IBC-FLORIPA-2010

Disclaimer: This is an overview of the Programme structure.
In the contributed oral the speaker is indicated in bold.

Sunday, 5 December 2010

09:00

09:00 **Short Course 1:** Competing risks and multi-state models: concepts, methods and software  
*Course Tutors:* Ronald Geskus (Academic Medical Centre, Amsterdam, the Netherlands), Hein Putter (Leiden University Medical Centre, the Netherlands)  
*Course registration from 09:00*  
*Course Starts at 09:30*  
*Course ends by 17:00*

09:00 **Short Course 2:** Genome-Wide Association Studies  
*Course Tutors:* Andreas Ziegler (Universität zu Lubeck, Germany), Kristel Van Steen (Université de Liège, Belgium)  
*Course registration from 09:00*  
*Course Starts at 09:30*  
*Course ends by 17:00*

09:00 **Short Course 3:** Multiple Imputation and its Application  
*Course Tutors:* Mike Kenward/James Carpenter (London School of Hygiene and Tropical Medicine, UK)  
*Course registration from 09:00*  
*Course Starts at 09:30*  
*Course ends by 17:00*

09:00 **Short Course 4:** Statistics for Biological Networks  
*Course Tutors:* Ernst Wit (University of Groningen, The Netherlands), Veronica Vinciotti (Brunel University, UK), Vilda Purutçuoglu (Middle East Technical University, Turkey)  
*Course registration from 09:00*  
*Course Starts at 09:30*  
*Course ends by 17:00*

17:00

**WECOLME RECEPTION** *(Conference Venue hall)*

Monday, 6 December 2010

09:00

09:00 **OPENING SESSION**  
*Garapuvu Theatre*  
Chair: Andrew Mead, University of Warwick, United Kingdom

10:30 **COFFEE BREAK**

11:00
<table>
<thead>
<tr>
<th>Time</th>
<th>Section</th>
<th>Title</th>
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<tr>
<td>11:00</td>
<td>CONTRIBUTED ORAL 1: <strong>Bayesian Methods 1</strong></td>
<td><strong>Chair</strong>: Annibale Biggeri (University of Florence, Italy)</td>
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<td></td>
<td>Association tests that accommodate genotyping uncertainty</td>
<td>Thomas Louis, Johns Hopkins Bloomberg SPH; Qing Li, Inherited Disease Res. Branch, NIH-Natl. Human Genome Res. Inst.; Benilton Carvalho, Cambridge Res Inst; M. Danielle Fallin, Rafael Irizarry, Ingo Ruczinski, Johns Hopkins Bloomberg SPH</td>
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<td></td>
<td>Computational implementation of an reversible jump mcmc algorithm to garch models applied to climatological time series</td>
<td>Gabriel Sarmanho, Afrânio Vieira, UnB; Paulo Lucio, UFRN</td>
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<td>Bayesian ranking and effect-size estimation via semi-parametric hierarchical mixture models in microarray experiments</td>
<td>Hisashi Noma, Dept of Biostatistics, Kyoto Univ Sch of Public Health; Shigeyuki Matsui, Dept of Data Science, The Inst of Statistical Mathematics</td>
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<td>Bayesian Modelling of Recurrent Events with Dependent Censoring</td>
<td>Ananda Sen, Univ of Michigan</td>
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<td>Assessment of binary diagnostic tests by Latent Class, Bayesian and GEE Modeling in the absence of gold standard test</td>
<td>Huseyin Refik Burgut, Ilker Unal, Yasar Sertdemir, Recep Tuncer, Macit Sandikci, Cukurova Univ</td>
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<td></td>
<td>Bayesian variable selection for probit mixed models</td>
<td>Meili Baragatti, Ipsogen; Francois Bertucci, Inst Paoli Calmettes; Tagett Rebecca, Ipsogen; Denys Pommeret, Inst de Mathématiques de Luminy, CNRS</td>
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<td>11:00</td>
<td>CONTRIBUTED ORAL 1: <strong>Capture/Recapture Estimation Methods</strong></td>
<td><strong>Chair</strong>: Richard Barker (University of Otago, New Zealand)</td>
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<td>Age-dependent models for recovery data on animals marked as adults</td>
<td>Byron Morgan, Rachel McCrea, Univ of Kent</td>
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<td>Stochastic animal movement models generating circular distributions</td>
<td>William Reed, Univ of Victoria</td>
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<td>A Dual-Record Systems Estimator When One List Contains Count Data</td>
<td>Maarten Cruyff, Peter van der Heijden, Utrecht Univ</td>
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<td>Multispecies integrated population model for the study of synchrony in demographic parameters</td>
<td>José J. Lahoz-Monfort, Byron J. T. Morgan, Univ of Kent; Mike P. Harris, Sarah Wanless, Stephen N. Freeman, Ctr for Ecology &amp; Hydrology</td>
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<td>General animal movement and migration models using multi-state random walks</td>
<td>Brett McClintock, Ruth King, Univ of St Andrews; Juan Morales, Univ Naticional del Comahue, Argentina; Jason Matthiopoulos, Len Thomas, Bernie McConnell, Univ of St Andrews</td>
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<td>The use of mixtures in modelling the unknown arrival times of birds at stop-over sites</td>
<td>Eleni Matechou, Byron J.T. Morgan, Univ of Kent</td>
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<td>11:00</td>
<td>CONTRIBUTED ORAL 1: <strong>Survival Analysis and Cancer Risk</strong></td>
<td><strong>Chair</strong>: Christine McLaren (University of California, Irvine, US)</td>
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<td>Comparing Methods For Calculating Relative Survival: A Simulation Based Study</td>
<td>Mark Rutherford, Paul Lambert, Univ of Leicester; Paul Dickman, Karolinska Instt</td>
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<td>Destructive weighted Poisson cure rate models</td>
<td>Josemar Rodrigues, Univ Federal de Sao Carlos</td>
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<td>Survival Extrapolation in the Presence of Cause Specific Hazards</td>
<td>Tatiana Benaglia, Linda Sharples, Medical Res Council - Biostatistics Unit</td>
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<td></td>
<td>A Mechanistic Breast Cancer Modeling: An Application on Invasive Ductal Carcinoma</td>
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Gleici Perdoná, FMRP-USP; Francisco Louzada-Neto, Juliana Cobre, UFSCAR
A Cox model with dynamic ridge penalties on time dependent effects of the covariates
Aris Perperoglou, Athens Univ of Economics and Business
A two-step estimator of haplotype relative risks with clustered survival data
Daniel Gillen, Sean Brummel, Univ of California, Irvine

11:00 INVITED SESSION 1: Breakthroughs in longitudinal data
Chair: Geert Molenberghs (University Hasselt, Belgium)

Functional Linear Models for Output-Buffered Systems
James O. Ramsay (McGill University, Canada)
Estimation of optimal treatment strategies from longitudinal observational studies with intermittent clinic visits
Andrea Rotnitsky (Universidad Di Tella, Argentina)

Model Assessment Tools for Joint Models of Longitudinal and Time-to-Event Data
Dimitris Rizopoulos (Erasmus University, The Netherlands)
Inference on treatment effects from a randomized clinical trial in the presence of premature treatment discontinuation: The SYNERGY trial
Anastasios Tsiatis (North Carolina State University, US)

11:00 INVITED SESSION 2: Genomic data integration using sparse matrix decomposition methods
Chair: Aeilko H Zwinderman (Netherlands)

