

# Amanda Alvarenga

PH.D. CANDIDATE

College of Agriculture- Purdue University

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abalvarenga | 📺 amanda-alvarenga



*My expertise includes organization, analysis, and interpretation of large-scale datasets, quantitative genetic and genomic analysis, and development of research, including tools and pipelines. I enjoy devising solutions to a variety of problems (research and otherwise), coordinating groups and/or meetings, and helping others conduct their research. My philosophy when it comes to innovation and goals is 'If at first you don't succeed, try, try again!'*

## Education

### Purdue University

West Lafayette, USA

DOCTOR OF PHILOSOPHY IN ANIMAL SCIENCES WITH FOCUS ON QUANTITATIVE GENETICS AND GENOMICS

2019 – 2022

- Dissertation title: Genetic and Genomic modeling of welfare indicator traits in cattle population
- GPA: 4.00/4.00

### Federal University of Viçosa

Viçosa, Brazil

DOCTOR OF PHILOSOPHY IN ANIMAL SCIENCES WITH FOCUS ON QUANTITATIVE GENETICS AND GENOMICS

2018 – 2019

- Incomplete due to transition to the pursuit of Ph.D. in the USA
- GPA: 4.00/4.00

### “Luiz de Queiroz” College of Agriculture - University of São Paulo

Piracicaba, Brazil

MASTER OF ANIMAL SCIENCES AND PASTURES WITH FOCUS IN QUANTITATIVE GENETICS AND GENOMICS

2015 – 2017

- Dissertation title: Feed efficiency traits in Santa Inês sheep under genomic approaches
- GPA: 3.95/4.00

### Federal University of Lavras

Lavras, Brazil

BACHELOR OF ANIMAL SCIENCES

2011 – 2015

- Dissertation title: Modeling equations to predict energetic values using metanalysis and Bayesian approaches in broilers
- Graduated with highest GPA and 1st place in the 'Academic Merit' award

## Skills

### Language

PORTUGUESE (NATIVE SPEAKER), ENGLISH (FULL PROFESSIONAL)

### Programming Languages

BASH, R (AND RELATED TOOLS, E.G. RMARKDOWN, PLOTLY, SHINY), PYTHON (LEARNING)

### Microsoft Office

EXCEL, OUTLOOK, ONENOTE, POWERPOINT, WORD

### Other Software

ALPHASIMR, BLUPF90 FAMILY SOFTWARE, GS3, GENSEL, GCTA, PLINK, QMSIM, SAS, SNP1101, WOMBAT

### Keywords Expertises

DATA MINING, DATA SCIENCES, DATA VISUALIZATION, DATA SIMULATION, GENOME-WIDE ASSOCIATION, GENOMICS, GENOTYPE-BY-ENVIRONMENT INTERACTION, INDEPENDENT AND SELF-DIRECTED SCIENTIST, IN-HOUSE PIPELINES, LARGE-DATASETS, MIXED MODELS, MULTIVARIATE ANALYSIS, PROBLEM SOLVING, POPULATION-STRUCTURE, PREDICTIVE MODELS, QUANTITATIVE GENETICS, SINGLE-STEP GBLUP, STATISTICAL METHODOLOGIES, VALIDATION METHODS

## Honors

### 27th Summer Institute in Statistical Genetics Scholarship

Seattle, USA

UNIVERSITY OF WASHINGTON SCHOOL OF PUBLIC HEALTH

2022

### InnovatED magazine

West Lafayette, USA

PURDUE UNIVERSITY

2022

- Article selected to be published in the Purdue University Graduate Research magazine

### W.R. Featherston Early Graduate Career Award

PURDUE UNIVERSITY

- Outstanding M.S./ Ph.D. student within the first two years of graduate study

West Lafayette, USA

2021

### LOUJA Graduate Travel Awards

PURDUE UNIVERSITY

- Oral presentation competition

West Lafayette, USA

2021

### US-Based Early Career Researcher Scholarship

6TH INTERNATIONAL CONFERENCE OF QUANTITATIVE GENETICS

Brisbane, Australia (Online)

2020

### 25th Summer Institute in Statistical Genetics Scholarship

UNIVERSITY OF WASHINGTON SCHOOL OF PUBLIC HEALTH

Seattle, USA

2020

### College of Agriculture's Dr. Dagnatchew Yirgou Endowment Travel Award

PURDUE UNIVERSITY

West Lafayette, USA

2019

### Honors degree

FEDERAL UNIVERSITY OF LAVRAS

Lavras, Brazil

2015

- Graduated with highest GPA and set herself apart in 1st place in the 'Academic Merit' award

