

Fábio Pértille, PhD

CV

Phone: (+46) 0 733880485

E-mail: fabio.pertille@liu.se

Researcher ID: L-2837-2016

ORCID ID: orcid.org/0000-0002-7214-9184

Professional Address

Linköping University/ Campus US
BKV, Patologen, plan 09
SE-58183 - Linköping
Telephone: +46 13 286619

EDUCATION

PhD in Science (Genetics, Epigenetics and Bioinformatics)- College of Agriculture “Luiz de Queiroz”, University of São Paulo, São Paulo, Brazil (2013-2016).

Thesis: Unraveling important genetic associations and differential methylation profiles using reduced genome sequencing in chickens.

Advisors: Dr. Luiz Lehmann Coutinho

Master's in science (genetics and animal breeding)- College of Agriculture “Luiz de Queiroz”, University of São Paulo, São Paulo, Brazil (2011-2013).

Thesis: Identification of polymorphisms associated with production traits on chicken (*Gallus gallus*) chromosome 4.

Advisors: Dr. Luiz Lehmann Coutinho

Veterinarian degree – Centro de Ciências Agroveterinárias, University of the State of Santa Catarina, Santa Catarina, Brazil (2006-2010).

POSITIONS

Post-Doctoral Fellow- Department of Biomedical and Clinical Sciences (BKV), Linköping University, Linköping, Sweden (2021-present).

Research: Epigenetic effects of early stress in chickens; Epigenetic biomarkers for predicting radiation and cisplatin sensitivity in Head & Neck cancer in humans.

PI: Karin Roberg

Dedication: 100% to research.

Post-Doctoral Fellow- IFM Biology, Linköping University, Linköping, Sweden (2020-2021).

Research: Epigenetic effects of early stress in chickens; Role of epigenetic changes in the diversifications of chicken breeds due to domestication.

PI: Carlos Guerrero-Bosagna

Dedication: 100% to research.

Visiting Researcher Fellow - - IFM Biology, Linköping University, Linköping, Sweden (2019-2020).

Research: Methylome and transcriptome analysis of chickens subjected to illumination stress in the livestock production environment.

PI: Luiz Lehmann Coutinho & Carlos Guerrero-Bosagna

Dedication: 100% to research.

Post-Doctoral Fellow- Animal Biotechnology, Animal Science Department, University of São Paulo (ESALQ-USP), Brazil (2017-2020).

Research: Epigenetic analysis of methylation profile of chickens submitted to different stress conditions in the livestock production environment

PI: Luiz Lehmann Coutinho

Dedication: 100% to research.

Doctoral Fellow- Animal Biotechnology, Animal Science Department, University of São Paulo (ESALQ-USP), Brazil (2013-2017).

Research: Unraveling important genetic associations and differential methylation profiles using reduced genome sequencing in chickens

PI: Luiz Lehmann Coutinho

Visiting Researcher Fellow - - IFM Biology, Linköping University, Linköping, Sweden (2015-2016).

Research: Genetic variations detected in the domestic chicken and its associations with quantitative traits using RAD-SEQ

PI: Luiz Lehmann Coutinho & Per Jensen

Masters Fellow- Animal Biotechnology, Animal Science Department, University of São Paulo (ESALQ-USP), Brazil (2011-2013).

Research: Identification of polymorphisms associated with production traits on chicken (*Gallus gallus*) chromosome 4

PI: Luiz Lehmann Coutinho

Young Scientist with Scientific Initiation Scholarship in Immunogenetics by the University of Santa Catarina State (UDESC), Brazil (2007-2010).

Research: Genetic diversity of the control region (D-loop) in mitochondrial DNA in caipira's chickens lineages

PI: Carlos André da Veiga Lima-Rosa

ADDITIONAL TRAINNING

Continuing education

Course: Epigenetics in disease and well-being (20h)
Linköping University, LIU, Sweden (Jan 20-21, 2016).

Course: Epigenetic Control of Gene Expression (56h)
Certified by The University of Melbourne, Australia (2016).
(coursera.org/verify/JH73VLUGEGHU)

Course: Poultry Nutrigenomics Course (10h)
APINCO Foundation of Poultry Science and Technology (FACTA), Campinas, SP, BR (May 27-28th, 2014)

Course: Genomic Selection in R software (12h)
Animal Science Department, University of São Paulo (ESALQ-USP), BR (April 18th, 2013).

Course: Non-coding RNAs and genomic dynamics (3h)
58° Brazilian congress of Genetics, Foz do Iguaçu - PR, BR (Set 11-14th, 2012)

Intensive Course: "Direct and Reverse Genetics: A Functional View of the Genome" (3h)
58° Brazilian congress of Genetics, Foz do Iguaçu - PR, BR (Set 11-14th, 2012)

Course: Training Steps - Improving Animal Welfare at Slaughter (16h)
National Humanitarian Slaughter Program, Piracicaba, SP (April 6-7th, 2011)

Mini-Course: Sequence Analysis: use of basic tools in Bioinformatics" (6h)
XI Workshop in Genetics from Biosciences Institute, University of the State of São Paulo (UNESP), Botucatu, SP (Jun 5th, 2011).

Course: Intensive Course "Molecular Systematics" (3h).
58° Brazilian congress of Genetics, Águas de Lindóia, SP, BR (2009)

Course: Molecular Organization and Chromosomal Longitudinal Differentiation"(3h)
58° Brazilian congress of Genetics, Águas de Lindóia, SP, BR (2009)

Course: Applications of Microarrays in Genomics: from comparative analysis to gene expression with NimbleGen (1h).
Roche Applied Sciences (Set 1st, 2009)

Course: Theoretical Course of Ultrasonography in Cattle (8h)
University of the State of Rio Grande do Sul (UFRGS) (May 12th, 2008).

Mini-Course: Labelling of Animal Origin Products (8h)
University of the State of Santa Catarina (UDESC-CAV). Lages, SC (Nov 12th, 2007).

Course: Microsoft tools (108h)
Chapecó, SC, Brazil (2001)

Course: Typewriter typing (Minimum 120 types per minute).
Campos Novos, SC, Brazil (1998)

ASSIGNMENTS AS MEMBER OF EXAMINING COMMITTEE

Member of the Scientific Advisory Committee of the São Paulo Research Foundation (FAPESP)

Member of the selection board for doctoral candidates. within the starting H20020 consortium called "Genome and Epigenome Enabled Breeding in Monogastrics" (GERoNIMO), Linköping, 2021

Member of the selection board for doctoral candidates within the Research project granted by Templeton Foundation entitled "Non-genomic Inheritance of environmentally-induced traits: Deciphering epigenetically-driven genet variation in mammals", Linköping, 2021.

Examiner for the Veterinarian degree in Animal Reproduction Field by Lisiane Golombiesk, University of Passo Fundo, BR (2016).

Examiner for the Veterinarian degree in Applied Research and Bovine Mastitis by Leonardo Bringhenti, University of Passo Fundo, BR (2016).

Examiner for the Veterinarian degree in the Area Of Medical and Surgical Clinical, Reproductive Management And Preventive Veterinary Medicine Of Large Animals by Talita Girardi Bordin, University of Passo Fundo, BR (2016).

Evaluation Committee of Submitted Articles to the XII BRAZILIAN SYMPOSIUM ON ANIMAL IMPROVEMENT from The Brazilian Society for Animal Improvement. Ribeirão Preto - SP Sep 12-13th (2017).

Evaluator, in the field of Agricultural Sciences, at the 21st SIICUSP (International Symposium on Scientific Initiation at USP), São Paulo (2013).

AWARDS AND DISTINCTIONS

Best Thesis 2017 Award from the ANIMAL SCIENCE/FISHERY RESOURCES area. From Coordination for the Improvement of Higher Education Personnel (CAPES), Brazil, 2017.

Highlight among the five-best works of the Veterinary Medicine course at the 19th UDESC Scientific Initiation Seminar. From Center for Agroveterinary Sciences (CAV), University of Santa Catarina (UDESC), Brazil, 2010.

LANGUAGE PROFICIENCY

Proficient in conversation, reading and writing in English, Spanish and Portuguese.
Basic level of Swedish (SFI level D).

REFERENCES

Dr. Carlos Guerrero-Bosagna

Linköping University (LIU/SE), Department of Physics, Chemistry and Biology. E-mail: carlos.guerrero.bosagna@ebc.uu.se

Prof. Dr. Luiz Lehman Coutinho

Escola Superior de Agricultura “Luiz de Queiroz” (Esalq/USP), Department of Animal Science. E-mail: llcoutinho@usp.br

Professor Per Jensen

Linköping University (LIU/SE), Department of Physics, Chemistry and Biology. E-mail: perje@ifm.liu.se

Dr. Mônica Correa Ledur

Embrapa Swine & Poultry, Brazilian Agricultural Research Corporation. E-mail: monica.ledur@embrapa.br

EDUCATION

PhD in Science (Genetics, Epigenetics and Bioinformatics)- College of Agriculture “Luiz de Queiroz”, University of São Paulo, São Paulo, Brazil (2013-2016).

Thesis: Unraveling important genetic associations and differential methylation profiles using reduced genome sequencing in chickens.