A general framework for sparse matrix decomposition techniques
Daniela Witten (University of Washington, US)
Genetic control of genome wide expression in brain cancer tissue: nonlinear sparse CCA
Sandra Waaijenborg (University Medical Center Utrecht, The Netherlands)
Unravelling omics datasets with sparse PLS
Kim-Anh Le Cao (University of Queensland, Australia)

Discussant
Paul Eilers (Erasmus University Rotterdam, The Netherlands)

12:45 LUNCH
14:00

14:00 CONTRIBUTED ORAL 2: Epidemiological Methods I
Chair: Stijn Vansteelandt (Ghent University, Belgium)

Genetic Modifiers of Menopausal Hormone Therapy associated Breast Cancer Risk - A Meta-Analysis of Four Genome-Wide Association Studies
Jenny Chang-Claude, Rebecca Hein, Lars Beckmann, German Cancer Res Ctr; Kamila Czene, Per Hall, Karolinska Instt; Sara Lindstrom, Harvard Sch of Public Health; Jianjun Liu, Genome Inst of Singapore; Heli Nevalinna, Helsinki Univ Central Hosp; Yuqing Li, Genome Inst of Singapore; Dieter Flesch-Janys, Univ Medical Ctr Hamburg-Eppendorf
Epidemiological Model Using Celular Automata
Rosana Massahud, Iraziet Charret, Univ of Lavras
Checking a semiparametric model for doubly truncated data
Carla Moreira, Jacobo de Uña-Álvarez, Univ of Vigo
Analysing covariates with spike at zero: conceptual issues and properties of a fractional polynomial procedure
CONTRIBUTED ORAL 2: Genomics
Chair: Guilherme J.M. Rosa (University of Wisconsin, US)

Biodiversity estimation: unraveling the T-cell receptor repertoire in the body's cellular ecosystem
Nuno Sepulveda, Insto Gulbenkian de Ciencia; Carlos Daniel Paulino, Insto Superior Tecnico/ UTL, Lisbon; Michele Guindani, Univ of New Mexico; Peter Muller, M. D. Anderson Cancer Ctr; Jorge Carneiro, Insto Gulbenkian de Ciência

Application of the Equi-Energy sampler to mixture models
Denys Pommeret, Mathematical Inst of Luminy; Meili Baragatti, Ispogen and Mathematical Inst of Luminy

A Poisson Hurdle Model for Homopolymer Base-Calling of 454 Sequencing Data
Kristof De Beuf, Lieven Clement, Olivier Thas, Ghent Univ

On the glog-SMN distribution and its application to a gene expression problem
Mariana Rodrigues-Motta, Filidio Edifionso Vilca Labra, Univ de Campinas - UNICAMP

Characteristics of dna methylation array data
Sally Galbraith, The Univ of New South Wales

A generalized additive model framework for underdispersed count data with an application to miRNA qPCR data
Lieven Clement, Peter Pipelers, Olivier Thas, Jean-Pierre Ottoy, Ghent Univ

CONTRIBUTED ORAL 2: Social Research
Chair: Cristian Meza (Universidad de Valparaíso, Chile)

Exposure to road shows is associated with more knowledge, and positive beliefs, attitudes and social norms regarding exclusive breastfeeding among men and other community members in rural Zimbabwe
Bernard Chasekwa, Zvitambo Project

Height and union formation in India
Jeroen Smits, Radboud Univ Nijmegen; Christiaan Monden, Oxford Univ

Disability, Health, Poverty and Hardship: a longitudinal analysis
Said Shahtahmasebi, WINTEC

Bayesian hierarchical dynamic models for cortisol stress response on preschoolers: cross culture emotion regulation
Niko Kaciroti, Univ of Michigan

Perceptions about self-care ability of the elderly users of the gerontogeriatric nursing program of fluminense federal university
Dirley Santos, Univ Federal Fluminense; Marcia Andrade, Pontificia Univ Católica; Selma Sá, Univ Federal Fluminense; Carlos Coimbra, Museu de Astronomia e Ciências Afins

Design-Based Random Permutation Models With Auxiliary Information
Wenjun Li, Univ of Massachusetts Medical Sch; Edward J. Stanek III, Univ of Massachusetts; Julio M. Singer, Univ de São Paulo

INVITED SESSION 3: Efficient dose finding in drug development
Chair: José Pinheiro (Johnson & Johnson PRD, US)
The Challenge of Improving Dose Selection in Drug Development: Recommendations from the Adaptive Dose-Ranging Studies Working Group
Chyi-Hung Hsu (Novartis)

Model-based Adaptive Designs for Dose-ranging Studies
Vlad Dragalin (Wyeth Pharmaceuticals, US)

Recent Developments in Designing Experiments for Dose Finding Studies
Christine Kiss (Bochum University, Germany)

Discussant
Ekkehard Glimm (Novartis)

14:00 INVITED SESSION 4: Statistical ecology and conservation
Chair: Byron J Morgan (Univ of Kent, Canterbury, United Kingdom)

Genotype Uncertainty: Accounting for genotyping error in mark-recapture-type studies using low copy number DNA
Richard Barker (University of Otago, New Zealand)

The 2010 biodiversity target: are biodiversity monitoring programmes fit for purpose?
Stephen T. Buckland (University of St. Andrews, Scotland)

Model discrimination and goodness-of-fit techniques for complex ecological models
Rachel McCrea (University of Kent, Canterbury, UK)

Discussant
Tore Schweder (University of Oslo, Norway)

15:45 COFFEE BREAK

16:15 CONTRIBUTED ORAL 3: Agriculture I
Chair: Sue Welham (Rothamsted Research, UK)

Mixed models with splines in an agricultural application: nitrate leaching as affected by tillage and winter cover crop management
Esther Meenken, Patricia Fraser, Mike Beare, Denis Curtin, Frank Table, Tina Harrison-Kirk, New Zealand Inst for Plant and Food Res

An alternative methodology for imputing missing data in trials with genotype-by-environment interaction
Sergio Arciniegas Alarcón, Marisol García Peña, Univ Nacional de Colombia

Strategies for screening interactions between many factors
Susan Lewis, Univ of Southampton

SNP genotyping of tetraploid potato cultivars: a comparison of mixture models
Gerrit Gort, Roeland Voorrips, Fred van Eeuwijk, Wageningen Univ; Paul Eilers, Erasmus medical center

Modelling bunch yield stability in oil palm using different stability statistics
Maxwell Okoye, Nigerian Inst for Oil Palm Res (NIFOR)

Structuring genotype x environment interaction by curvilinear regression
Stanislaw Mejza, Iwona Mejza, Poznan Univ of Life Sciences

16:15 CONTRIBUTED ORAL 3: Experimental Design in Clinical Trials
Chair: Jane Hutton (Warwick University, UK)

Optimal allocation of patients in the two-stage randomised clinical trial design
Stephen Walter, McMaster Univ

Sample size determination in clinical trials with multiple co-primary endpoints including
mixed continuous and binary variables

Takashi Sozu, Kyoto Univ; Tomoyuki Sugimoto, Toshimitsu Hamasaki, Osaka Univ

Three-arm non-inferiority trials with a prespecified margin for binary endpoints

Eisuke Hida, Natl Inst of Public Health; Toshiro Tango, Ctr for Medical Statistics

A comparison of methods for the statistical analysis of clustered data

Sally Galbraith, The Univ of New South Wales; James Daniel, Children's Medical Res Inst; Bryce Vissel, Garvan Inst of Medical Res

Genotype-stratified phase I trials in oncology

Motomi Mori, Yi Yi Chen, Byung Park, Joshi Alumkal, Oregon Health & Science Univ

16:15 CONTRIBUTED ORAL 3: High Dimensional Data I
Chair: Harald Binder (University Medical Center, Freiburg, Germany)