## Academic and Work Experiences

### Graduate Research Assistant

PURDUE UNIVERSITY

West Lafayette, USA

2019 – NA

- Used mixed and other complex models (e.g. threshold/liability) to estimate variance components, predict genomic breeding values, and gene mapping
- Evaluated genotype-by-environment interaction (e.g. across ecoregions and across countries), including multiple-trait models and random regression to identify environmental sensitivity (i.e. reaction norm)
- Implemented single-step GBLUP and core and non-core algorithm (APY) to optimize computational time and memory
- Prepared statistical pipelines to conduct genetic and genomic projects
- Researched alternatives to optimize genomic predictions
- Solved statistical analytics problems
- Presented at the department and international conferences to disseminate knowledge and results for an academic and lay audience
- Assisted undergraduate and graduate students in their research projects: theory and programming
- Wrote reports and a proposal

### Voluntary Teaching Assistant

PURDUE UNIVERSITY

West Lafayette, USA

2021 – 2021

- Taught and mentored undergraduate students' technical subjects in breeding and genetics and explained their applicability in the industry
- Prepared and presented a quantitative genetics class to help students to apply the theory into practice

### Quantitative Geneticist Intern

ANGUS GENETICS INC.

Saint Joseph, USA

2021 – 2021

- Assessed and edited over 1 million genotyped individuals (i.e. 54K SNP panel)
- Analyzed and modeled categorical traits recorded on individuals raised across different countries
- Evaluated data structure (data mining), population stratification, genotype-by-environment interaction, model definition, genome-wide association, and genomic prediction
- Presented and reported the results written and verbal to a genetic and non-genetic audience
- Interacted with other entities and groups (e.g. customer service, regional managers, information technology, product development, producer/farmer)

### Graduate Research Assistant

FEDERAL UNIVERSITY OF VIÇOSA

Viçosa, Brazil

2018 – 2019

- Simulated phenotype, pedigree, and genomic information to evaluate alternative approaches accounting for crossbred population-parameters into a purebred genomic evaluation

### Graduate Research Assistant

"LUIZ DE QUEIROZ" COLLEGE OF AGRICULTURE- UNIVERSITY OF SAO PAULO

Piracicaba, Brazil

2015 – 2017

- Conducted a genetic and genomic project
- Collaborated with other research groups by helping in the experimental analysis (e.g. block and latin square designs)

### Voluntary Undergraduate Teaching Assistant

FEDERAL UNIVERSITY OF LAVRAS

Lavras, Brazil

2014 – 2014

- Taught undergraduate students statistics and quantitative genetics

## Undergraduate Research Assistant

FEDERAL UNIVERSITY OF LAVRAS

Lavras, Brazil

2012 – 2015

- Performed a metanalysis and modeling prediction equations, and applied Bayesian approaches

## Publications

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### Genetic and genomic of docility-based cognitive ability in American Angus cattle

ALVARENGA A.B., GARCIA A., RETALLICK K., OLIVEIRA H.R., MILLER S.P., BRITO L.F.

2022

- In preparation

### Genetic modeling and genomic analyses of yearling temperament in American Angus cattle and its relationship with productive efficiency and resilience traits

ALVARENGA A.B., OLIVEIRA H.R., MILLER S.P., SILVA F.F., BRITO L.F.

2022

- Frontiers in Genetics <https://doi.org/10.3389/fgene.2022.794625>

### A systematic review of genomic regions and candidate genes underlying behavioral traits in farmed mammals and their link with human disorders

ALVARENGA A.B., OLIVEIRA H.R., CHEN S.Y., MILLER S.P., MARCHANT J.N., GRIGOLETTO L., BRITO L.F.

2021

- Animals 11 (715) <https://www.doi.org/10.3390/ani11030715>

### Haplotype-based single-step GWAS for yearling temperament in American Angus cattle

ARAÚJO A.C., CARNEIRO P.L.S., ALVARENGA A.B., OLIVEIRA H.R., MILLER S.P., RETALLICK K., BRITO L.F.

2021

- Genes 13 (1):17 <https://www.doi.org/10.3390/genes13010017>

### Comparing alternative single-step GBLUP approaches and training population designs for genomic evaluation of crossbred animals

ALVARENGA A.B., VERONEZE R., OLIVEIRA H.R., MARQUES D.B.D., LOPES P.S., SILVA F.F., BRITO L.F.