Advisor: Dr. Luiz Lehmann Coutinho

Papers:

PÉRTILLE, FÁBIO; BRANTSÆTER, MARGRETHE; NORDGREEN, JANICKE; COUTINHO, LUIZ LEHMANN; JANCZAK, ANDREW M.; JENSEN, PER; GUERRERO-BOSAGNA, CARLOS. DNA methylation profiles in red blood cells of adult hens correlate with their rearing conditions. *Journal Of Experimental Biology*. 2017. DOI: 10.1242/jeb.157891.

PÉRTILLE, FÁBIO; MOREIRA, GABRIEL COSTA MONTEIRO; ZANELLA, RICARDO; NUNES, JOSÉ DE RIBAMAR DA SILVA; BOSCHIERO, CLARISSA; ROVADOSCKI, GREGORI ALBERTO; MOURÃO, GERSON BARRETO; LEDUR, MÔNICA CORRÊA; COUTINHO, LUIZ LEHMANN. Genome-wide association study for performance traits in chickens using genotype by sequencing approach. *Scientific Reports*. 2017. DOI: 10.1038/srep41748.

NUNES, JOSÉ DE RIBAMAR DA SILVA & LIU, SHIKAI; **PÉRTILLE, FÁBIO;** PERAZZA, CAIO AUGUSTO; VILLELA, PRISCILLA MARQUI SCHMIDT; DE ALMEIDA-VAL, VERA MARIA FONSECA; HILSDORF, ALEXANDRE WAGNER SILVA; LIU, ZHANJIANG; COUTINHO, LUIZ LEHMANN. Large-scale SNP discovery and construction of a high-density genetic map of *Colossoma macropomum* through genotyping-by-sequencing. *Scientific Reports*. 2017. DOI: 10.1038/srep46112.

ROVADOSCKI, GREGORI A.; PETRINI, JULIANA; RAMIREZ-DIAZ, JOHANNA; PERTILE, SIMONE F. N.; **PÉRTILLE, FÁBIO;** SALVIAN, MAYARA; IUNG, LAIZA H. S.; RODRIGUEZ, MARY ANA P.; ZAMPAR, ALINE; GAYA, LEILA G.; CARVALHO, RACHEL S. B.; COELHO, ANTONIO A. D.; SAVINO, VICENTE J. M.; COUTINHO, LUIZ L.; MOURÃO, GERSON B. Genetic parameters for growth characteristics of free-range chickens under univariate random regression models. *Poultry Science*. 2016. DOI: 10.3382/ps/pew167.

PETRINI, JULIANA.; IUNG, LAIZA.H.S.; RODRIGUEZ, MARY .A.P.; SALVIAN, MAYARA.; **PÉRTILLE, FÁBIO.;** ROVADOSCKI, GREGORY.A.; CASSOLI, L.D.; COUTINHO, L.LUIZ.; MACHADO, PAULO.F.; WIGGANS, G.R.; MOURÃO, GERSON.B. Genetic parameters for milk fatty acids, milk yield and quality traits of a Holstein cattle population reared under tropical conditions. *Journal of Animal Breeding and Genetics*. 2016. DOI: 10.1111/jbg.12205.

SILVA, VINICIUS HENRIQUE DA; REGITANO, LUCIANA CORREIA DE ALMEIDA; GEISTLINGER, LUDWIG; **PÉRTILLE, FÁBIO;** GIACHETTO, POLIANA FERNANDA; BRASSALOTI, RICARDO AUGUSTO; MOROSINI, NATÁLIA SILVA; ZIMMER, RALF; COUTINHO, LUIZ LEHMANN. Genome-Wide Detection of CNVs and Their Association with Meat Tenderness in Nelore Cattle. *Plos One*. 2016. DOI: 10.1371/journal.pone.0157711.

PÉRTILLE, FÁBIO; GUERRERO-BOSAGNA, CARLOS; SILVA, VINICIUS HENRIQUE DA; BOSCHIERO, CLARISSA; NUNES, JOSÉ DE RIBAMAR DA SILVA; LEDUR, MÔNICA CORRÊA; JENSEN, PER; COUTINHO, LUIZ LEHMANN. High-throughput and Cost-effective Chicken Genotyping Using Next-Generation Sequencing. *Scientific Reports*. 2016. DOI: 10.1038/srep26929.

Master’s in science (genetics and animal breeding)- College of Agriculture “Luiz de Queiroz”, University of São Paulo, São Paulo, Brazil (2011-2013).

Thesis: Identification of polymorphisms associated with production traits on chicken (*Gallus gallus*) chromosome 4.

Advisor: Dr. Luiz Lehmann Coutinho

Paper:

PÉRTILLE, FÁBIO; ZANELLA, RICARDO.; FELÍCIO, ANDREZZA M.; LEDUR, MONICA C.; PEIXOTO, JANE O.; COUTINHO, LUIZ L. Identification of polymorphisms associated with production traits on chicken (*Gallus gallus*) chromosome 4. *Genetics and Molecular Research*. 2015. DOI: 10.4238/2015.September.9.11.

OVERVIEW OF SCIENTIFIC CONTRIBUTION

- **Publication metrics: h-index: 9; times cited: 236, no self-citations:212** (ISI Web of Science, December 28nd 2021).
- Peer-reviewed original research articles: **21**
- Peer-reviewed review articles: **1**
- Peer-reviewed book chapters: **1**
- Peer-reviewed conference contributions: **4** oral presentations/**8** poster presentations, **30** abstracts.
- Organizing events, conferences, exhibitions, and fairs:**8**
- Participation in events, congresses, exhibitions, and fairs: **>50**
- Role as Scientific Assessor: **2**
- Other publications including popular science books/presentations:
 - Popular science article: **1** (for 'AviNews' journal)
 - Contribution to news/science blogs: **16**

LIST OF PUBLICATIONS BY DR. FÁBIO PÉRTILLE

- Total number of publications: **21**
 - [OA] denotes open access articles
1. NERY DA SILVA, ARTHUR; SILVA ARAUJO, MICHELLE; **PÉRTILLE, FÁBIO**; ZANELLA, ADROALDO JOSÉ. How Epigenetics Can Enhance Pig Welfare? *Animals*, 2022. DOI: 10.3390/ani12010032 [OA]
 2. **PÉRTILLE, FÁBIO**; ALVAREZ-RODRIGUEZ, MANUEL; DA SILVA, ARTHUR NERY; BARRANCO, ISABEL; ROCA, JORDI; GUERRERO-BOSAGNA, CARLO; RODRIGUEZ-MARTINEZ, HERIBERTO. Sperm Methylome Profiling Can Discern Fertility Levels in the Porcine Biomedical Model. *Int. J. Mol. Sci.* 22, 2679, 2021. DOI: 10.3390/ijms22052679 [OA]
 3. **PÉRTILLE, FÁBIO**; IBELLI, ADRIANA MERCIA GUARATINI; SHARIF, MAJ EL; POLETI, MIRELE DAIANA; FRÖHLICH, ANNA SOPHIE; REZAEI, SHIVA; LEDUR, MÔNICA CORRÊA; JENSEN, PER; GUERRERO-BOSAGNA, CARLOS AND COUTINHO, LUIZ LEHMANN. Putative Epigenetic Biomarkers of Stress in Red Blood Cells of Chickens Reared Across Different Biomes. *Front. Genet.* 2020; DOI:10.3389/fgene.2020.508809 [OA]
 4. SUNDMAN, ANN-SOFIE; **PÉRTILLE, FÁBIO**; COUTINHO, LUIZ LEHMANN; JAZIN, ELENA; GUERRERO-BOSAGNA, CARLOS; JENSEN, PER. DNA methylation in canine brains is related to domestication and dog-breed formation. *PLoS One*. 2020. DOI:10.1371/journal.pone.0240787 [OA]
 5. NUNES, JOSÉ DE RIBAMAR S; **PÉRTILLE, FÁBIO**; ANDRADE, SONIA C. S.; PERAZZA, CAIO A.; VILLELA, PRISCILLA M. S.; ALMEIDA-VAL, VERA M. F.; GAO, XIAO-ZHI; COUTINHO, LUIZ L.; HILSDORF, ALEXANDRE W. S. Genome-wide association study reveals genes associated with the absence of intermuscular bones in tambaqui (*Colossoma macropomum*). *Anim. Genet.* 2020. DOI:10.1111/age.13001
 6. GUERRERO-BOSAGNA, CARLOS; **PÉRTILLE, FÁBIO**; GOMEZ, YAMENAH; REZAEI, SHIVA; GEBHARDT, VÖGELI, SABINE; STRATMANN, ARIANE; VÖELKL, BERNHARD; TOSCANO, MICHAEL J. 'DNA Methylation Variation in the Brain of Laying Hens in Relation to Differential Behavioral Patterns. *Comparative Biochemistry and Physiology Part D: Genomics and Proteomics*. 2020. DOI:10.1016/j.cbd.2020.100700 [OA]
 7. MIRELE D., POLETI, REGITANO, LUCIANA C. A.; SOUZA, GUSTAVO H. M. F.; CESAR, ALINE S. M.; SIMAS, ROSINEIDE C.; SILVA-VIGNATO, BÁRBARA; MONTENEGRO, HORÁCIO; **PÉRTILLE, FÁBIO**; BALIEIRO, JÚLIO C. C.; CAMERON, LUIZ C.; ELER, JOANIR P.; AND COUTINHO, LUIZ L. Proteome Alterations Associated with the Oleic Acid and Cis-9, Trans-11 Conjugated Linoleic Acid Content in Bovine Skeletal Muscle." *Journal of Proteomics*. 2020. DOI:10.1016/j.autrev.2020.102523
 8. MOREIRA, GABRIEL COSTA MONTEIRO; BOSCHIERO, CLARISSA; CESAR, ALINE SILVA MELLO; REECY, JAMES M. ; GODOY, THAÍS FERNANDA; **PÉRTILLE, FÁBIO**; LEDUR, MÔNICA CORRÊA; MOURA, ANA SILVIA ALVES MEIRA TAVARES; GARRICK, DORIAN J. ; AND COUTINHO, LUIZ LEHMANN. Unraveling genomic associations with feed efficiency and body weight traits in chickens through an integrative approach. *BMC Genet.* 2019. DOI:10.1186/s12863-019-0783-3 [OA]
 9. **PÉRTILLE, FÁBIO**; SILVA, VINICIUS H. DA; JOHANSSON, ANNA MARIA; LINDSTRÖM, TOM; WRIGHT, DOMINIC ; COUTINHO, LUIZ L.; JENSEN, PER; AND GUERRERO-BOSAGNA, CARLOS. Genome Dynamics during Chicken Diversification: Role of CpGs in the Emergence of Genomic Variability. *Epigenetics*. 2019. DOI:10.1080/15592294.2019.1609868 [OA]
 10. MOREIRA, GABRIEL CM; BOSCHIERO, CLARISSA; CESAR, ALINE SILVA MELLO; REECY, JAMES M; GODOY, THAÍS FERNANDA; **PÉRTILLE, FÁBIO**; LEDUR, MÔNICA CORRÊA; MOURA, ANA SAMT; GARRICK, DORIAN; COUTINHO, LUIZ L. Integration of genome wide association studies and whole genome sequencing provides novel insights into fat deposition in chicken. *Sci. Rep.* 2018 DOI:10.1038/s41598-018-34364-0 [OA]
 11. ROVADOSCKI, GREGORI ALBERTO; PERTILLE, SIMONE FERNANDA NEDEL; ALVARENGA, AMANDA BOTELHO; CESAR, ALINE SILVA MELLO; **PÉRTILLE, FÁBIO**; PETRINI, JULIANA; FRANZO, VAMILTON; SOARES, WEBER VILAS BOAS; MOROTA, GOTA; SPANGLER, MATTHEW L.; PINTO, LUÍS FERNANDO BATISTA; CARVALHO, GLEIDSON GIORDANO PINTO DE; LANNA, DANTE PAZZANESE DUARTE; COUTINHO, LUIZ LEHMANN; MOURÃO, GERSON BARRETO. Estimates of genomic