Assessing multiple micronutrient deficiencies in undernourished populations through the plasma nutriproteome

Ingo Ruczinski, Johns Hopkins Univ

A General Method to Identify Genes that have a Biologically Meaningful Pattern of Association with Multiple Related Phenotypes

Stan Pounds, St. Jude Children's Res Hosp

Disease mapping with long study periods and changing census boundaries

Patrick Brown, Cancer Care Ontario; Lennon Li, Steve Fan, James Stafford, Univ of Toronto

A simple method for detecting gene-gene interactions from genome-wide SNP data

Masaru Ushijima, Minoru Isomura, Yoshio Miki, Masaaki Matsuura, Japanese Fndn for Cancer Res

Evaluation of four discrimination rules for the assignment of metabolic functions of proteins of lactococcus lactis using phylogenetic profiles

Liliana López Kleine, Nicolas Molano Gonzalez, Univ Nacional de Colombia

Constrained Ordination Analysis in Metagenomics Microbial Diversity Studies

Olivier Thas, Ghent Univ

16:15 CONTRIBUTED ORAL 3: Regression Methods
Chair: Ralitza Gueorgieva (Yale University, US)

On calculating confidence intervals when using inverse probability weighting

Hendrick Boshuizen, Natl Inst of Public Health and the Environment

Modified Wald residuals in generalized linear models with non canonical link

Mariana Urbano, Clarice Demétrio, ESALQ; Gauss Cordeiro, UFRPE

Joint Method in Model Regression

Hope Mbachu, Imo State Polytechnic Umuagwo Owerri Imo State Nigeria

On the recoding of continuous and bounded health indexes to a binomial form: An application to quality of life scores

Inmaculada Arostegui, Vicente Núñez-Antón, Univ of the Basque Country (UPV/EHU)

A new strategy for meta analysis of continuous covariates in oberservational studies

Willi Sauerbrei, Institute of Medical Biometry and Informatics; Patrick Royston, MRC CTU London

Bootstrap-based methods for assessing continuous covariate effect in ROC-GAM regression models

Maria Xosé Rodriguez-Alvarez, Univ of Santiago de Compostela; Javier Roca-Pardiñas, Univ of Vigo; Carmen Cadarso-Suárez, Univ of Santiago de Compostela

16:15 BIOMETRICS SHOWCASE
Presentations of the two papers judged as the best publications in Biometrics in 2008 and 2009 by members of the IBS
POSTER SESSION 1

Session: Agricultural, Plant and Animal Sciences

Modeling Underdispersed Longitudinal Counts
Eduardo Davila, Luis Alberto López, Univ Nacional de Colombia

Multiple factorial analysis apply to the interpretation of genotype by environment interactions
Maria Gabriela Cendoya, Gabriela Paola Zapico, Juan Manuel De Santa Eduviges, Facultad de Ciencias Agrarias

Comparison between models of hipsometric relationship with and without a spatial component for Pinus sp
Júlio Pereira, Débora Mourão, Verônica Scalet, Carlos Souza, UFSCAR

A Frailty Modeling Approach for Parental Effects in Animal Breeding
Suely Giolo, Federal Univ of Parana; Clarice Demétrio, Univ of Sao Paulo

Common bean cropping regionalization in Rio Grande do Sul state, Brazil, based on genotype x environment interaction
Clause Fátima de Brum Piana, João Gilberto Corrêa da Silva, Univ Federal de Pelotas; Irajá Ferreira Antunes, Embrapa Clima Temperado

Sampling methods and sample size to evaluate the maturation state of the Niagara Rosada grape
Elton Araújo, Federal Univ of Mato Grosso do Sul

Incorporating Soft Data in the Kriging Equations
Megan Liedtke, Dr. David Marx, Dr. Stephen Kachman, Univ of Nebraska-Lincoln

Bayesian multiple comparisons with skew-normal error
Marcos Oliveira, UFSJ; Daniel Ferreira, UFLA

Grazing Spatial and Temporal Distribution of Domestic Animals
Maria Gabriela Cendoya, Estanislao Díaz Falú, Miguel A. Brizuela, Silvia Cid, Facultad de Ciencias Agrarias

Spatio-temporal analysis of transmission of Avian Flu outbreak in Nigeria
Oyelola Adegboyeye, The American university of Afghanistan

Bayesian and non-Bayesian analysis of germinations curves using a nonlinear model
Terezinha Guedes, Robson Rossi, Clédina Acorsi, Sebastião Gazola, Univ Estadual de Maringá

Schemes of optimal sampling in maps estimated by kriging
Gener Pereira, Univ Estadual Paulista

Determination of a point sufficiently close to the asymptote in nonlinear growth functions
Lídia Carvalho, Univ Estadual Paulista

Effect of spatial autocorrelation on accuracy estimates in land use maps derived from remote sensing
Teresa Boca, INTA

Influence Ratio Method: an alternative approach to cluster analysis
Silvia Maria De Freitas, Federal University of Ceará

Selecting the best sugarcane families based on Regression trees
Diego Paiva Bernardes, Luis Alexandre Peternelli, Suelen Cristina Alves, Univ Federal de Viçosa

Biplot and joint plot graphics to study the triple interaction
Lucio Araújo, Federal Univ of Uberlândia; Mario Varela, INCA; Mirian Araújo, Federal Univ of Uberlândia; Carlos Dias, Univ of São Paulo

The trait measured affects experimental design efficiency in a Barley variety trials
María Inés Berro, Laura Nalbarte, Lucía Gutierrez, Univ de la Republica del Uruguay

The Log-Generalized Modified Weibull Regression Model
Edwin Ortega, Univ de São Paulo; Gauss Cordeiro, Univ Federal de Pernambuco; Jalmir Carrasco, Univ de São Paulo

Statistical models for QTL mapping associated to counting data
Fabyano Silva, Univ Federal de Viçosa; Karen Pallota Tunin, ESALQ-USP; Guilherme J.M. Rosa, Univ of Wisconsin

R functions for analyzing split-plot schemes
Eric Ferreira, Pórtya Cavalcanti, Univ Federal de Alfenas

A Conceptual Basis for the Experimental Research
João Gilberto da Silva, Univ Federal de Pelotas

Some statistical approaches in estimating lambing rates with merino ewes
Mario D'Antuono, Dept of Agriculture and Food, Govt of Western Australia

Extension to multiple covariates in the estimation of instantaneous risk function of the Aalen additive model
Luciane Giarola, UFSJ - Univ Federal de São João do Rei; Mario Vivanco, Marcelo Cirillo, UFLA - Univ Federal de Lavras

Comparison of confidence intervals methods for the size of a population under a binomial mark capture-recapture sampling
Luis Salasar, José Galvão, UFSCar

Exploration of Bayesian estimation of sensitivity and specificity in the absense of a golden standard
Wim Swart, Harold van der Heijden, GD Animal Health Service, Deventer, Netherlands; Arjan Stegeman, Faculty of Veterinary Med, Univ of Utrecht, the Netherlands

QTL detection for growth traits in swine outbred populations by Random Regression models using free softwares
Valéria Pinheiro, Fabyano Silva, Guilherme Rosa, Paulo Lopes, Simone Guimarães, Cosme Cruz, Univ Federal De Viçosa (UFV)

Censored zero-inflated gamma distribution. Estimation methods and a simulation study
Vanderly Janeiro, Univ Estadual de Maringá, Silvio Sandoval Zocchi, Universidade de São Paulo