2020

- Frontiers in Genetics 11 (263) <https://www.doi.org/10.3389/fgene.2020.00263>

### Genetic parameters, genome-wide association and gene networks for milk and reproductive traits in Guzera cattle

PAIVA J.T., PEIXOTO M.G.C.D., BRUNELI F.A.T., ALVARENGA A.B., OLIVEIRA H.R., SILVA A.A., SILVA D., VERONEZE R., SILVA F.F., LOPES P.S.

2020

- Livestock Science 242 <https://www.doi.org/10.1016/j.livsci.2020.104273>

### Incorporating temperament traits in dairy cattle breeding programs: challenges and opportunities in the phenomics era

CHANG Y., BRITO L.F., ALVARENGA A.B., WANG Y.

2020

- Animal Frontiers 10(2) <https://www.doi.org/10.1093/af/vfaa006>

### Progesterone-based timed AI protocols for Bos Indicus cattle I: evaluation of ovarian function

MADUREIRA G., MOTTA J.C.L., DRUM J.N., CONSENTINI C.C., PRATA A., MONTEIRO P.L.J., MELO L.F., ALVARENGA A.B., WILTBANK M., SARTORI R.

2020

- Theriogenology 145 <https://www.doi.org/10.1016/j.theriogenology.2020.01.030>

### Linkage disequilibrium in Brazilian Santa Inês breed, Ovis aries

ALVARENGA A.B., ROVADOSCKI G.A., PETRINI J., COUTINHO L.L., MOROTA G., SPANGLER M.L., PINTO L., CARVALHO G.G.P., MOURAO G.B.

2018

- Scientific Reports 8 (8851) <https://www.doi.org/10.1038/s41598-018-27259-7>

### Estimated of genomic heritability and genome-wide association study for fatty acids profile in Santa Ines sheep

ROVADOSCKI G.A., PERTILE S., ALVARENGA A.B., CESAR A.S.M., PERTILLE F., PETRINI J., FRANZO V., SOARES W.V.B., MOROTA G., SPANGLER M.L., PINTO L., CARVALHO G.G.P., LANNA D.P., COUTINHO L.L., MOURAO G.B.

2018

- BMC Genomics 19 <https://www.doi.org/10.1186/s12864-018-4777-8>

## Community and College Services

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### Social Committee Member

GRADUATE STUDENT ASSOCIATION- DEPARTMENT OF ANIMAL SCIENCES- PURDUE UNIVERSITY

West Lafayette, USA

2019 – 2020

- Organized social/networking events for graduate students, researchers, and staff

## Workshop Organizer Assistant

"LUIZ DE QUEIROZ" COLLEGE OF AGRICULTURE- UNIVERSITY OF SAO PAULO

- 1st Workshop on Omics Strategies Applied to Livestock Science
- Hosted international researchers during the event

Piracicaba, Brazil

2017 – 2017

## Conference Organizer Assistant (Poster Evaluator)

"LUIZ DE QUEIROZ" COLLEGE OF AGRICULTURE- UNIVERSITY OF SAO PAULO

- 24th Symposium of Undergraduate Scientific Research and Extension

Piracicaba, Brazil

2016 – 2016

## Treasurer and Social Committee Member

ANIMAL BREEDING AND BIOTECHNOLOGY RESEARCH AND STUDY GROUP- DEPARTMENT OF ANIMAL SCIENCES- FEDERAL

UNIVERSITY OF LAVRAS

- Developed organizational skills, and administrated money raised for the research group through workshops and symposiums

Lavras, Brazil

2013 – 2015

## Conference Organizer Assistant

ANIMAL BREEDING AND BIOTECHNOLOGY RESEARCH AND STUDY GROUP- DEPARTMENT OF ANIMAL SCIENCES- FEDERAL

UNIVERSITY OF LAVRAS

- Solved problems and unforeseen events, hosted the speakers, and mediator of the conference
- Planned all the details involved in the conference, including advertisement, food, the layout, and schedule
- Developed leadership skills by assigning tasks to other undergraduate students and helping them to efficiently conduct their tasks

Lavras, Brazil

2014 – 2014

## Educational Assistant- Voluntary Work

NATIONAL FEDERATION OF APAES

- Teaching assistant at organization for children requiring special educational services for developmental and learning disability

Lavras, Brazil

2013 – 2013

# Courses/Workshops

Relevant courses are being listed.