- heritability and genome-wide association study for fatty acids profile in Santa Inês Sheep. *BMC Genomics*. 2018. DOI: 10.1186/s12864-018-4777-8 [OA]
12. ZANELLA, RICARDO; LAGO, LUÍSA V.; SILVA, ARTHUR N. DA; **PÉRTILLE, FÁBIO**; CARVALHO, NATHÁ S. DE; PANETTO, JOÃO CLÁUDIO DO CARMO; ZANELLA, GIOVANA C.; FACIOLI, FERNANDA L. AND SILVA, MARCOS VINICIUS G.B. DA. Genetic Characterization of Indubrasil Cattle Breed Population. *Vet Sci*. 2018. DOI:10.3390/vetsci5040098 [OA]
 13. **PÉRTILLE, FÁBIO**; BRANTSÆTER, MARGRETHE; NORDGREEN, JANICKE; COUTINHO, LUIZ LEHMANN; JANCZAK, ANDREW M.; JENSEN, PER; GUERRERO-BOSAGNA, CARLOS. DNA methylation profiles in red blood cells of adult hens correlate with their rearing conditions. *Journal Of Experimental Biology*. 2017. DOI: 10.1242/jeb.157891.
 14. **PÉRTILLE, FÁBIO**; MOREIRA, GABRIEL COSTA MONTEIRO; ZANELLA, RICARDO; NUNES, JOSÉ DE RIBAMAR DA SILVA; BOSCHIERO, CLARISSA; ROVADOSCKI, GREGORI ALBERTO; MOURÃO, GERSON BARRETO; LEDUR, MÔNICA CORRÊA; COUTINHO, LUIZ LEHMANN. Genome-wide association study for performance traits in chickens using genotype by sequencing approach. *Scientific Reports*. 2017. DOI: 10.1038/srep41748 [OA]
 15. NUNES, JOSÉ DE RIBAMAR DA SILVA & LIU, SHIKAI; **PÉRTILLE, FÁBIO**; PERAZZA, CAIO AUGUSTO; VILLELA, PRISCILLA MARQUI SCHMIDT; DE ALMEIDA-VAL, VERA MARIA FONSECA; HILSDORF, ALEXANDRE WAGNER SILVA; LIU, ZHANJIANG; COUTINHO, LUIZ LEHMANN. Large-scale SNP discovery and construction of a high-density genetic map of Colossoma macropomum through genotyping-by-sequencing. *Scientific Reports*. 2017. DOI: 10.1038/srep46112 [OA]
 16. ROVADOSCKI, GREGORI A.; PETRINI, JULIANA; RAMIREZ-DIAZ, JOHANNA; PERTILE, SIMONE F. N.; **PÉRTILLE, FÁBIO**; SALVIAN, MAYARA; IUNG, LAIZA H. S.; RODRIGUEZ, MARY ANA P.; ZAMPAR, ALINE; GAYA, LEILA G.; CARVALHO, RACHEL S. B.; COELHO, ANTONIO A. D.; SAVINO, VICENTE J. M.; COUTINHO, LUIZ L.; MOURÃO, GERSON B. Genetic parameters for growth characteristics of free-range chickens under univariate random regression models. *Poultry Science*. 2016. DOI: 10.3382/ps/pew167.
 17. PETRINI, JULIANA.; IUNG, LAIZA.H.S.; RODRIGUEZ, MARY .A.P.; SALVIAN, MAYARA.; **PÉRTILLE, FÁBIO**.; ROVADOSCKI, GREGORY.A.; CASSOLI, L.D.; COUTINHO, L.LUIZ.; MACHADO, PAULO.F.; WIGGANS, G.R.; MOURÃO, GERSON.B. Genetic parameters for milk fatty acids, milk yield and quality traits of a Holstein cattle population reared under tropical conditions. *Journal of Animal Breeding and Genetics*. 2016. DOI: 10.1111/jbg.12205.
 18. SILVA, VINICIUS HENRIQUE DA; REGITANO, LUCIANA CORREIA DE ALMEIDA; GEISTLINGER, LUDWIG; **PÉRTILLE, FÁBIO**; GIACHETTO, POLIANA FERNANDA; BRASSALOTI, RICARDO AUGUSTO; MOROSINI, NATÁLIA SILVA; ZIMMER, RALF; COUTINHO, LUIZ LEHMANN. Genome-Wide Detection of CNVs and Their Association with Meat Tenderness in Nelore Cattle. *Plos One*. 2016. DOI: 10.1371/journal.pone.0157711 [OA]
 19. **PÉRTILLE, FÁBIO**; GUERRERO-BOSAGNA, CARLOS; SILVA, VINICIUS HENRIQUE DA; BOSCHIERO, CLARISSA; NUNES, JOSÉ DE RIBAMAR DA SILVA; LEDUR, MÔNICA CORRÊA; JENSEN, PER; COUTINHO, LUIZ LEHMANN. High-throughput and Cost-effective Chicken Genotyping Using Next-Generation Sequencing. *Scientific Reports*. 2016. DOI: 10.1038/srep26929 [OA]
 20. POSSAMAI, MARI HELEN PAGANI; BATTILANA, JAQUELINE; PALUDO, EDIANE; HERKENHOFF, MARCOS EDGAR; **PÉRTILLE, FÁBIO**; LIMA-ROSA, CARLOS ANDRÉ DA VEIGA. Genotypic characterization of ten microsatellite loci in two Brazilian free range (Caipira) chicken lines. *Ciência Rural*. 2015. DOI: 10.1590/0103-8478cr20140132 [OA]
 21. **PÉRTILLE, FÁBIO**; ZANELLA, RICARDO.; FELÍCIO, ANDREZZA M.; LEDUR, MONICA C.; PEIXOTO, JANE O.; COUTINHO, LUIZ L. Identification of polymorphisms associated with production traits on chicken (*Gallus gallus*) chromosome 4. *Genetics and Molecular Research*. 2015. DOI: 10.4238/2015.September.9.11.

PEER-REVIEWED BOOK CHAPTERS

1. COUTINHO, LUIZ L.; BOSCHIERO, CLARISSA; GODOY, T. F.; MOREIRA, GABRIEL. C. M.; **PÉRTILLE, FÁBIO**; CESAR, ALINE S. M.; POLETI, MIRELE. D. Genômica In: Fisiologia de Aves Comerciais.1 ed.Jaboticabal : FINEP, 2017, v.1, p. 647-671.