Sample size determination for estimating distributions of fruit diameters using simulation
María del Carmen Romero, Univ Nacional del Ctr de la Provincia de Buenos Aires; Pablo Daniel Reeb, Univ Nacional del Comahue; Julio Alejandro Di Rienzo, Univ Nacional de Córdoba

Geostatistics analysis for distribution of the vector leafhopper and the disease CVC
Valéria Pereira, Edson Ramos, Marcello de Mello, Adriayne Araújo, Silvia Almeida, Univ Federal do Pará

Spatial distribution of the Azteca Barbifex in the production of citrus from geostatistics
Valéria Pereira, Edson Ramos, Marcello de Mello, Adriayne Araújo, Silvia Almeida, Univ Federal do Pará

A Study of the impact of the hygienic practices of milking on the total amount of bacterium found on the milk through MLG
Idemauro de Lara, Jeanete Moreira, Univ Federal do Rio Grande do Norte; Angela Gracindo, EMATER -RN; Genildo Pereira, EMATER-RN

Statistical tests in logistic regression under separation condition
André Oliveira Souza, Sebastiao Martins Filho, Univ Federal de Viçosa; Enrico Antonio Colosimo, Univ Federal de Minas Gerais; Fabyano Fonseca Silva, Univ Federal de Viçosa

Comparison between classical anova and ANOVA-AR in agronomic field trials, with spatial dependence, by simulation
Cristtian Paixão, Diogo Rossoni, Renato Lima, Univ Federal de Lavras

Crossover Designs: AB/BA
Daniele Rodrigues, UFRN; Carla Vivacqua, UFRN; Antônio Carneiro, UFV

Identify of regression models and parameters equality applied in the seeds germination of Jatropha curcas L
Rafael Dalvi Nunes, Sebastiao Martins Filho, Adair José Regazzi, Márcio Dias Pereira, Univ Federal de Viçosa
A classification rule involving two multivariate normal populations with estimated parameters when one population is singular
Mbanefo Madukaife, Univ of Nigeria Nsukka

Fouling mechanism study on the microfiltration of passion fruit juice
Ricardo Oliveira, Sueli Barros, Diego de Paulo, Robson Rossi, Univ Estadual de Maringá

Multivariate classification of growth models for beef lambs genetic groups
Fernanda Silveira, Univ Federal de Lavras; Fabiano Fonseca e Silva, Univ Federal de Viçosa

Bayesian inference for association of molecular markers (SNP) with weaning weight in Nellore cattle using different models
Diego de Córdova Cucco, USP; Luis Varona, UNIZAR; José Bento Sterman Ferraz, Fernanda Marcondes de Rezende, Elisângela Chicaroni de Mattos, Joair Pereira Eler, USP

Sunflower yield: adjustment of data means by the combination of anova and regression models
Maria Neves de Oliveira, César Castro, Fábio Oliveira, Embrapa Soja

The description of new peccary species from northernmost brazilian amazonia through multivariate analysis
Nathália Silva, Hélio Souza-Júnior, Marcelo Luna-Júnior, Antonio Pontes, Francisco Cysneiros, UFPE

Evaluation of pattern synchrony among climatic variables using Cross Sample Entropy
José Rodrigo Silva, Lázaro de Souto Araújo, Vinicius Pereira do Sacramento, Manoel Rivelino Oliveira, Paulo José Duarte-Neto, Tatijana Stosic, Borko Stosic, Univ Federal Rural de Pernambuco

Variability of the multiple imputation method under different percentages of missing data
Melissa Carvalho, Luiz Alexandre Peternelli, Mariane Alves, Univ Federal de Viçosa

Evaluation of the experimental variation’s coefficient for fruit peppers characters
Anderson Rodrigo da Silva, Universidade Federal de Viçosa; Elizanilda Ramalho do Rêgo, Universidade Federal da Paraíba; Paulo Roberto Cecon, Moises Nascimento, Rafael Oliveira, Elisangela Oliveira, Luciane da Silva Oliveira, Universidade Federal de Viçosa

Approach Classical and Bayesian in symmetric models processed applied to estimate growth in height Eucalyptus urophylla in Gypsum Pole of Araripe – PE
Kleber Barros, José Antônio Silva, Patrícia Barros, Univ Federal Rural de Pernambuco

Bayesian analysis of growth curve of Nellore beef cattle
Fabiane Silva, Elizabeth Hashimoto, ESALQ/USP; Mauricio Alencar, Embrapa Pecuária Sudeste; Alfredo R. de Freitas, Gerson B Mourao, CNPq’s scholarship

Multivariate analysis of variability of a group of variables analyzed to characterize the soil in a randomized complete blocks design
Simone Sartorio, Marina Maestre, Sônia Piedade, Univ de São Paulo - ESALQ; César Lima, Univ de São Paulo - FZEA; Cláudio Marciano, Univ Estadual do Norte Fluminense - Ctr de Ciências e Tecnologias Agropecuárias; Fernando Oliveira, Biossolo Agricultura & Ambiente Ltda

Seed Stress Analysis via Zero-inflated Proportion Data Models
Afranio Vieira, Univ de Brasilia; Joseane da Silva, Juliano Pádua, Brazilian Agricultural Res Corp – EMBRAPA

Analysis of temporal correlations of drought severity in Brazil
Gabriel Melo, Carlos Souza, Dennis Souza, Tatijana Stosic, Borko Stosic, Univ Federal Rural de Pernambuco

Optimization of the velocity-area method for river discharge measurement
José Rodrigo Silva, Borko Stosic, Mouacir Cunha Filho, Jose Ramon Barros Cantalice, Univ Federal Rural de Pernambuco

Statistical analysis of family selection in sugar cane: a comparison between REML/BLUP and bayesian approaches
Luiz Peternelli, Marcio Barbosa, Fabiano Silva, Univ Federal de Viçosa; Guilherme Rosa, Univ of Wisconsin

Use of spatial analysis and corrected F-tests in unreplicated trials
Francisco Babinec, EEA Anguil
Assessment of reproducibility of animal behaviour measures  
Francisco Babinec, Mariano Alende, Gabriela Volpi Lagreca, EEA Anguil

Analyses of nonlinear mixed-effects models with scale mixtures of normal distributions  
Cibele Russo, Univ de São Paulo; Victor Hugo Lachos, Univ Estadual de Campinas; Reiko Aoki, Gilberto Paula, Univ de São Paulo

Optimization of fitness function in Evolutionary Computation System applied to the forecasting of time-series  
David Silva, Tiago Ferreira, Paulo Neto, Federal Rural Univ of Pernambuco

Fitting the compound Poisson model to a mass egg data set  
Lucimary Santos, Renata Alcarde, Vanderly Janeiro, Greice Erler, Clarice Demétrio, Sônia Piedade, Octávio Nakano, ESALQ/USP

Multivariate techniques in the study of genetic diversit  
Elisângela Oliveira, Paulo Cecon, Luciane Oliveira, Fernando Finger, Univ Federal de Viçosa; Priscila Faria, Escola Superior de Agricultura Luiz de Queiroz; Fabyano Silva, Anderson Silva, Univ Federal de Viçosa

Non linear models fitting for balanced and unbalanced data  
Liliane Cordeiro, Diana Campos, Antônio Policarpo, UFV

Use of geostatistics for optimization sampling of forestry inventory  
Rogério Santana, Nerilson Terra, UFV

Aplicação de modelos de crescimento não lineares em tubarão-junteiro (Carcharhinus porosus)  
David Silva, Cícero Brito, José Antonio Aleixo, Rinaldo Ferreira, Eufrasio Santos, Gabriel Rivas, Univ Federal Rural de Pernambuco