## Multivariate Analysis for Genetics Data

27TH SUMMER INSTITUTE IN STATISTICAL GENETICS SCHOLARSHIP

- Course to attend during the Summer-2022

Seattle, USA (Online)

July 2022 – July 2022

## Association Mapping: GWAS and Sequencing Data

27TH SUMMER INSTITUTE IN STATISTICAL GENETICS SCHOLARSHIP

- Course to attend during the Summer-2022

Seattle, USA (Online)

July 2022 – July 2022

## Advanced Quantitative Genetics

27TH SUMMER INSTITUTE IN STATISTICAL GENETICS SCHOLARSHIP

- Course to attend during the Summer-2022

Seattle, USA (Online)

July 2022 – July 2022

## Genomic prediction considering admixed populations and genotype-by-environment interaction

WAGENINGEN UNIVERSITY & RESEARCH

- Course to attend during the Summer-2022
- Estimate breed-origin-of-alleles (BOA) and use BOA in genomic predictions of admixed populations
- Include genotype-by-environment interactions in genomic prediction

Wageningen, The Netherlands

June 2022 – July 2022

## Programming and computer algorithms in animal breeding with a focus on single-step GBLUP and genomic selection in practice

UNIVERSITY OF GEORGIA

- Course to attend during the Summer-2022
- Advanced programming in Fortran 95/2003 and computer algorithms
- Modeling: single-trait, multiple-trait, random-regression, competition, threshold, censored
- Dimensionality of genomic information, analyses of sequence data, causative variants

Athens, USA

May 2022 – June 2022

## Writing and presenting scientific papers

72ND ANNUAL MEETING OF THE EUROPEAN FEDERATION OF ANIMAL SCIENCE

Davos, Switzerland

Aug. 2021 – Aug. 2021

## Computational pipeline for whole genome sequencing data

25TH SUMMER INSTITUTE IN STATISTICAL GENETICS SCHOLARSHIP

- Hands-on introduction to whole genome sequence analysis pipelines

Seattle, USA (Online)

July 2020 – July 2020

## Current topics in genomics

PURDUE UNIVERSITY

- Weekly seminars with invited speakers from across the world
- Many topics covered by specialist (e.g. genomic prediction, genome-wide association, epigenomics, metabolomics)

West Lafayette, USA

Aug. 2020 – Dec. 2020

## Big data analytics and high-performance computing

PURDUE UNIVERSITY

- Introduction to machine learning application, linear, non-linear, and logistic regression, classification algorithms

West Lafayette, USA

Jan. 2020 – May 2020

## Genome-wide landscape of Copy Number Variations in cattle

PURDUE UNIVERSITY

- Speaker: Dr. Magda Mielczarek (Wroclaw University of Environmental and Life Sciences, Poland)
- Background about Copy Number Variants
- Application and pipeline to identify Copy Number Variants using whole genome sequencing data: alignment to the reference genome (BWA), post-alignment (Picard, SAMtools), CNV detection (CNVnator, Pindel), CNV annotation (VEP), and statistical analysis

West Lafayette, USA

June 2019 – June 2019

## Quantitative genomics applied to breeding

PURDUE UNIVERSITY

- Quantitative genetics theory, variance components estimation, population structure, imputation, linkage disequilibrium, genome-wide association, and genomic prediction, simulation of dataset
- Software: R, FImpute, QMSim, AlphaSim, BLUPF90, PLINK, GCTA

West Lafayette, USA

Aug. 2019 – Dec. 2019

## Quantitative genetics

PURDUE UNIVERSITY

- Genetic and population genetics concept, and its application in plants

West Lafayette, USA

Aug. 2019 – Dec. 2019

## Multivariate analysis

FEDERAL UNIVERSITY OF VIÇOSA

- Theory of multivariate methods (e.g. principal components, factor analysis, orthogonal polynomials)

Viçosa, Brazil

Aug. 2018 – Dec. 2018

## Data analysis in animal breeding and genetics

FEDERAL UNIVERSITY OF VIÇOSA

- Genetic and genomic analysis (e.g. linkage disequilibrium, effective population size, fixation index, variance components, genome-wide association analysis, genomic prediction, pedigree and genomic relationship matrix, selection index, and optimum contribution selection)
- Software/programming languages: R, BASH command lines, and many genomic statistical software (e.g. AIREML, Wombat, BLUPF90, PLINK)

Viçosa, Brazil

Aug. 2018 – Dec. 2018

## Bayesian inference applied to animal breeding and genetics

FEDERAL UNIVERSITY OF VIÇOSA

- Theory of Bayesian Inference, derivation of all the distributions and mixed models