ORGANIZING EVENTS, CONFERENCES, EXHIBITIONS, AND FAIRS

1. Seminars on: "Novel Tools for the Assessment of Welfare in Farm Animals", Linköping, SE, 2020.
2. I Workshop On Omics Strategies Applied To Livestock Science. Piracicaba/SP, Brazil, 2017.
3. Technological Innovation Fair for Sustainable Agribusiness. Piracicaba/SP, Brazil, 2017.
4. Comparative Studies in Pre-natal Programming - Satellite Meeting to the International Society for Applied Ethology, Aarhus, Denmark, 2017.
5. II Field Day of the Department of Animal Science research activities. Piracicaba/SP, Brazil, 2014.
6. 21° USP International Scientific Initiation Symposium. Piracicaba/SP, Brazil, 2013.
7. 50th Annual Meeting of Brazilian Society of Animal Science. Piracicaba/SP, Brazil, 2013.
8. International Symposium on Scientific Initiation at USP. Piracicaba/SP, Brazil, 2011.

ROLE IN SCIENTIFIC COMITEE

1. Assessor for scientific advice to São Paulo Research Foundation (FAPESP), 2021.
2. Reviewer of scientific papers submitted to the “XII Simpósio Brasileiro de Melhoramento Animal”. Ribeirão Preto/SP, Brazil, 2017.

PEER-REVIEWED CONFERENCE CONTRIBUTIONS

Expanded abstracts published in conference proceedings

1. ARIEL, EMILIANO VIDELA RODRIGUEZ; **PÉRTILLE, FABIO**; GUERRERO-BOLSAGNA, CARLOS; MITCHELL, JOHN B.O; JENSEN, PER AND SMITH, V.ANNE. Practical application of a Bayesian network approach to poultry epigenetics and stress. BMAW (15th Bayesian Modeling Applications Workshop), 2021.
2. PIZZOL, MARIANE S. DAL; IBELLI, ADRIANA M. G; MORÉS, NELSON; MORÉS, MARCOS ANTONIO ZANELLA; PEIXOTO, JANE DE OLIVEIRA; SAVOLDI, IGOR RICARDO; **PÉRTILLE, FABIO**; MARIANI, PILAR DRUMMOND SAMPAIO CORRÊA; COUTINHO, LUIZ LEHMMAN; LEDUR, MÔNICA CORRÊA. Perfil De Metilação Diferencial No Cromossomo 6 De Suínos Normais E Afetados Com Osteocondrose *Latens*. In: 13ª Jornada de Iniciação Científica – JINC, 23th October, 2019. Concórdia, SC, Brazil.
3. PETRINI, JULIANA; LUNG, LAIZ. H. S; RODRIGUEZ, MARI A. P; **PÉRTILLE, FABIO**; CASSOLI, L D; MACHADO, P F; COUTINHO, LUIZ LEHMANN; MOURAO, GERSON B. Genome-wide association study for milk total unsaturated fatty acids in Brazilian Holstein. In: 10th World Congress of genetic applied to livestock production, 2014, Vancouver. Proceedings of 10th World Congress of genetic applied to livestock production, 2014.
4. ROVADOSCKI, GREGORY A; SILVA, F L; **PÉRTILLE, FABIO**; PRIOLI, RENATO A; SAVINO, V J M; COELHO, A. A. D; MOURAO, GERSON B. Ajuste de modelos não lineares em linhagem de frango caipira. In: 57ª Reunião Anual da RBras, 2012, Piracicaba/SP. Anais do RBRAS, 2012.
5. POSSAMAI, MARI H P; HERKENHOFF, M E; **PÉRTILLE, FABIO**; PALUDO, EDIANE; BATTILANA, JAQUELINE; LIMA-ROSA, CARLOS AV. ESTUDO DO POLIMORFISMO EM DUAS POPULAÇÕES DE LINHAGENS DE GALINHAS CAIPIRAS BRASILEIRAS UTILIZANDO-SE TRÊS MARCADORES SSR. In: Congresso Brasileiro de Medicina Veterinária, 2011, Florianópolis/SC. Revista de Ciências Agro veterinárias, 2011.
6. POSSAMAI, MARI H P; HERKENHOFF, MARCOS E; **PÉRTILLE, FABIO**; PALUDO, EDIANE; BATTILANA, JAQUELINE; LIMA-ROSA, CARLOS AV. Estudo do polimorfismo genético através da análise do dna mitocondrial em linhagens comerciais de galinhas caipiras. In: Congresso Brasileiro de Medicina Veterinária, 2011, Florianópolis/SC. Revista de Ciências Agro veterinárias, 2011.
7. SOUZA, M A; SILVA, M. V. G. B; COSTA, C N; ATILIO, D; **PÉRTILLE, FABIO**; COUTINHO, LUIZ L. Frequências de variantes alélicas dos genes LGB, OPN, BLAD, DGAT1, CVM e DUMPS. In: 48ª Reunião Anual da Sociedade Brasileira de Zootecnia, 2011, Belém ? PA. Anais da Sociedade Brasileira de Zootecnia, 2011.
8. POSSAMAI, MARI H P; LIMA-ROSA, CARLOS AV; **PÉRTILLE, FABIO**; HERKENHOFF, M.E; NEVES, G.B. Diversidade Genética de Linhagens de Galinhas Caipiras Utilizando Marcadores Moleculares. In: 4º Congresso Nacional de Extensão Universitária/13º Encontro de Atividades Científicas da Unopar, 2010, Londrina/PR. ANAIS DO 4º CONGRESSO NACIONAL DE EXTENSÃO UNIVERSITÁRIA/ 13º ENCONTRO DE ATIVIDADES CIENTÍFICAS DA UNOPAR (CD-ROM) - 2010, 2010.

Abstracts published in conference proceedings

1. **PÉRTILLE, FABIO**; IBELLI, ADRIANA MERCIA GUARATINI; HARIFHARIF, MAJ EL S; POLETI, MIRELE DAIANA; LEDUR, MÔNICA CORRÊA; JENSEN, PER; GUERRERO-BOSAGNA, CARLOS; COUTINHO, LUIZ LEHMANN. Epigenetic biomarks in red blood cells of chickens subjected to the same stress but reared in different biomes. Proceedings of the Animal Welfare Science Symposium, 2019. Ultuna, Uppsala.
2. **PÉRTILLE, FABIO**; MITHEISS, NINA; LØTVEDT, PIA; COUTINHO, LUIZ. L.; JENSEN, PER, AND GUERRERO-BOSAGNA, CARLOS. Unpredictable light schedule causes sex-specific epigenetic and transcriptional changes in the chicken’s pineal gland. Proceedings of the 37th International Society for Animal Genetics Conference. 2019. Lleida, Spain.
3. **PÉRTILLE, FABIO**; MITHEISS, NINA; LØTVEDT, PIA; COUTINHO, LUIZ LEHMANN; JENSEN, PER; GUERRERO-BOSAGNA, CARLOS. Epigenetic and transcriptomic effects of unpredictable light conditions in the pineal glands of chickens. Latsis symposium, 2017. Zurich, Switzerland.
4. **PÉRTILLE, FABIO**; BRANTSÆTER, MARGRETHE; NORDGREEN, JANICKE; COUTINHO, LUIZ LEHMANN; JANCZAK, ANDREW M, JENSEN, PER; GUERRERO-BOSAGNA, CARLOS. DNA methylation profiles in red blood cells of adult hens correlate to their previous rearing conditions. In: 1st Workshop on Omics Strategies Applied to Livestock Science, 2017, Piracicaba. Proceedings of the 1st Workshop on Omics Strategies Applied to Livestock Science, 2017.
5. **PÉRTILLE, FABIO**; BRANTSÆTER, M. ; NORDGREEN, J. ; COUTINHO, LUIZ LEHMANN ; JANCZAK, A. M. ; JENSEN, P. ; GUERRERO-BOSAGNA, C. . Epigenetic marks of rearing conditions detected in red blood cells of adult hens. In: 51st Congress of the International Society for Applied Ethology, 2017, Aarhus. Proceedings of the 51st Congress of the International Society for Applied Ethology, 2017.