Using the UPGMA method in studies of Genetic Diversity  
Luciane Oliveira, Paulo Cecon, Elisângela Oliveira, Anderson Silva, Fabyano Silva, Fernando Finger, Univ Federal de Viçosa

Aplicação de modelos de crescimento não lineares em leucena [Leucaena leucocephala (Lam) de Wit]  
David Silva, Cícero Brito, José Antonio Aleixo, Rinaldo Ferreira, Gabriel Rivas, Eufrasio Santos, Univ Federal Rural de Pernambuco

Aplicação de modelos matemáticos na estimativa do crescimento de eucaliptos Eucalyptus tereticornis  
David Silva, Cícero Brito, José Antonio Aleixo, Rinaldo Ferreira, Gabriel Rivas, Univ Federal Rural de Pernambuco

Study of different approaches for genetic parameter estimation of visual scores in Nellore cattle  
Diego de Córdova Cucco, USP / FZEA; Luis Varona, UNIZAR; José Bento Sterman Ferraz, Rachel Santos Bueno, Elisângela Chicaroni de Mattos, Joair Pereira Eler, USP / FZEA

Bayesian model selection using the sparse effects, hierarchy and heredity principles  
Guilherme Biz, Silvio Zocchi, Roseli Leandro, ESALQ-USP

Validation of a model to simulate changes of soil organic carbon stock in the arable layer  
Maria Monterubbianesi, Guillermo Studdert, Germán Domínguez, Univ Nacional de Mar del Plata

Geostatistical modelling and analysis for compositional data  
Ana Martins, Univ Estadual de Maringá; Paulo Ribeiro Jr, Wagner Bonnat, Univ Federal do Paraná; Antônio Gonçalves, Univ Estadual de Maringá

Measuring the Rectangularization of Life Tables Using the Gompertz Distribution  
Peter Pflaumer, Technical Univ of Dortmund

Dunnet`s modified test and a study of the efficiency of some multiple comparison tests  
Clarice Demétrio, ESALQ/USP; Armando Conagin, IAC; Décio Barbin, ESALQ/USP
08:15 CONTRIBUTED ORAL 4: Epidemiological Methods II
Chair: Adriana Perez (The Univ of Texas Health Science Center at Houston, US)

Effect of population stratification on quantitative trait locus association analyses
Saurabh Ghosh, Tanushree Haldar, Indian Statistical Institute

An ascertainment-adjusted score test for gene-environment interactions in family-based association studies
Tasha Fingerlin, Weiming Zhang, Gary Grunwald, Univ of Colorado Denver; Carl Langefeld, Wake Forest Univ

Inference for a common odds ratio in stratified studies
Ionut Bebu, Christopher Loffredo, George Luta, Georgetown Univ

Poisson Regression Used to Correct Noisy Variability in the Logistic Regression: an Application to Evaluate the Survival Immediate After Cardiac Arrest in the CODE Register (Cardiac arrest Outcomes Date Evaluation)
Mariana T. Carballo, Helio P. Guimarães, HCor; Álvaro Avezum, Dante Pazzanezzi; Helder Jose de Lima Reis, Hosp de Clínicas Gaspar Viana; Jose Antonio Manetta, Hosp Albert Sabin; Ligia N. Laranjeira, Otavio Berwanger, HCor; on behalf of CODE investigators, Res Div-Dante Pazzanese Inst of Cardiology

Uncovering selection bias in case-control studies using Bayesian poststratification
Sara Geneletti, London Sch of Economics and Political Science; Nicola Best, Sylvia Richardson, Mireille Toledano, Paul Elliott, Imperial Coll London

Shared frailty models and the estimation of heterogeneities in transmission
Paddy Farrington, Steffen Unkel, Open Univ

08:15 CONTRIBUTED ORAL 4: Experimental Design
Chair: Sally Galbraith (The University of New South Wales, Australia)

Dose finding designs for responses of mixed types: the model based approach
Valerii Fedorov, GlaxoSmithKline

Optimal Designs for Generalised Linear Mixed Models
David Woods, Univ of Southampton

D-optimal designs for the two-variable binary logistic model without interaction
Gaetan Kabera, Medical Res Council, South Africa; Principal Ndlovu, Univ of South Africa; Linda M. Haines, Univ of Cape Town

Bayes factors and experimental design for genome-wide association studies
Roderick Ball, Scion (NZ Forest Res Inst Limited)

Conflicts between optimality criteria for block designs with low replication
R. Bailey, Queen Mary, Univ of London

Evaluation of central composite designs as an optimization method for crop production technologies under field experimentation conditions
Dariusz Załuski, Janusz Golaszewski, Aneta Stawiana-Kosiorek, Anna Imiolek, Univ of Warmia and Mazury in Olsztyn

08:15 CONTRIBUTED ORAL 4: Mixed Models
Chair: Thomas Kneib (Carl von Ossietzky Universität, Germany)

The gradient function as an exploratory goodness-of-fit assessment of the random-effects distribution in mixed models
Geert Verbeke, Geert Molenberghs, I-Biostat, K.U.Leuven and U.Hasselt

Random effects in cumulative mortality models
**John Hinde**, NUI Galway

New challenges in Semiparametric Nonlinear Mixed-Effects Models Estimation

Ana Arribas-Gil, Univ Carlos III de Madrid; **Cristian Meza**, Univ de Valparaíso

Approximate inference in generalized linear mixed models with flexible random effects densities

**Georgios Papageorgiou**, John Hinde, Natl Univ of Ireland, Galway

Prediction with measurement errors: do we really understand the BLUP?

**Julio Singer**, Univ de Sao Paulo; Edward Stanek, Univ of Massachusetts; Viviana Lencina, Univ Nacional de Tucuman; Luz Mery Gonzalez, Univ Nacional de Colombia; Wenjun Li, Univ of Massachusetts- Worcester; Silvina San Martino, Univ Nacional de Mar del Plata

The special features of multivariate regression chains

**Nanny Wermuth**, Chalmers/Gothenburg Univ

08:15 **CONTRIBUTED ORAL 4: Survival Models**

*Chair*: Francisco Louzada Neto (Universidad federal de Sao Carlos, Brazil)

Evaluating discrimination abilities of joint models for time-to-event and longitudinal marker

**Hélène Jacqmin-Gadda**, Inserm

Estimation of treatment effect based on possibly misspecified cox regression

**Satoshi Hattori**, Kurume Univ; Masayuki Henmi, The Inst of Statistical Mathematics

Comparing flexible Bayesian survival models in health economic evaluations

**Christopher Jackson**, Linda Sharples, Simon Thompson, MRC Biostatistics Unit, Cambridge

A Log-linear Regression Model for the Beta-Weibull Distribution

**Edwin Ortega**, Universidade de São Paulo; Gauss M. Cordeiro, Universidade Federal Rural de Pernambuco, Elizabeth M. Hashimoto, Universidade de São Paulo

Analysis of data from the MESS trial through the joint modelling of pre-randomisation event rates and multiple post-randomisation survival times with cure rates

**Jennifer Rogers**, Jane Hutton, Univ of Warwick

Mixture regression models of the residual life with a event-free fraction for censored data

Wei-Hwa Chang, Taiwan Suicide Prevention Ctr; **Chen-Hsin Chen**, Academia Sinica; Y. Q. Chen, Fred Hutchinson Cancer Res Ctr

08:15 **INVITED SESSION 5: Processing and analysis of Genomic array data**

*Chair*: Ingo Ruczinski (Johns Hopkins Univ, Baltimore, MD)

Simple models for microarray data

Matthew Ritchie (The Walter and Eliza Hall Institute of Medical Research, Australia)

Multivariate mixture models for scoring copy number variation in genetic association studies