Viçosa, Brazil

Aug. 2018 – Dec. 2018

## Bayesian Inference applied to animal breeding and genetics

FEDERAL UNIVERSITY OF VIÇOSA

- Software: R, BLUPF90

Viçosa, Brazil

Aug. 2018 – Dec. 2018

## Linear mixed models workshop

FEDERAL UNIVERSITY OF VIÇOSA

- Speakers: Dr. Alencar Xavier (Corteva, USA) and Dr. Gota Morota (Virginia Tech, USA)

Viçosa, Brazil

Oct. 2018 – Oct. 2018

## V Workshop of applied statistics and biometry

FEDERAL UNIVERSITY OF VIÇOSA

Viçosa, Brazil

Sept. 2018 – Sept. 2018

## Generalized linear model

FEDERAL UNIVERSITY OF VIÇOSA

- Speaker: Dr. Clarice Demetrio ("Luiz de Queiroz" College of Agriculture- University of São Paulo, Brazil)

Viçosa, Brazil

Sept. 2018 – Sept. 2018

## Animal breeding in the genomics era: challenges and opportunities

FEDERAL UNIVERSITY OF VIÇOSA

- Speaker: Dr. Mario Calus (Wageningen University, The Netherlands)

Viçosa, Brazil

Sept. 2018 – Sept. 2018

## Quantitative genetics and genomics workshop

"LUIZ DE QUEIROZ" COLLEGE OF AGRICULTURE- UNIVERSITY OF SÃO PAULO

- Speaker: Dr. Gota Morota, Dr. Jeremy Howard, Matt Spangler (University of Nebraska-Lincoln, USA)

Piracicaba, Brazil

May 2018 – May 2018

## Linear models I

"LUIZ DE QUEIROZ" COLLEGE OF AGRICULTURE- UNIVERSITY OF SÃO PAULO

- Theory and application (R statistical software) of linear models, including derivation

Piracicaba, Brazil

March 2016 – June 2016

## Genetics of physiological processes in domestic animals

"LUIZ DE QUEIROZ" COLLEGE OF AGRICULTURE- UNIVERSITY OF SÃO PAULO

Piracicaba, Brazil

March 2016 – June 2016

## Teaching preparation in animal sciences and pastures

"LUIZ DE QUEIROZ" COLLEGE OF AGRICULTURE- UNIVERSITY OF SÃO PAULO

- Weekly practices of different techniques to present scientific results to an academic and lay audience

Piracicaba, Brazil

March 2016 – June 2016

## Scientific communication techniques in animal sciences and pastures I

"LUIZ DE QUEIROZ" COLLEGE OF AGRICULTURE- UNIVERSITY OF SÃO PAULO

- Techniques to improve written communication skills

Piracicaba, Brazil

March 2016 – June 2016

## Quantitative genetics and genomics workshop

"LUIZ DE QUEIROZ" COLLEGE OF AGRICULTURE- UNIVERSITY OF SÃO PAULO

- Speakers: Dr. Gota Morota, Matt Spangler (University of Nebraska-Lincoln, USA)

Piracicaba, Brazil

May 2016 – May 2016

## Special topics in animal breeding and genetics

"LUIZ DE QUEIROZ" COLLEGE OF AGRICULTURE- UNIVERSITY OF SÃO PAULO

- General topics in genetics, including DNA genotyping procedures, RNA sequencing, DNA methylation

Piracicaba, Brazil

Aug. 2016 – Dec. 2016

## Population genetics

"LUIZ DE QUEIROZ" COLLEGE OF AGRICULTURE- UNIVERSITY OF SÃO PAULO

Piracicaba, Brazil

Aug. 2016 – Dec. 2016

## Scientific communication techniques in animal sciences and pastures II

"LUIZ DE QUEIROZ" COLLEGE OF AGRICULTURE- UNIVERSITY OF SÃO PAULO

- Techniques to improve oral communication skills

Piracicaba, Brazil

Aug. 2016 – Dec. 2016

## Algebra and matrices

"LUIZ DE QUEIROZ" COLLEGE OF AGRICULTURE- UNIVERSITY OF SÃO PAULO

Piracicaba, Brazil

Jan. 2016 – Jan. 2016

## Probability and statistics

"LUIZ DE QUEIROZ" COLLEGE OF AGRICULTURE- UNIVERSITY OF SÃO PAULO

Piracicaba, Brazil

Jan. 2016 – Jan. 2016

## Differential calculus

"LUIZ DE QUEIROZ" COLLEGE OF AGRICULTURE- UNIVERSITY OF SÃO PAULO

Piracicaba, Brazil

Jan. 2016 – Jan. 2016

## Regression and covariance

"LUIZ DE QUEIROZ" COLLEGE OF AGRICULTURE- UNIVERSITY OF SÃO PAULO

- Theory and application (R statistical software) of linear regression, multiple linear regression, residual analysis and diagnostic, correlations, model selection, polynomials orthogonal