6. **FABIO PÉRTILLE**; CLARISSA BOSQUIERO; JOSE RIBAMAR NUNES; VINICIUS H SILVA; CARLOS GUERRERO-BOSAGNA; MONICA C LEDUR; LUIZ L COUTINHO. COST-EFFECTIVE GENOTYPIC CHARACTERIZATION IN CHICKENS USING NEXT-GENERATION SEQUENCING. In: International Symposium on Animal Functional Genomics, 2015, Piacenza. ISAFG 2015 Proceedings, 2015.
7. MOREIRA, GABRIEL. C. M; **PÉRTILLE, FÁBIO**; GODOY, THAIS. F; BRASSALOTI, RICARDO; LEDUR, MONICA. C; COUTINHO, LUIZ L. . Discovery of candidate genes for fatness in chickens based on genotyping with 600K SNP chip in a QTL region. In: 60th Brazilian Congress on Genetics, 2014, Guarujá/SP. Proceedings of 60th Brazilian Congress on Genetics, 2014.
8. PETRINI, JULIANA; SALVIAN, MAYARA; IUNG, LAIZA. H. S; RODRIGUEZ, MARY. A. P; **PÉRTILLE, FÁBIO**; MACHADO, P. F; COUTINHO, LUIZ L; MOURAO, GERSON. B. . Genome-wide association study for lactose content in a Holstein cattle population using Bayesian regression. In: 51o Reunião Anual da Sociedade Brasileira de Zootecnia, 2014, Barra dos Coqueiros/Sergipe. Proceedings of 51o Reunião Anual da Sociedade Brasileira de Zootecnia, 2014.
9. SILVA, VINICIUS. H; REGITANO, LUCIANA. C. A; **PÉRTILLE, FÁBIO**; GIACHETTO, POLIANA F.; COUTINHO, LUIZ L. Identification and validation of copy number variation in Nelore breed and possible association with meat tenderness. In: 34th International Society for Animal Genetics Conference, 2014, Xi'An. Proceedings of 34th International Society for Animal Genetics Conference, 2014.
10. SILVA, VINICIUS H; REGITANO, LUCIANA. C. A; GIACHETTO, POLIANA F; **PÉRTILLE, FÁBIO**; COUTINHO, LUIZ L. CNV study in Nelore with PennCNV software: the control files. In: 50th Annual Meeting of Brazilian Society of Animal Science, 2013, Campinas/SP. The Brazilian Society of Animal Science, 2013.
11. DIAZ, JOANNA. R; IUNG, LAIZA. H. S. ; PETRINI, JULIANA. ; RODRIGUEZ, MARY. A. P; **PÉRTILLE, FÁBIO**; COUTINHO, LUIZ L; MACHADO, P. F; MOURAO, GERSON B. Genome-wide association of polyunsaturated fatty acids in Holstein dairy cattle. In: 50th Annual Meeting of Brazilian Society of Animal Science, 2013, Campinas/SP. The Brazilian Society of Animal Science, 2013.
12. **PÉRTILLE, FÁBIO**.; FELICIO, ANDREZZA. M; ROSARIO, MILOR. F; SILVA, V. H; MANGETTI, T; Silva, N. A; LEDUR, M. C; COUTINHO, LUIZ L. PPARGC1A indel polymorphism is associated with performance and carcass traits in chickens. In: 58° Congresso Brasileiro de Genética, 2012, Foz do Iguaçu/ PR. Anais do Congresso Brasileiro de Genética, 2012.
13. PALUDO, EDIANE; **PÉRTILLE, FÁBIO**; DALLA COSTA, FILIPE A; HERKENHOFF, MARCOS. E; BATTILANA, JAQUE; LIMA-ROSA, CARLOS AV. Polimorfism of the b-1β GENES of the brazilian (BLUE-EGG CAIPIRA) chicken. In: 58o Congresso Brasileiro de Genética, 2012, Foz do Iguaçu/ PR. Resumos do 58o Congresso Brasileiro de Genética, 2012.
14. **PÉRTILLE, FÁBIO**.; TESSMAN, ALEXANDRE L; COUTINHO, LUIZ L; AVILA, V.S; PEIXOTO, JANE. O; COLDEBELLA, A; LEDUR, MONICA. C. Investigation of the LEPR1 A>G polymorphism in the leptin receptor gene in a commercial broiler population. In: 57° Congresso Brasileiro de Genética, 2011, Águas de Lindóia/SP. Resumos do 57° Congresso Brasileiro de Genética, 2011.
15. DALLA COSTA, FILIPE A.; HERKENHOFF, MARCOS E; **PÉRTILLE, FÁBIO**; PALUDO, EDIANE. ; BATTILANA, JAQUE. ; LIMA-ROSA, CARLOS AV. . Analysis of polymorphism in Brazilian caipira's chickens lineages using microsatellites loci. In: Resumos do 57° Congresso Brasileiro de Genética, 2011, Águas de Lindóia SP. Resumos do 57° Congresso Brasileiro de Genética, 2011.
16. LIMA-ROSA, CARLOS AV; DALLA COSTA, FILIPE A; POSSAMAI, MARY H.P. ; HERKENHOFF, MARCOS E. ; **PÉRTILLE, FÁBIO**; PALUDO, EDIANE; COSTA FILHO, J.; BATTILANA, JAQUELINE. Genetic diversity of the control region (D-loop) in mitochondrial DNA in caipiras chickens lineages. In: 57° Congresso Brasileiro de Genética, 2011, Águas de Lindóia/SP. Resumos do 57° Congresso Brasileiro de Genética, 2011.
17. LIMA-ROSA, CARLOS AV; HERKENHOFF, MARCOS. E; POSSAMAI, MARY H.P; PALUDO, EDIANE; **PÉRTILLE, FÁBIO**; DALLA COSTA, FILIPE A. Estudo do polimorfismo genético através do emprego de microsatélites em linhagens de galinhas caipiras brasileiras. In: I CICPG e 20 SIC, 2010, Florianópolis/SC. ANAIS I CICPG E 20 SIC, 2010.
18. LIMA-ROSA, CARLOS AV; **PÉRTILLE, FÁBIO**; DALLA COSTA, FILIPE A. ; PALUDO, EDIANE ; HERKENHOFF, MARCOS E. . O Polimorfismo da Região Controladora do mtDNA (Alça-D) de Galinhas Caipiras Brasileiras de Ovos Azuis. In: 20o Seminário de Iniciação Científica (SIC) e I Congresso de Iniciação Científica e Pós-Graduação (CICPG), 2010, Florianópolis. Anais do SIC, 2010.
19. LIMA-ROSA, CAV; HERKENHOFF, MARCOS E. ; POSSAMAI, MARY H.P. ; PALUDO, EDIANE ; **PÉRTILLE, FÁBIO**. ; DALLA COSTA, F.A. ; COSTA FILHO, J. . ANÁLISE DA VARIABILIDADE GENÉTICA DA REGIÃO CONTROLADORA DO MTDNA (ALÇA-D) EM LINHAGENS INDUSTRIAIS DE GALINHAS CAIPIRAS. In: CICPG E 20 SIC - 2010, 2010, Florianópolis/SC. ANAIS I CICPG E 20 SIC - 2010, 2010.
20. **PÉRTILLE, FABIO**.; PALUDO, EDIANE; HERKENHOFF, MARCOS. E. ; FONTEQUE, G. V. ; FREITAS, L.B. ; SALZANO, F.M.; Lima-Rosa, CAV. Variabilidade Genética da Região Controladora do mtDNA (alça-D) de Galinhas Caipiras Brasileiras. In: 55° Congresso Brasileiro de Genética, 2009, Águas de Lindóia, SP. Anais do 55° Congresso Brasileiro de Genética, 2009.
21. LIMA-ROSA, CARLOS AV ; FONTEQUE, G. V. ; HERKENHOFF, MARCOS E. ; PALUDO, EDIANE. ; **PÉRTILLE, FABIO**. . Análise de três locos de microsatélites em uma amostra de galinhas caipiras brasileiras de ovos azuis. In: 55° Congresso Brasileiro de Genética, 2009, Águas de Lindóia, SP. Anais do 55° Congresso Brasileiro de Genética, 2009.
22. PALUDO, EDIANE; **PÉRTILLE, FABIO**. ; HERKENHOFF, MARCOS. E. ; FONTEQUE, G. V. ; Lima-Rosa, CARLOS AV. . Variabilidade dos genes β-Lb do MHC da galinha (Gallus gallus domesticus) em aves caipiras brasileiras. In: 55° Congresso Brasileiro de Genética, 2009, Águas de Lindóia, SP. Anais do 55° Congresso Brasileiro de Genética, 2009.

Work Presentations in conference

1. **PÉRTILLE, FÁBIO**. Putative epigenetic biomarkers of stress in the red blood cells of chickens reared across different biomes. In Seminars on: "Novel Tools for the Assessment of Welfare in Farm Animals", Linköping, SE, 2020 (Oral).

