chromosome STR and SNP typing of Greenlanders. *PLoS One* 10(1):e0116573

Børsting C, **Pereira V**, Andersen JD, Morling N (2014) Single nucleotide polymorphism in Jamieson A. and Moenssens A.A. (editors) *Wiley Encyclopedia of Forensic Science: 1-18. John Wiley & Sons Ltd, Chichester, UK.*

Correia Pinto J, **Pereira V**, Marques S, Amorim A, Alvarez Fernandez L, Prata MJ (2014) Mirandese language and genetic differentiation in Iberia: a study using X chromosome markers. *Annals of Human Biology* 42(1): 20-25

Andersen JD, **Pereira V**, Pietroni C, Mikkelsen M, Johansen P, Børsting C, Morling N (2014) Next generation sequencing of multiple individuals per barcoded library by deconvolution of sequenced amplicons using endonuclease fragment analysis. *Biotechniques* 57(2): 91-94

Pereira V, Tomas C, Sanchez JJ, Syndercombe-Court D, Amorim A, Gusmão L, Prata MJ, Morling N (2014) The peopling of Greenland: further insights from the analysis of genetic diversity using autosomal and X-chromosomal markers. *Eur J Hum Genet* 23(2): 245-251

Pereira V, Tomas C, Pietroni C, Andersen JD, Fordyce SL, Pinto N, Mikkelsen M, Børsting C, Amorim A, Gusmão L, Prata MJ, Morling N (2013) Assessing the potential application of X-chromosomal haploblocks in population genetics and forensic studies. *Forensic Science International: Genetics Supplement Series* 4(1): e9-e10

Pereira V, Gusmão L (2013) X chromosome markers in: Siegel JA and Saukko PJ (editors) *Encyclopedia of Forensic Sciences, Second Edition: 257-263. Waltham Academic Press*

Pereira V, Gusmão L, Valente C, Pereira R, Carneiro J, Gomes I, Morling N, António A, Prata MJ (2012) Refining the genetic portrait of Portuguese Roma through X-chromosomal markers. *Am J Phys Anthropol* 148(3):389-394

Tomas C, **Pereira V**, Morling N (2012) Analysis of 12 X-STRs in Greenlanders, Danes and Somalis using Argus X-12. *Int J Leg Med* 126(1): 121-128

Pereira R, **Pereira V**, Gomes I, Tomas C, Morling N, Amorim A, Prata MJ, Carracedo A, Gusmão L (2012) A method for the analysis of 32 X chromosome insertion deletion polymorphisms in a single PCR. *Int J Leg Med* 126(1): 97-105

Pereira V, Moncada E, Diez IE, Tomas C, Amorim A, Morling N, Gusmão L, Prata MJ (2011) Genetic characterization of Somali and Iraqi populations using a set of 33 X-chromosome Indels. *Forensic Science International: Genetics Supplement Series* 3(1): e134-e138

Pereira V, Tomas C, Sanchez JJ, Amorim A, Gusmão L, Prata MJ, Morling N (2011) Study of 25 X-chromosome Single Nucleotide Polymorphisms in African and Asian populations. *Forensic Science International: Genetics Supplement Series* 3(1): e139-e140

Pereira V, Tomas C, Amorim A, Morling N, Gusmão L, Prata MJ (2011) Study of 25 X-chromosome SNPs in the Portuguese. *Forensic Sci Int Genet* 5: 336-338

Pereira V, Gomes V, Amorim A, Gusmão L, Prata MJ (2010) Genetic characterization of uniparental lineages in populations from Southwest Iberia with past malaria endemicity. *Am J Hum Biol* 22: 588-595

van Asch B, Pinheiro R, Pereira R, Alves C, **Pereira V**, Pereira F, Gusmão L, Amorim A (2010) A framework for the development of STR genotyping in domestic species: characterisation and population study of twelve canine X-chromosome loci. *Electrophoresis* 31(2):303-308

Gomes I, Amorim A, **Pereira V**, Carracedo A, Gusmão L (2009) Genetic patterns of 10 X chromosome short tandem repeats in an Asian population from Macau. *Forensic Science International: Genetics Supplement Series* 2:402-404

Valente V, Gomes I, **Pereira V**, Amorim A, Gusmão L, Prata MJ (2009) Association between STRs from the X chromosome in a sample of Portuguese Gypsies. *Forensic Science International: Genetics Supplement Series* 2:391-393

Gomes I, **Pereira V**, Gomes V, Prata MJ, Pinto N, Carracedo A, Amorim A, Gusmão L (2009) The Karimojong from Uganda: Genetic characterization using an X-STR decaplex system. *Forensic Sci Int Genet* 3(4): e127-e128

van Asch B, Alves C, Gusmão L, **Pereira V**, Pereira F, Amorim A (2009) A new autosomal STR nineplex for canine identification and parentage testing. *Electrophoresis* 30(2): 417-423

TEACHING

August 2023

Invited Lecturer, ISFG Virtual Summer School 2023: Biogeographical ancestry interpretation – Advanced

November 2022 – Course Organizer and Lecturer, PhD course

Population genetics and forensic analysis – University of Copenhagen

September 2022 – Invited Talk, Postgraduate course

Ancestry and Genealogy in a Forensic Context – Ciência ao Meio Dia, State University of Rio de Janeiro, Brazil

August 2022 – Invited Lecturer, Forensic Genetics and Massively Parallel Sequencing MSc Summer course

Haploid markers and Genealogy – University of Copenhagen

April 2022 – Invited Talk, National Genome Center

How and why can we use genetics to predict origin? – National Genome Center, Copenhagen, Denmark

Since October 2021 – Course Organizer and Lecturer – PhD course

Population genetics and forensic analysis

University of Copenhagen

Since June 2021 – Invited Lecturer, Forensic Genetics – MSc course

Genetic ancestry in a forensic context

University Institute of Health Sciences, CESPU, Portugal

Since April 2021 – Invited Lecturer, Forensic Genetics – BSc course

Genetic ancestry in a forensic context

University Institute of Health Sciences, CESPU, Portugal

December 2016 – Invited Talk – Postgraduate course

Ancestry and Forensic Genetics

State University of Rio de Janeiro, Brazil

Since August 2014 – Invited Lecturer, Forensic GeoBiology – MSc course

Ancestry in forensic genetics

DNA Sequencing

Introduction to Population

Molecular Techniques

Challenging DNA samples

University of Copenhagen

LANGUAGE SKILLS

Language - Reading - Writing - Conversation

Portuguese - Native - Native - Native

English - Excellent - Excellent - Excellent

French - Excellent - Good - Good

Spanish - Excellent - Good - Good

Italian - Excellent - Good - Good

Danish - Good - Good - Good