Piracicaba, Brazil

Aug. 2015 – Dec. 2015

## Planning and analysis of animal experiments

"LUIZ DE QUEIROZ" COLLEGE OF AGRICULTURE- UNIVERSITY OF SÃO PAULO

- Experimental design and analysis applied to animal sciences and pastures
- SAS applied to alternative modelings

Piracicaba, Brazil

Aug. 2015 – Dec. 2015

## I Workshop in genetic statistics- updating in genomic analysis

FEDERAL UNIVERSITY OF LAVRAS

- Data analysis of RNA sequencing (Dr. Fabyano Silva, Federal University of Vicosa, Brazil)
- Application of genomic selection (Dr. Marcio Balestre, Federal University of Lavras, Brazil)

Lavras, Brazil

2015 – 2015

## Log-symmetric regression models in R workshop

XIV BRAZILIAN SCHOOL OF REGRESSION MODELS

Lavras, Brazil

2015 – 2015

## Genomic selection applied to genetic breeding programs

FEDERAL UNIVERSITY OF LAVRAS

Lavras, Brazil

2014 – 2014

## Introduction to the R software

FEDERAL UNIVERSITY OF LAVRAS

Lavras, Brazil

2013 – 2013

## Introduction to the Bayesian Inference

XI MINEIRO MEETING OF STATISTICS

Ouro Preto, Brazil

2012 – 2012

# Presentations, abstracts and other publications

## Nature vs. Nurture: examining how cow behavior can change over time

ALVARENGA A.B.

- InnovatED (January 2022- Issue 3).

West Lafayette, USA

2022

## A genomic evaluation of genotype-by-environment interactions for foot scores in American and Australian Angus cattle

ALVARENGA A.B., RETALLICK K., GARCIA A., OLIVEIRA H.R., MILLER S.P., BYRNE A., BRITO L.F.

- 12th World Congress on Genetics Applied to Livestock Production. Oral presentation- conference paper

Rotterdam, The Netherlands

2022

## A genetic study of temperament in American Angus heifers and cows.

ALVARENGA A.B., OLIVEIRA H.R., MILLER S.P., RETALLICK K., BRITO L.F.

- 72nd Annual Meeting of the European Federation of Animal Sciences. Oral presentation

Davos, Switzerland

2021

## Genetic parameters for food allergy responses in divergently-selected pig lines

CHEN Y., OLIVEIRA H.R., ALVARENGA A.B., SCHINCKEL A., STEWART T.S., BRITO L.F.

2021

- Journal of Animal Science. Poster presentation

## Genomic mechanisms underlying behavioral traits across livestock species and their potential application in genomic prediction of breeding values

*Brisbane, Australia (Online)*

ALVARENGA A.B., OLIVEIRA H.R., MILLER S.P., LU D., MARCHANT J.N., BRITO L.F.

2020

- 6th International Conference of Quantitative Genetics. Short oral presentation and it was selected to be played during the main program

## Model development and estimation of genetic parameters for docility in American Angus cattle

*Brisbane, Australia (Online)*

ALVARENGA A.B., BRITO L.F., OLIVEIRA H.R., LU D., MARCHANT J.N., MILLER S.P.

2020

- 6th International Conference of Quantitative Genetics. Poster presentation

## Unravelling genomic regions associated with temperament in American Angus cattle

*Brisbane, Australia (Online)*

OLIVEIRA H.R., ALVARENGA A.B., MILLER S.P., SCHENKEL F.S. BRITO L.F.

2020

- 6th International Conference of Quantitative Genetics. Poster presentation

## Genetic parameters for soybean allergy response in divergently selected pigs

CHEN Y., SCHINCKEL A., STEWART T., BRITO L.F., OLIVEIRA H.R., ALVARENGA A.B.

2020

- Journal of Animal Science. Poster presentation

## Using information from purebred and crossbred individuals into genomic prediction

*Salvador, Brazil*

ALVARENGA A.B., MARQUES D.B.D., FERNANDES C.G., BRITO L.F., LOPES P.S., SILVA F.F., VERONEZE R.