2. **PÉRTILLE, FÁBIO**; IBELLI, ADRIANA MERCIA GUARATINI; HARIFHARIF, MAJ EL S; POLETI, MIRELE DAIANA; LEDUR, MÓNICA CORRÊA; JENSEN, PER; GUERRERO-BOSAGNA, CARLOS; COUTINHO, LUIZ LEHMANN. Epigenetic biomarkers in red blood cells of chickens subjected to the same stress but reared in different biomes. In: the Animal Welfare Science Symposium, 2019. Ultuna, Uppsala (Oral).
3. **PÉRTILLE, FÁBIO**; MITHEISS NINA; LØTVEDT, PIA; COUTINHO, LUIZ LEHMANN; JENSEN, PER; AND GUERRERO-BOSAGNA, CARLOS. Unpredictable light schedule causes sex-specific epigenetic and transcriptional changes in the chicken's pineal gland. In the 37th International Society for Animal Genetics Conference. 2019. Lleida, Spain (Poster).
4. **PÉRTILLE, FÁBIO**; MITHEISS NINA; LØTVEDT, PIA; COUTINHO, LUIZ LEHMANN; JENSEN, PER; AND GUERRERO-BOSAGNA, CARLOS. Epigenetic and transcriptomic effects of unpredictable light conditions in the pineal glands of chickens. In: Latsis symposium, 2017. Zurich, Switzerland (Poster).
5. **PÉRTILLE, FÁBIO**; BRANTSÆTER, MARGRETHE; NORDGREEN, JANICKE; COUTINHO, LUIZ LEHMANN; JANCZAK, ANDREW M, JENSEN, PER; GUERRERO-BOSAGNA, CARLOS. DNA methylation profiles in red blood cells of adult hens correlate to their previous rearing conditions. In: 1st Workshop on Omics Strategies Applied to Livestock Science, 2017, Piracicaba (Poster).
6. **PÉRTILLE, FÁBIO**; BRANTSÆTER, MARGRETHE; NORDGREEN, JANICKE; COUTINHO, LUIZ LEHMANN; JANCZAK, ANDREW M, JENSEN, PER; GUERRERO-BOSAGNA, CARLOS. Epigenetic marks of rearing conditions detected in red blood cells of adult hens. In: 51st Congress of the International Society for Applied Ethology, 2017, Aarhus (Poster).
7. **PÉRTILLE, FÁBIO**; BOSQUIERO, CLARISSA; NUNES, JOSÉ R; SILVA, VINICIUS H; GUERRERO-BOSAGNA, CARLOS; LEDUR, MONICA C; COUTINHO, LUIZ L. Cost-effective genotypic characterization in chickens using next-generation sequencing. In: International Symposium on Animal Functional Genomics, 2015, Piacenza. ISAFG 2015 (Poster).
8. **PÉRTILLE, FÁBIO**; FELICIO, ANDREZZA M; ROSARIO, MILLOR F; SILVA, VINICIUS H; MANGETTI, TASSIA; SILVA, NIRLEI A; LEDUR, MONICA C; COUTINHO, LUIZ L. PARGC1A indel polymorphism is associated with performance and carcass traits in chickens. In: 58° Congresso Brasileiro de Genética, 2012, Foz do Iguaçu/ PR. (Poster).
9. **PÉRTILLE, FÁBIO**; TESSMAN, ALEXANDRE L; COUTINHO, LUIZ L; AVILA, V.S; PEIXOTO, JANE. O; COLDEBELLA, A; LEDUR, MONICA. C. . Investigation of the LEPR1 A>G polymorphism in the leptin receptor gene in a commercial broiler population. In: 57° Congresso Brasileiro de Genética, 2011, Águas de Lindóia/SP (Poster)
10. **PÉRTILLE, FÁBIO**. Genetic Variability of the mtDNA control region (D-loop) of free-range Brazilian chickens. In the XIX Scientific Initiation Seminar of Agrarian sciences. From Center for Agroveterinary Sciences (CAV), University of Santa Catarina (UDESC), Brazil, 2009 (Oral).
11. **PÉRTILLE, FÁBIO**. Genetic Variability of the mtDNA control region (D-loop) of free-range Brazilian chickens. In the 19th UDESC Scientific Initiation Seminar. From Center for Agroveterinary Sciences (CAV), University of Santa Catarina (UDESC), Brazil, 2010 (Oral).
12. **PÉRTILLE, FÁBIO**; PALUDO, EDIANE; HERKENHOFF, MARCOS. E; FONTEQUE, G. V; FREITAS, L.B; SALZANO, F.M; Lima-Rosa, CARLOS AV. Variabilidade Genética da Região Controladora do mtDNA (alça-D) de Galinhas Caipiras Brasileiras. In: 55° Congresso Brasileiro de Genética, 2009, Águas de Lindóia, SP (Poster).

POPULAR SCIENCE PUBLICATIONS

1. **PÉRTILLE, FÁBIO**. Performance evaluation and stress diagnosis in chickens (Content available in: Español (Spanish) Português (Portuguese (Brazil))). *AviNews magazine*, may, 2018. Home page: <https://avicultura.info/en/performance-evaluation-and-stress-diagnosis-in-chickens/>

APPEARANCES ON NEWS ARTICLES

1. Stimulerande uppväxtmiljö ger friskare grisar. *Extrakt.se*. February 2022. Home page: <https://www.extrakt.se/stimulerande-uppvaxtmiljo-ger-friskare-grisar/>
2. Stress och epigenetik. *Epigenetik.se*. November 2020. Home page: <https://epigenetik.se/stress-och-epigenetik/>
3. Genförändringar upptäckta hos stressade kycklingar. *Forskning.se*. November, 2020. Home page: <https://www.forskning.se/2020/11/13/genforandringar-upptackta-hos-stressade-kycklingar/>
4. Långvarig stress gav genförändringar. *Kurera För friskvård och naturlig hälsa*. November 2020. Home page: <https://kurera.se/langvarig-stress-gav-genforandringar/>
5. Ny metod för att upptäcka långvarig stress hos kycklingar. *Livsmedel i fokus*. November, 2020. Home page: <https://www.livsmedelifokus.se/ny-metod-for-att-upptacka-langvarig-stress-hos-kycklingar/>
6. LÅNGVARIG STRESS ORSAKAR GENFÖRÄNDRINGAR I KYCKLINGAR. *DJUR & NATUR/DJURHÅLLNING/DJURSKYDD/ETIK & MORAL/UPPSALA UNIVERSITET*. November, 2020. Home page: <https://luthagsnytt.se/arkiv/14249>
7. Chronic stress causes genetic changes in chickens. *Uppasala PRESS & MEDIA*. November 2020. Home page: <https://www.uu.se/en/press/press-release/?id=5256&typ=pm>
8. Chronic stress causes genetic changes in chickens. *Feedstuffs*. November, 2020. Home page: <https://www.feedstuffs.com/nutrition-health/chronic-stress-causes-genetic-changes-chickens>
9. Biomarkers Reveal Stress Level in Chickens. *LAB WORLDWIDE*. November, 2020. Home page: <https://www.lab-worldwide.com/biomarkers-reveal-stress-level-in-chickens-a-981199/>
10. Polli sottoposti a stress mostrano cambiamenti genetici. *Notizie scientifiche*. Home page: <https://notiziescientifiche.it/polli-sottoposti-a-stress-mostrano-cambiamenti-genetici/>
11. Stresul cronic poate duce la modificări genetice la găini. *Bio infomedia*. Home page: <https://www.bio-infomedia.ro/articole/animale/stresul-cronic-poate-duce-la-modificari-genetice-la-gaini>

12. Uma ferramenta para desvendar mistérios. <https://www.upf.br/Ingresso/Noticias/uma-ferramenta-para-desvendar-misterios?fbclid=IwAR2rwdZLnNQxt9KKvxTJJfy7GwpsTaMi6FOg2vMp6nyFIPqgdfqo1ETvoM>. UPFNews, April, 2020.
13. Chicken study reveals that environmental factors, not just chance, could drive species evolution. *PHYS.ORG*, 10th September, 2019. Home page: <https://phys.org/news/2019-09-chicken-reveals-environmental-factors-chance.html>
14. Pesquisador que atuou na Universidade de Linköping recebe Prêmio Capes de Tese, 2018. Home page: <http://blog.liu.se/brasileiros/2018/01/18/pesquisador-que-atuou-na-universidade-de-linkoping-recebe-premio-capes-de-tese-2017/>
15. Bolsista da Capes publica artigo na revista Scientific Reports. Home page: <https://www.gov.br/capes/pt-br/assuntos/noticias/bolsista-da-capes-publica-artigo-sobre-sequenciamento-genetico-na-revista-scientific-reports>.
16. Brasiliansk gäst doktorand fick fint pris. Linköping Universitet Notiser, 2017. Home page: <http://blog.liu.se/notiser/2017/11/28/brasiliansk-gastdoktorand-fick-fint-pris/>
17. Esalq conquista 3 prêmios de tese de doutorado. Jornal de Piracicaba. Piracicaba, 2017. Home page: http://www.jornaldepiracicaba.com.br/mobile/cidade/2017/12/esalq_conquista_3_premios_de_tese_de_doutorado

PATENT

Nothing to declare

GRANTS AWARDED

Main applicant in Research Project granted by **FORMAS** (Swedish Research Agency for Sustainable Development): 'Are cognitive effects derived from an early life barren environment reversible? An integrative approach in pigs to understand neuro-epigenetic reversibility' 2021-2024. Grant amount: € 400,000.

Investigator in Research Project granted to Dr. José Jimenez Chilaron by **John Templeton Foundation** (USA): Non-genomic Inheritance of environmentally-induced traits: Deciphering epigenetically-driven genetic variation in mammals' 2021-2024. Grant amount: € 194,500.

Investigator in H2020 Research Innovation Action: 'GeroNIMO - Genome and Epigenome Enabled Breeding in Monogastrics' 2021-2026. Sub-award to Uppsala University: € 500,000.

Investigator in Research Project granted to Dr. Carlos Guerrero-Bosagna by **Vetenskapsrådet** (Swedish Research Agency): Lifelong and intergenerational mitochondrial, physiological and epigenomic effects of early metabolic challenges' 2020-2022. Grant amount: € 300,000

Investigator in the Research Project granted to Dr. Carlos Guerrero Bosagna by **FORMAS** (Swedish Research Agency for Sustainable Development): 'Epigenetic tools to identify stress and exposure to detrimental conditions in production animals' 2019-2021. Grant amount: € 300,000.