Vincent Plagnol (University of Cambridge, UK)

Statistical assessment of chromosomal aberrations at the cohort level

Franck Picard (Laboratoire Biometrie et Biologie Evolutive, France)

Statistical models for calling genotypes and copy number in high throughput genotyping platforms: principles and software

Rob Scharpf (Johns Hopkins University, US)

10:00 **COFFEE BREAK**

10:30 **CONTRIBUTED ORAL 5: Bayesian Methods II**

*Chair*: Carlos Daniel Paulino (University of Lisboa, Portugal)
Bayesian Hierarchical Model for Mapping Multiple QTL considering a F2 Population
Renato Pereira, Roseli Leandro, ESALQ/USP

Association mapping of malting quality traits in barley and model selection
Lucia Gutierrez, Univ de la Republica del Uruguay

Applications of approximate Bayesian inference for latent Gaussian spatio-temporal models
Wagner Bonat, Paulo Ribeiro Jr, UFPR

Hierarchical bayesian model to integrate individual data on ecological regression analysis
Laura Grisotto, Dolores Catelan, Annibale Biggeri, Dept of Statistics “G. Parenty” Univ of Florence

Bayesian analysis on 3 parameter IRT models for admission exams in UFLA, years 2006 to 2009
Maria Bragion, Univ Federal de Lavras

Assessing the Spatial Distribution of Mussel Seed Using Structured Additive Regression Models for Zero-inflated Count Data
Maria P. Pata, Univ of Santiago de Compostela

10:30 CONTRIBUTED ORAL 5: Bioinformatics
Chair: Andrew Mead (Warwick University, UK)

Using statistical model to correct genomic wave in high density oligo arrays
Jiqiu Cheng, Katholieke Univ Leuven; Bernard Thienpont, Babraham Inst, Cambridge; Peter Konings, Evelyne Vanneste, Thierry Voet, Joris Robert Vermeesch, Yves Moreau, Katholieke Univ Leuven

Statistical methodology for the analysis of multi-sample ChIP-chip experiments
Tristan Mary-Huard, AgroParisTech / INRA; Marie-Laure Martin-Magniette, Caroline Berard, Stephane Robin, INRA

Treating dependent data as independent: a composite likelihood method and its applications to population genetics, phylogenetics and forensic genetics
Arindam RoyChoudhury, Columbia Univ

The Mathematical Modeling of Gene Regulatory Networks and the detection of interacting QTLs using Regularization Paths
Martin Boer, Cajo ter Braak, Fred van Eeuwijk, WUR

Association tests for X-chromosomal markers -- A comparison of different test statistics
Christina Loley, Inke König, Andreas Ziegler, Univ zu Lübeck

Case-Parent Triad Studies of Genetic Association and Gene-Gene Interaction in the Presence of Missing Data
Tracy Bergemann, Univ of Minnesota; Matthew Deyo-Svendsen, Univ of Minnesota Medical Sch -- Duluth Campus

10:30 CONTRIBUTED ORAL 5: Missing Data Methods
Chair: Mike Kenward (London School of Hygiene & Tropical Medicine, UK)

Doubly Robust Pseudo-likelihood estimation for incomplete data
Geert Molenberghs, Univ Hasselt; Geert Verbeke, Katholieke Univ Leuven; Michael Kenward, London Sch of Hygiene and Tropical Med; Birhanu Teshome Ayele, Univ Hasselt

Formalising the use of causal diagrams in missing data problems
Rhian M. Daniel, Michael G. Kenward, Simon N. Cousens, Bianca L. De Stavola, London Sch of Hygiene and Tropical Med

Comparing Diagnostic Tests with Missing Data
Frederico Poleto, Julio Singer, Univ of Sao Paulo; Carlos Daniel Paulino, Technical Univ of Lisbon

The Impact of Dropouts on the Analysis of Dose-Finding Studies with Recurrent Event Data
Mouna Akacha, Univ of Warwick; Norbert Benda, Federal Inst for Drugs and Medical Devices (BfArM)

A semi-parametric, time-varying means model approach to pattern mixture models
10:30 CONTRIBUTED ORAL 5: High Dimensional Data II
Chair: Mariza de Andrade (Mayo Clinic, US)

A Family-based Association Test to Detect Gene-Gene Interactions in the Presence of Linkage
Lizzy De Lobel, Ugent; Lutgarde Thijs, Tatiana Kouznetsova, Jan Staessen, KULeuven; Kristel Van Steen, Univ de Liège

Interactive multidimensional analysis tool based on radial visualization
Carmelo A. Ávila Zarza, Moisés Inestroza, Roberto Theron, Univ of Salamanca

A detailed view on Model-Based Multifactor Dimensionality Reduction with quantitative traits for detecting gene-gene interactions: different ways of adjusting for lower-order effects
Jestinah Mahachie John, Univ of Liege

Discriminant analysis of principal components: a new approach for the analysis of genetically structured populations
Thibaut Jombart, Imperial Coll London

Predicting Multitrait Phenotypes from Genomic and Genetic data via Gaussian Markov Random Fields and L1 Penalties
Patricia Menendez, Martin Boer, Cajo ter Braak, Fred van Eeuwijk, Biometris; Paul Eilers, Erasmus medical center

10:30 INVITED SESSION 6: Spatial methods for tropical disease epidemiology
Chair: Peter J Diggle (United Kingdom)

Spatio-temporal modelling of meningitis incidence in sub-Saharan Africa
Michelle Stanton (Lancaster University, UK)

The IRI data-library: a resource for tropical disease epidemiology
Madeleine Thomson (Columbia University, US)

Risk-factors for Leptospirosis in tropical Brazil
Marilia Sa Carvalho (Fiocruz, Brazil)

Discussant
Renato M Assuncao (Universidade Federal de Minas Gerais, Brazil)

12:15 LUNCH
14:00

12:15 POSTER SESSION 2

Session: Genetics and Genomics; Clinical Trials and Cancer Research

Study of statistical properties of adaptive walks on correlated adaptation landscapes
Jose Filho, Viviane Oliveira, Universidade Federal Rural de Pernambuco

Identifying variables associated with classification of genotypes using molecular markers and morphological traits: A Biplot representation based on Procrustes rotation
Jhonny R Demey, Insto de Estudios Avanzados; María Purificación Galindo-Villardón, Univ de Salamanca; Asia Yusely Zambrano Rodríguez, Francia Fuenmayor, Inesto Nacional de Investigaciones Agrícolas; José Luis Vicente-Villardón, Univ de Salamanca

The Allelic Penetrance Approach: a new statistical modeling framework for genetic analysis
Nuno Sepulveda, Insto Gulbenkian de Ciencia; César Correia, Carlos Daniel Paulino, Insto Superior Tecnico; Carlos Penha-Gonçalves, Insto Gulbenkian de Ciencia
MCMC simulation methods applied to genetic mapping
Moysés Nascimento, Ana Carolina Campana, Luiz Alexandre Peternelli, Univ Federal de Viçosa; Adésio Ferreira, Univ Federal do Espírito Santo; Cosme Cruz, Paulo Cecon, Univ Federal de Viçosa

Association between responses of two methods for adaptability and stability of genotypes
Moysés Nascimento, Ana Carolina Campana, Luiz Alexandre Peternelli, Univ Federal de Viçosa; Marcelo Cirillo, Univ Federal de Lavras; Adésio Ferreira, Univ Federal do Espírito Santo; Reinaldo de Paula, Embrapa Pecuária Sudeste

Skew normal additive mixed models for gene expression data
Daniela Oliveira, UFSJ; Fábio Corrêa, Júlio Bueno Filho, UFLA