2019

- XIII Brazilian Symposium of Animal Breeding. Poster presentation (Portuguese)

## Genomic prediction of crossbred individuals using simulated dataset

*Viçosa, Brazil*

ALVARENGA A.B., FERNANDES C.G., ANDRADE M.V., BRITO L.F., SILVA F.F., VERONEZE R.

2018

- I Symposium of Genetic and Animal Breeding. Poster presentation (Portuguese)

## Circulating PGFM increases in response to oxytocin challenge from 25 to 60 days of pregnancy in dairy cows

*New Orleans, USA*

DRUM J.N., MONTEIRO P.L.J., PRATA A., GENNARI R.S., GAMARRA C.A., BRICH M., ALVARENGA A.B., CANAVESSI A.M.O.,

2018

WILTBANK M., SARTORI R.

- 51st Annual Meeting of Society for the Study of Reproduction. Poster presentation

## Bayesian methods and different $\pi$ for genomic selection on residual feed intake using small training population

*Piracicaba, Brazil*

ALVARENGA A.B., PETRINI J., CESAR A.S.M., ROVADOSCKI G.A., COUTINHO L.L. CARVALHO G.G.P., PINTO L. MOURAO G.B.

2017

- I Workshop on Omics Strategies Applied to Livestock Science. Poster presentation

## Genome-wide association study for milk fat using principal component analysis in Holstein cows

*Piracicaba, Brazil*

SALVIAN M., PETRINI J., CARRARA E.R., ROVADOSCKI G.A., ALVARENGA A.B., COUTINHO L.L., MACHADO P.F., WIGGANS G.R.,

2017

MOURAO G.B.

- I Workshop on Omics Strategies in Livestock Science. Poster presentation

## Supplementation of protein in a creep-feeding system during calving does not influence semen characteristics and testicular development in bulls of Tabapua breed

*Belo Horizonte, Brazil*

CARVALHO L.R., SILVA L.O.E., SANTOS A.P.C., MADUREIRA G., REIS M.T.R., ALVARENGA A.B., MARINHO P.H.A., BARRETO FILHO

2017

J.B.

- Brazilian Congress of Animal Reproduction. Poster presentation (Portuguese)

## Reproductive efficiency of Nelore cows submitted to 7-d FTAI protocols initiated with estradiol benzoate or GnRH and with or without GnRH at the time of AI

*Cabo de Santo Agostinho, Brazil*

CONSENTINI C.E.C., MADUREIRA G., MOTTA J.C.L., MELO L.F.E., PRATA A.B., GOLCALVES J.R.S., MONTEIRO JR. P.L.J.,

2017

ALVARENGA A.B., WILTBANK M.C., SARTORI R.

- 31st Annual Meeting of Brazilian Society of Embryos Technology. Poster presentation (Portuguese)

## Daily ovarian dynamics in Nelore heifers and non-lactating multiparous cows submitted to progesterone (P4)-based FTAI protocols

*Cabo de Santo Agostinho, Brazil*

MOTTA J.C.L., MADUREIRA G., MARCHI R.D., DRUM J.N., CONSENTINI C.E.C., PRATA A.B., MONTEIRO JR. P.L.J., ALVARENGA

2017

A.B., WILTBANK M.C., SARTORI R.

- 31st Annual Meeting of Brazilian Society of Embryos Technology. Poster presentation (Portuguese)



**Reproductive performance of Nelore heifers submitted to a 7-d P4-based FTAI protocol using either estradiol benzoate or GnRH at the beginning and with or without GnRH at the time of AI**

*Cabo de Santo Agostinho, Brazil*

MADUREIRA G., CONSENTINI C.E.C., MOTTA J.C.L., PRATA A.B., MONTEIRO JR. P.L.J., MELO L.F.E., ALVARENGA A.B.,  
GONCALVES J.R.S., WILTBANK M.C., SARTORI R.

2017

- 31st Annual Meeting of Brazilian Society of Embryos Technology. Poster presentation (Portuguese)

**Changes in the profile of PGFM following an oxytocin challenge during the first 60 days of pregnancy in dairy cows**

*Cabo de Santo Agostinho, Brazil*

DRUM J.N., MONTEIRO JR. P.L.J., PRATA A.B., GENNARI R.S., GAMARRA C.A., BRICH M., ALVARENGA A.B., CANAVESSI A.M.O.,  
WILTBANK M.C., SARTORI R.