Investigator in the Research project granted to Dr. Michael Toscano by Swiss National Science Foundation: 'Exploring the proximate factors affecting movement and location patterns and their relation to health and welfare in poultry' 2020-2023. Grant amount: CHF 600,000. Subaward amount to Linköping University: CHF 100,000.

Main applicant in a Short Term Scientific Mission (STSM) granted by **European Cooperation In Science & Technology Agency**: Action number: CA15224 - Identifying causes and solutions of keel bone damage in laying hen - Epigenetic marks to assess welfare and behavior in laying hens.' 2019 (1 week). Grant amount: € 1000.

Co-applicant in the Research project granted to Dra. Luciana Correia de Almeida Regitano by **FAPESP, Brazil**: The Nelore hologenome: implications in beef quality and feed efficiency' 2019-2023. Grant amount: € 400,000

Main applicant in a Post doc Research project in Brazil granted by **São Paulo Research Foundation (FAPESP), Brazil**: Epigenetic analysis of methylation profile of chickens submitted to different stress conditions in the livestock production environment' 2017-2020. Grant amount: € 40,480.

Main applicant in a Research Internships Abroad (BEPE) in Sweden granted by **FAPESP, Brazil**: Methylome and transcriptome analysis of chickens subjected to illumination stress in the livestock production environment' 2019-2020. Grant amount: € 52,450.

Co-applicant in the Research project granted to Dr. Luiz Lehmann Coutinho by **CNPQ, Brazil**: Identification of regulatory regions of gene expression in cattle' 2019-2021. Grant amount: € 23,000.

Co-applicant in the Research project granted to Dra. Mirele Daiana Poleti by **CNPQ, Brazil**: Quantification e validation of protein biomarkers for meat tenderness, deposition, and composition of intramuscular fat in bovines of different genetic groups' 2019-2021. Grant amount: € 5,800

Main applicant in a Doctoral Candidate Sandwich Grant performed Abroad (PDSE) in SW granted by **Coordination for the Improvement of Higher Education Personnel (CAPES), Brazil**: Genetic variations detected in the domestic chicken and its associations with quantitative traits using RAD-SEQ' 2015-2016. Grant amount: € 24,000.

Main applicant in a Master Research project in Brazil granted by **FAPESP, Brazil**: Identification of polymorphisms associated with production traits on chicken (*Gallus gallus*) chromosome 4' 2012-2013. Grant amount: € 7,000

Main applicant in a Scientific research granted by **National Council for Scientific and Technological Development (CNPQ), Not Sweden - Higher education institutes, Brazil**: Identification of polymorphisms associated with production traits on chicken (*Gallus gallus*) chromosome 4' 2011. Grant amount: € 1,200

Main applicant in a Scientific research granted by **Institutional Scientific Initiation Scholarship Program (PROBIC), Brazil**: Genetic variability of the mtDNA controlling region (d-loop) of Brazilian caipiras chickens' 2008. Grant amount: € 1,200

RESEARCH INFRASTRUCTURE USED AND LINKED PROJECTS

Data Processing from SNIC (Swedish National Infrastructure for Computing): SNIC 2021/23-69 - DNA methylation analyses in farm animals in response to stress (2018-present)

Data storage from SNIC: uppstore2017266 - DNA methylation analyses in farm animals in response to stress (2018-present)

Data Processing from SNIC: SNIC 2017/7-390 - Genomic and epigenomic analyses of PST1 reduced genomes (2017-present)

Data storage from SNIC: LiU-2016-00020-17 - DNA methylation assessment of mitochondrial DNA in humans and chickens (2016-2018)

Data Sequencing from NGI (National Genomics Infrastructure), Sweden: DNA sequencing and sequencing library preparation services. (2015-present)

Data storage from SNIC: b2014219 - Avian genomics (2014-2018)

Data storage and processing from SGI Animal biotechnology laboratory ESAL-USP, BR: All projects in partnership with the University of São Paulo, Brazil (2013-present)

REVIEWING FOR SCIENTIFIC JOURNALS AND FUNDING AGENCIES

Scientific journals: Animals MDPI, Frontiers in Veterinary Science, PlosOne, Molecular Biology Reports, Animal Behaviour, Genome, Animal Genetics, Frontiers in Genetics, Livestock Science, Journal of Experimental Biology,

Editorial Board member: Animals MDPI

Funding agencies: São Paulo Research Foundation (FAPES).

INVITED SEMINARS AT INSTITUTIONS AND CONFERENCES

Invited speaker at the **Novel Tools for the Assessment of Welfare in Farm Animals**’’ held at the Linköping University (IFM-LIU). Seminar title: Putative epigenetic biomarkers of stress in the red blood cells of chickens reared across different biomes (Linköping, Sweden, 2020).

Invited speaker at the **IFM Biology SEMINAR SERIES**’’ held at the Linköping University (IFM-LIU). Seminar title: “GEDI-MeDIP: From development to potential” (Linköping, Sweden, 2020).

Invited speaker at the **1st Workshop on Omics Strategies Applied to Livestock Science**’’ held at the University of São Paulo (IFM-LIU). Seminar title: Unraveling important genetic associations and differential methylation profiles using reduced genome sequencing in chickens (Piracicaba, Brazil, 2017).

Invited speaker at the **IFM Biology SEMINAR SERIES**’’ held at the Linköping University (IFM-LIU). Seminar title: “Biotechnology applied to animal breeding” (Linköping, Sweden, 2015).

EVENT CHAIR

Event chair to Dr Carlos Guerrero-Bosagna at the **Luiz de Queiroz College of Agriculture of the University of Sao Paulo** to present the seminar: Epigenetics: from Nature to Nurture and Beyond by (Piracicaba, SP, Brazil, 2018).

Event chair at **1st Workshop on Omics Strategies Applied to Livestock Science**’’ held at the University of São Paulo (IFM-LIU)(Piracicaba, Brazil, 2017).

Pedagogical achievements

INVITED SEMINARS AT INSTITUTIONS AND CONFERENCES

Invited speaker at the **Novel Tools for the Assessment of Welfare in Farm Animals**” held at the Linköping University (IFM-LIU). Seminar title: Putative epigenetic biomarkers of stress in the red blood cells of chickens reared across different biomes (25min, Linköping, Sweden, 2020).

Invited speaker at the **IFM Biology SEMINAR SERIES**” held at the Linköping University (IFM-LIU). Seminar title: “GEDI-MeDIP: From development to potential” (2h, Linköping, Sweden, 2020).

Invited speaker at the **Animal Welfare Science Symposium**” held at the SLU Campus Ultuna (Uppsala, SE). Seminar title: “Epigenetic biomarkers in red blood cells of chickens subjected to the same stress but reared in different biomes” (15min, Uppsala, Sweden, 2019).

Invited speaker at the **Comparative Studies in Pre-natal Programming**” hosted as a Satellite Workshop, associated with the 51th Conference of International Society for Applied Ethology. Seminar title: GBS-MeDIP: From development to potential (2h, Aarhus University, Denmark, 2017).

Invited speaker at the **1st Workshop on Omics Strategies Applied to Livestock Science**” held at the University of São Paulo (IFM-LIU). Seminar title: DNA methylation profiles in red blood cells of adult hens correlate to their previous rearing conditions (2h, Piracicaba, Brazil, 2017).

Invited speaker at the **IFM Biology SEMINAR SERIES**” held at the Linköping University (IFM-LIU). Seminar title: “Biotechnology applied to animal breeding” (2h, Linköping, Sweden, 2015).

EVENT CHAIR

Event chair to Dr Carlos Guerrero-Bosagna at the **Luiz de Queiroz College of Agriculture of the University of Sao Paulo** to present the seminar: Epigenetics: from Nature to Nurture and Beyond by (Piracicaba, SP, Brazil, 2018).

Event chair at **1st Workshop on Omics Strategies Applied to Livestock Science**” held at the University of São Paulo (IFM-LIU)(Piracicaba, Brazil, 2017).

TEACHING ASSISTANSHIPS

Teaching assistant for the undergraduate/graduate course ‘Animal Science’. Course coordinated by Dr. Sila da Silva Carneiro, University of Sao Paulo (Piracicaba, SP, BR, 2016).

TEACHING EXPERIENCES

Theory class (4h) to the course of Bioinformatics of the Graduate Program in Bio experimentation, Faculty of Agronomy and Veterinary Medicine at the University of Passo Fundo., BR (Level 2-3) : Epigenome Analysis. In Portuguese to ~10 students.

Practice class (4h) to the course of Bioinformatics of the Graduate Program in Bio experimentation, Faculty of Agronomy and Veterinary Medicine at the University of Passo Fundo., BR (Level 2-3) : Epigenome Analysis. In Portuguese to ~10 students.

Science exhibition (8h) to the ESALQSHOW – Technological Innovation Fair for Sustainable Agribusiness (Level 1-2-3) : Speaker. In Portuguese to ~1000 students.

Lecture (3h) to the Biotechnology Course at the Federal University of Latin American Integration (Level 2) : “Applied genetics and epigenetics to breeding and animal well-being. In English to ~15 students.