Analysis of Microarray Data using Mixed Effects Models
Luo Dongwen, AgRes Ltd

First order autoregressive panel data model applied to microarray time series analysis: a bayesian framework
Gilson Rocha, Fabyano Silva, Moysés Nascimento, Telma Morais, Univ Federal de Viçosa; Thelma Sáfadi, Univ Federal de Lavras

Clustering Electroencephalography Data Using Density Estimation
George von Borries, Gilson Matos, Univ de Brasília; Ricardo von Borries, Univ of Texas at El Paso

Bayesian estimation of redundancy measures in EST from cDNA library
Fernanda Paula, Fabyano Silva, Carlos Nascimento, Simone Guimarães, Sebastião Filho, Universidade Federal de Viçosa

Multistage strategy in the genetic mapping in family studies using SNP data
Mirian Souza, IME-USP; Suely Ruiz Giolo, UFPR; Julia Maria Pavan Soler, IME-USP

Using mixed models with a mixture of normal distributions for the random residual effect leads to a fast and powerful genomewide association test
Tom Cattaert, Univ of Liege; Lizzy De Lobel, Ghent Univ; Kristel Van Steen, Univ of Liege

Comparison of partialional and hierarchical clustering in protein data
Juliana Cespedes, Federal Univ of Itajubá

Path analysis for yield components on selection of sugarcane families selection
Deiciana Espósito, Luiz Peternelli, Univ Federal de Viçosa

Genetic Diversity among Pepper accessions using Tocher Method
Filipe Sávio, Priscila Faria, Escola Superior de Agricultura Luiz de Queiroz - USP; Paulo Cecon, Fernando Finger, Univ Federal de Viçosa; José Pinheiro, Escola Superior de Agricultura Luiz de Queiroz – USP

Incomplete Steiner Triple Systems over balanced square lattices to diallele analysis
Rosiana Alves, Júlio Bueno Filho, Univ Federal de Lavras

A two-step multiloci strategy in case-parent trio data
Maria Batista, Federal Univ of Ceará; Júlia Soler, Univ of São Paulo; Alexandre Pereira, Univ of São Paulo - Heart Inst (InCor)

Classification of alleles of a multiallelic locus in the study of genetic association with the development of diseases
Marcela Alicia Juliarena, Edgardo Rodriguez, Carolina Ceriani, Silvina Gutierrez, Eduardo Nestor Esteban, Facultad de Ciencias Veterinarias

Comparative study of methods of three-way data analysis for characterization of plant genetic resources evaluated in different environments
Sergio Bramardi, Andrea Lavalle, Marta Marticorena, Pablo Reeb, Univ Nacional del Comahue; Raquel Defacio, INTA; Cecilia Gonzalez, Univ Nacional de La Plata

Characterizing Population Genetic Structure in Outbred and Inbred Groups
Júlia Soler, Inst of Mathematics and Statistics

Comparison of Estimation Methods Under Imcomplete Samples: An Application to the Hardy-Weinberg Balance
Allan Robert da Silva, Carlos Raphael Daniel, Luiz Henrique Dore, Univ Federal de Sergipe
Analyzing Gene Expression Data through Quantitative and Categorical Approaches in Congenic Rat Strains
Júlia Soler, Inst of Mathematics and Statistics

FLIM - Free Interface for Microarray Analysis using Bioconductor
Luciane Oliveira, Otávio Brustolini, Paulo Cecon, Fabiano Silva, Univ Federal de Viçosa

Hidden Markov chain on the Location of homogeneous regions in DNA sequences
Luciano Souza, Kleber Barros, Kleber Santoro, Univ Federal Rural de Pernambuco

Marginal (GEE) Regression Model to evaluate multiple components in Cancer-Specific Geriatric Assessment (C-SGA)
Soe Soe Thwin, VA-Boston Healthcare System

Quantile calculus and censored regression
Yijian Huang, Emory Univ

Selection of a Working Correlation Structure in the Weighted Generalized Estimating Equations Approach for Incomplete Longitudinal Data
Masahiko Gosho, Chikuma Hamada, Isao Yoshimura, Tokyo Univ of Science

Minimum-norm estimation for a bi-exponential survival model
Yuval Nov, Univ of Haifa

Fitting Poisson models sequentially to explore cancer mortality trends in Argentina
Camila Niclès, Sonia Pou, Univ Nacional de Córdoba; Alberto Osella, Istituto Nazionale di Ricovero e Cura a Carattere Scientifico; María del Pilar Díaz, Univ Nacional de Córdoba

The Negative Binomial-Generalized Gamma Regression Model With Cure Rate
Gladys Barriga, Univ Estadual Paulista; Edwin Ortega, Elizabeth Hashimoto, Univ de São Paulo; Vicente Cancho, Univ Estadual Paulista

Interactive Effects of Alcohol and Tobacco on Head and Neck Cancer, A Visualization using Bivariate Splines
Jennifer Clark, Andrew Olshan, Amy Herring, Univ of North Carolina, Chapel Hill

Estimators for the bivariate distribution function of censored gap times
Luís Machado, Univ of Minho

Modeling geographic and temporal variations in cancer mortality: environmental factor effects through multilevel approach
Sonia Pou, Univ of Córdoba; Alberto Osella, Istituto Nazionale di Ricovero e Cura a Carattere Scientifico "Saverio de Bellis"; María del Pilar Díaz, Univ of Córdoba

Vertical modeling: analysis of competing risks data with missing causes of failure
Mioara Alina Nicolaie, Leiden Universitair Medical Ctr; Hans C. van Houwelingen, Leiden Universitair Medical Ctr; Hein Putter, Leiden Universitair Medical Ctr

Consequences of Dichotomization
Frank Mannino, Valerii Fedorov, GlaxoSmithKline

Time Varying Survival Curves
Urania Dafni, Univ of Athens; Dimitris Karlis, Athens Univ of Economics

Mixed response models for bladder cancer in Cordoba, Argentina
Maria del Pilar Diaz, Maria Dolores Roman, Florencia Ines Roque, Alicia Nuvarro, Univ of Cordoba; Alberto R Osella, Lab of Epidemiology and Biostatistics, IRCCS Saverio de Bellis

A generalized modified Weibull distribution for lifetime modeling
Jalmar Carrasco, Edwin Ortega, Univ de São Paulo; Gauss Cordeiro, Univ Federal de Pernambuco

Longitudinal count data model with heterogeneity in the intra-patient variation
Hideaki Uehara, Tsumura & Co.; Masako Nishikawa, Kunihiko Takahashi, Eisuke Hida, Kazue Yamaoka, Natl Inst of Public Health; Toshiro Tango, Ctr for Medical Statistics

Assessment biostatistics cardiovascular risk in individuals in the city of Belém, from the framinghan score concomitant with their independent variables
Cássio Pinho dos Reis, Jasonn Cardoso Morais, Silvia dos Santos de Almeida, Univ Federal do Pará
Nutritional profile of elderly cardiac patients at a university hospital in Belém, PA
Cássio Pinho dos Reis, Ana Carla Moreira da Silva, Silvia dos Santos de Almeida, Univ Federal do Pará

Construction of Exact Optimal Designs for the Michaelis-Menten and Hill Models
Iuri Ferreira, Luzia Trinca, Cláudia Ferreira, IBB-UNESP

Sequential factorial design for the formulation of a culture media to optimize the biomass and bacteriocin production of lactobacillus salivarius subsp. Salivarious CRL 1328
Elena Bru, María Silvina Juárez Tomáis, Ctr de Referencia para Lactobacilos; Birgitt Wiese, Medische Hochschule Hannover; Maria Elena F. Nader-Macias, Ctr de Referencia para Lactobacilos