2017

- 31st Annual Meeting of Brazilian Society of Embryos Technology. Poster presentation (Portuguese)

**Diferencial expression. Between animals with different fat acids in the muscle**

*Piracicaba, Brazil*

TRVISOLI P.A., CESAR A.S.M, CARRARA E.R., ALVARENGA A.B., SILVA I.S.M.E., PAMPOLINI J., REGITANO L.C.A., MOURAO G.B.,  
COUTINHO L.L.

2017

- X Scientific Symposium of Graduate Students in the CENA: New era of research, transformation, leadership and innovation. Poster presentation (Portuguese)

**Novelty SNPs for feed efficiency in Santa Inês breed sheep**

*Jaboticabal, Brazil*

ALVARENGA A.B., ROVADOSKI G.A., PETRINI J., SANTOS A.C.P., COUTINHO L.L., CARVALHO G.G.P., PINTO L., MOURAO G.B.

2016

- 1st International Meeting of Advances in Animal Science. Poster presentation

**Proteic supplementation in creep-feeding system during calving period does not interferes in the sexual development of heifers of Tabapua breed**

*Pirassununga, Brazil*

MADUREIRA G., CARVALHO L.R., SILVA L.O.E., ALVARENGA A.B., COELHO C.F., CASAGRANDE D.R., BARRETO FILHO J.B.

2016

- VI Research Symposium and Graduate Program of Reproduction. Poster presentation (Portuguese)

**Modeling equations to predict food energy values for broilers using metanalysis and Bayesian inference**

*Campinas, Brazil*

ALVARENGA A.B., LIMA R.R., SAFADI T.

2015

- XIV School of Regression Models. Poster presentation (Portuguese)

**Modeling prediction equations for energy values of concentrated food for broilers using Bayesian approach**

*Lavras, Brazil*

ALVARENGA A.B., SAFADI T., LIMA R.R., MARIANO F.C.M.Q., RODRIGUES P.B., ALVARENGA R.R.

2014

- XXVII Research Congress of Federal University of Lavras. Poster presentation (Portuguese)

**Bayesian inference in the regression modeling of energetic values food for broilers**

*Lavras, Brazil*

ALVARENGA A.B., SAFADI T., LIMA R.R., MARIANO F.C.M.Q., OLIVEIRA E.C., ALVARENGA R.R.

2014

- XXVII Research Congress of Federal University of Lavras. Poster presentation (Portuguese)

**Development of broilers from 22 to 42 days of age being fed with different energetic diets**

*Lavras, Brazil*

MESSIAS T.C., ALVARENGA A.B., NOGUEIRA A.R., JORDAN F.C., RODRIGUES P.B., ALVARENGA R.R.

2014

- XXVII Research Congress of Federal University of Lavras. Poster presentation (Portuguese)

**Comparing different coefficients used in neural networks to predict energetic values of feed for broilers**

*Uberlandia, Brazil*

ALVARENGA A.B., MARIANO F.C.M.Q., LIMA R.R.

2013

- XII Mineiro Meeting of Statistics. Poster presentation (Portuguese)

**Influence of number of nodes in a neural network analysis to predict energetic values of feed for broilers**

*Uberlandia, Brazil*

MARIANO F.C.M.Q., ALVARENGA A.B., LIMA R.R.

2013

- XII Mineiro Meeting of Statistics. Poster presentation (Portuguese)

**Use of prediction equations for energetic values of concentrated food for broilers in the initial phase**

*Foz do Iguacu, Brazil*

RODRIGUES P.B., ALVARENGA R.R., OLIVEIRA E.C., MARIANO F.C.M.Q., GARCIA JR. A.A.P., LIMA E.M.C., ALVARENGA A.B.,  
OLIVEIRA D.H.

2013

- XXIII Animal Sciences Brazilian Congress. Poster presentation (Portuguese)
- XXIII Animal Sciences Brazilian Congress. Poster awarded



**Development of broilers fed with formulated meal using different calcium: phosphate ratio and supplemented with 3 and/or 6 phytase**

NARDELLI N.B.S., RODRIGUES P.B., NAVES L.P., LIMA E.M.C., GARCIA JR. A.A.P., OLIVEIRA E.C., CRUZ F.L., ALVARENGA A.B.

- XXIII Animal Sciences Brazilian Congress. Poster presentation (Portuguese)

*Foz do Iguacu, Brazil*

2013

**Evaluating different regression methods to predict energy of diets for broilers production**

ALVARENGA A.B., MARIANO F.C.M.Q., LIMA R.R., ALVARENGA R.R., RODRIGUES P.B.

- XXVI Research Congress of Federal University of Lavras. Poster presentation (Portuguese)

*Lavras, Brazil*

2012