Theory class (4h) to the ZQP5848 - Usual methods in molecular biology applied to animal science (Level 2-3) : “Next-generation sequencing for genomic and epigenomic analysis”. In Portuguese to ~15 students.

Theory class (2h) to the PPGBioexp-Bioexperimentation (Level 2-3) : “Unraveling Important Genetic Associations and Differential Methylation Profiles Using Reduced Chicken Genome Sequencing”. In Portuguese to ~25 students.

Theory class (1h:50min) to the LCB-1500 - Biotechnology Seminars I (Level 2-3) : “Biotechnology applied to animal breeding”. In Portuguese to ~40 students.

ACADEMIC MENTORING

Assistant Supervisor for Masters student Denise Beatrice Mäkinen for **Thesis project** at the Masters program in Experimental and Medical Biosciences, Campus University Hospital, Linköping University. Main Supervisor: Carlos Guerrero-Bosagna (Linköping, Sweden; 2021?)

Assistant Supervisor for Masters student Arthur Nery da Silva, IFM Biology, Linköping University. Main Supervisor: Professor Adroaldo Zanella (Pirassununga, Brazil; 2021).

Assistant Supervisor for Masters student Emil Johansson for **Thesis project** at the Masters program in Experimental and Medical Biosciences, Campus University Hospital, Linköping University. Main Supervisor: Carlos Guerrero-Bosagna (Linköping, Sweden; 2021)

Assistant Supervisor for Masters student Sara Söderqvist for **Thesis project** at the Masters program in Experimental and Medical Biosciences, Campus University Hospital, Linköping University. Main Supervisor: Carlos Guerrero-Bosagna (Linköping, Sweden; 2021)

Assistant Supervisor for Masters student Erik Järstråat for **Thesis project** at the Masters program in Experimental and Medical Biosciences, Campus University Hospital, Linköping University. Main Supervisor: Carlos Guerrero-Bosagna (Linköping, Sweden; 2021)

Assistant Supervisor for Undergrad Honors Thesis of the guest student Arthur Nery da Silva at IFM Biology, Linköping University. Main Supervisor: Professor Adroaldo Zanella (Pirassununga, Brazil; 2020).

Assistant Supervisor for PhD student Ann-Sofie Sundman at IFM Biology, Linköping University. Main Supervisor: Professor Per Jensen (Linköping, Sweden; 2020).

Supervisor for Scientific Initiation student Rafael Henrique Staiger at Animal Science, College of Agriculture “Luiz de Queiroz”, University of São Paulo (Piracicaba, Brazil, 2020).

Assistant Supervisor for PhD student José de Ribamar S. Nunes at at Animal Science, College of Agriculture “Luiz de Queiroz”, University of São Paulo(São Paulo, Brazil (2020). Main Supervisor: Professor Luiz Lehmann Coutinho (Piracicaba, Brazil, 2017).

Assistant Supervisor for PhD student Shiva Rezaei at IFM Biology, Linköping University. Main Supervisor: Professor Carlos Guerrero-Bosagna (Linköping, Sweden; 2017).

Assistant Supervisor for PhD student Patricia Tatemoto a guest student at IFM Biology, Linköping University. Main Supervisor: Professor Adroaldo Zanella (Pirassununga, Brazil; 2017).

Assistant Supervisor to Masters student Tom Prakash (University of Applied Sciences, Vienna, Austria) for **Thesis project** in the Masters program in Experimental and Medical Biosciences, Campus University Hospital, Linköping University. Main Supervisor: Professor Carlos Guerrero-Bosagna (Linköping, Sweden; 2016).

Assistant Supervisor to Masters student Nina Mittheiss (University of Applied Sciences, Vienna, Austria) for **Thesis project** in the Masters program in Experimental and Medical Biosciences, Campus University Hospital, Linköping University. Main Supervisor: Professor Carlos Guerrero-Bosagna (Linköping, Sweden; 2016).

Assistant Supervisor for Undergrad Honors Thesis of the student Camila Ugalde Soria Galvarro at IFM Biology, Linköping University. Main Supervisor: Professor Carlos Guerrero-Bosagna (Linköping, Sweden; 2016).

Assistant Supervisor for Undergrad Honors Thesis of the student Karen Bascón Cardozo at IFM Biology, Linköping University. Main Supervisor: Professor Carlos Guerrero-Bosagna (Linköping, Sweden; 2016).

Assistant Supervisor to Masters student Sofia Eleftheriadis for **Thesis project** at the Masters program in Experimental and Medical Biosciences, Campus University Hospital, Linköping University. Main Supervisor: Professor Carlos Guerrero-Bosagna (Linköping, Sweden; 2015)

PEDAGOGICAL EDUCATION

*LZT5818-3/1 Preparação Pedagógica em Ciência Animal e Pastagens
(Pedagogical Preparation in Animal Science and Pastures)

Start: 15/03/2013

End: 27/06/2013

Workload: 45 hours, Credits: 3

Grade: A, Frequency: 100%

PEDAGOGICAL SEMINARS/CONFERENCES

*Participation in the I Pedagogical Preparation Workshop of CENA (Center for Nuclear Energy in Agriculture, USP). Piracicaba, SP, BR, 27th October 2017.

PEDAGOGICAL DEVELOPMENT WORK

* LZT0100 – Zootecnia Geral/ Estágio de Monitoria
(Animal Science, Mentoring Internship)

Start: 01/02/2016

End: 30/06/2016

Workload: 120 hours

ADMINISTRATIVE MERITS

Staff responsibility

I am currently responsible for the organization of department meetings at Linköping University, and I am part of the “Work Environment Team” of the E-Tox group at Uppsala University.

I take staff responsibilities very seriously, such as organization of the common bench; replacing materials and reagents; organizing practical classes for teachers; organizing scientific events; contacting private companies or partner institutions; negotiating with other departments; and fixing broken equipment like printers, freezers, ice machines, door locks, pipettes, and so on. I usually contact the person in charge once, and – depending on the feedback – I then proactively seek to resolve the problem, in friendly manner. There are no personal disagreements registered in my *dossier*. Furthermore, if overly proactive behavior is not welcome (for security reasons, for example), I can easily re-adapt.

Budget responsibility

I have always been responsible for the budgets of projects for which I was the main applicant, and have always proactively assisted the budget holders of those projects for which I was co-applicant or colleague. In October 2020, I took an LIU Financial System Purchasing and Procurement course (RAINDANCE). Since then I have held budgetary responsibilities.

Development responsibilities

Since 2015, I have been responsible for training staff in research groups around the world, both in laboratory practices and in bioinformatics data analysis obtained through application of the GBS-MeDIP technique, which I co-founded. I am also responsible for training in other laboratory techniques, mainly involving DNA or RNA sequencing on Illumina platforms, and in analysis of data generated by these approaches.

Note:

The GBS-MeDIP method will be the main method employed in a new **H2020 consortium** project called “Genome and Epigenome Enabled Breeding in Monogastrics” (GEroNIMO), as well as other two approved research projects in which I am collaborating: ‘Non-genomic inheritance of environmentally-induced traits: Deciphering epigenetically-driven genetic variation in mammals’ funded by the **Templeton Foundation**, and “Factors influencing the behavioral development and variation in movement patterns across laying hens and their association to animals’ health, with a focus on stress exposure early in life”, funded by the **Swiss National Science Foundation (SNF)**. I will also be responsible for training staff in these projects.

DECISION-MAKING AND LEADERSHIP

A leader is someone who engages and inspires the team. I am a very enthusiastic researcher. I think this enthusiasm is reflected by the people I coach. I have always been willing to take on certain responsibilities within the group as a leader; for example, in organizing or promoting seminars, get-togethers, retreats, and so on. Today, all decisions within my group regarding benchtop or bioinformatics analysis, receive my approval, after that of my direct superior.

EXPERIENCE OUTSIDE THE UNIVERSITY/COLLEGE ENVIRONMENT

Trainee in the Laboratory of Molecular Diagnosis of São Paulo State University (UNESP), Brazil (09/2010–10/2010)

Trainee in the Laboratory of Molecular Biology in EMBRAPA Swine and Poultry (Brazilian Agriculture Research Agency, Concórdia, SC, Brazil (07/2010–09/2010).

Trainee in the poultry production area – Brazil Foods S/A (BRF) (03/2010–04/2010)

Trainee in reproductive management of pigs at the Multiplier Swine Farm – MASTER (Chapecó, SC) (2008–2009)

Trainee in Inspection of Animal Products at the Integrated Agricultural Development Company of Santa Catarina State (CIDASC), Brazil (2008).

Trainee in Dairy Cattle at UDESC, Brazil (2006).

Trainee in Animal Products Inspection at the Livestock and Food Supply Agency of the Brazilian Ministry of Agriculture (MAPA/DF, Brazil) (2006)

***CO-OPERATION WITH AND INFORMATION DIRECTED TOWARDS THE
SURROUNDING COMMUNITY***

For each of the projects I have been involved with, we have a science dissemination and communication session with the surrounding community. Whenever we publish an article, we write a press release so that our research can be disseminated to the media. We usually receive enough support from the host institution to do this; otherwise we pay for a private service to bolster our funds as popular science.