The statistical and clinical interplay in dose-finding experiments with combination therapies
Mauro Gasparini, Politecnico di Torino; Stuart Bailey, Beat Neuenschwander, Novartis Pharma AG

Designing Experiments for a Pharmacokinetic Model with Correlated Errors
Mauricio Santos, Biocinese; Luzia Trinca, UNESP

Longitudinal, bounded health scores modelled by censored skew-normal distributions
Jane Hutton, Univ of Warwick; Elena Stanghellini, Univ of Perugia; Rosa Capobianco, Univ of Roma Tre

Alcohol and colorectal cancer risk: a modeling strategy for consumption and non-consumption
María del Pilar Díaz, Sonia Alejandro Pou, Univ of Córdoba; José Eduardo Corrente, Inst de Biociencias. Univ do Estado de Sao Paulo (UNESP). Campus de Botucatu

Comparing methods of analysis for cluster cross-over randomized trials with binary response
Marta Quagliano, Leandro Kovalevski, Valeria Milanés, Facultad de Ciencias Económicas y Estadística - Univ Nacional de Rosario

Spatial Analysis Strategies to Study Cancer Incidence Distribution in Córdoba, Argentina
Nancy Stanecka, Patricia Caro, Margarita Díaz, María del Pilar Díaz, Univ Nacional de Córdoba

Association Of the C Reactive Protein with the Metabolic Syndrome in Students of the Federal University of Viçosa
Daniele Rodrigues, Mariane Silva, Kiriaque Barbosa, Antônio Policarpo, Josefinha Bressan, UFV

A full Bayesian semiparametric approach for modeling survival data with cure fraction
Fabio Demarqui, UFMG; Dipak Dey, UCONN; Rosangela Loschi, Enrico Colosimo, UFMG

Kernels Techniques for Testing In Vitro “Similarity” of Drug Dissolution Profiles
Denis Enachescu, Cornelia Enachescu, Acad of Romania

Cured Fraction Bayesian Estimating on heart failure patients waiting for a transplant
Paulo Júnior, UFMG; Maria Regina Tavares, UFPA

Bayesian Analysis for a Model for Survival Data with a Cure Rate: Estimation and Case Influence Diagnostics
Alessandra Sibim, Vicente Cancho, Univ de São Paulo – USP

The new Kum-Log-logistics distribution applied to survival data
Tiago Santana, UNICAMP; Marcelino A. R. de Pascoa, Univ of Sao Paulo

The Hjorth-Poisson lifetime distribution
M. Aparecida Franco, Estela Bereta, Francisco Louzada Neto, Univ Federal de São Carlos

Efficiency of Designs for Longitudinal Recurrent Event Studies with Missing Data
Elizabeth Juarez-Colunga, Simon Fraser Univ

The generalized time dependent logistic family with Frailty
Eder Milani, Vera Tomazella, Teresa Cristina Dias, UFSCar

Comparative study between two Bayesian approaches in QTL mapping
Andreia Meyer, Univ Estadual Paulista; Renato Nunes Pereira, Univ de São Paulo; Roseli Aparecida Leandro, Univ de São Paulo; Adhemar Sanches, Univ Estadual Paulista

Modeling Bayesian partition for survival data of long-term
Jhon Franky, Universidade Federal de São Carlos

Efficiency of the use of information a priori in analysis of adaptability and stability of
genotypes
Moysés Nascimento, Fabyano Silva, Univ Federal de Viçosa; Thelma Sáfadi, Univ Federal de Lavras; Ana Carolina Campana, Univ Federal de Viçosa; Reinaldo Ferreira, Embrapa Pecuária Sudeste

Grouping data from dominant markers using supervised pattern classification
Pedro Ramos Cerqueira, Roseli Aparecida Leandro, ESALQ-USP; Juliana Garcia Cespedes, UNIFEI – Itajubá

Bayesian reference analysis of the Hardy-Weinberg equilibrium
Vera Lucia Tomazella, Univ Federal de São Carlos

Test, estimation and model comparison for the meiosis I non-disjunction fraction in trisomies
Vanessa Silva, Rosangela Loschi, Univ Federal de Minas Gerais

Handling missing data from high-throughput protein abundance experiments
Kevin Chang, Bioinformatics Inst, Sch of Biological Sciences, Univ of Auckland, New Zealand; Richard G. Jarrett, CSIRO Mathematics, Informatics and Statistics, Adelaide, Australia; Katya Ruggiero, Sch of Biological Sciences, Univ of Auckland, New Zealand

Selecting an exponential random graph model for complex brain networks
Sean Simpson, Hayasaka, Paul Laurienti, Wake Forest Univ Sch of Med

Sample Size Calculations for Comparing Two Proportions in Clinical Research
Arminda Siqueira, Joyce Rodrigues, Univ Federal de Minas Gerais

Quantum Pattern Recognition of Mitochondrial DNA sequences
Patrícia Barros, Wilson Oliveira, Kleber Barros, Univ Federal Rural de Pernambuco; Adenílton Silva, Univ Federal de Pernambuco

14:00

14:00 CONTRIBUTED ORAL 6: Clustering and Classification
Chair: Michal Abrahawowicz (McGill University, Canada)

On comparison of clustering methods for pharmacoepidemiological data
Lise Bellanger, Fanny Feuillet, Jean-benoit Hardouin, Véronique Sébille, Univ de Nantes

Diffusion of Surgical Innovation in Kidney Cancer Patients Using Trees
Mousumi Banerjee, Univ of Michigan

Clustering Based on Adherence Data
Sylvia Muyingo, Univ of Tampere

Mixture model cluster analysis for medical diagnosis under different covariance structures using information complexity
Bahar Erar, Hamparsum Bozdogan, The Univ of Tennessee

Semi-Supervised Recursively Partitioned Mixture Models for Identifying Cancer Subtypes
Devin Koestler, Brown Univ

A statistical method for the partial area under the ROC curve based on a boosting procedure
Osamu Komori, Shinto Eguchi, The institute of Statistical Mathematics

14:00 CONTRIBUTED ORAL 6: Longitudinal Data
Chair: Raúl Macchiavelli (University of Puerto Rico)

Semiparametric varying coefficient model proposals for longitudinal data
Vicente Núñez-Antón, Susan Orbe-Mandaluniz, Univ del País Vasco (UPV/EHU); Juan M. Rodríguez-Póo, Univ de Cantabria

Modelling the Rate of Change in a Longitudinal Study with Missing Data, Adjusting for Contact Attempts
Mouna Akacha, Jane L. Hutton, Univ of Warwick

Joint Modeling of Longitudinal Measurements and Interval-censored Competing Risk Data
Ralitza Gueorguieva, Robert Rosenheck, Haiqun Lin, Yale Univ
Outcome dependent sampling for continuous longitudinal response data
Jonathan Schildcrout, Vanderbilt Univ

Competing regression models for longitudinal data
Airlane Alencar, Julio Singer, Insto de Matemática e Estatística; Francisco Marcelo Rocha, Insto de Psicologia

A longitudinal model for repeated interval-observed data
Amita Manatunga, Emory Univ; Huichao Chen, Ctr for Biostatistics in AIDS Res; Robert lyles, Limin Peng, Michele Marcus, Emory Univ

14:00 CONTRIBUTED ORAL 6: Stochastic Processes
Chair: Tom Britton (Stockholm University, Sweeden)

Estimation of periodic autoregressive processes: A frequency domain approach
Alessandro José Sarnaglia, Univ Federal de Minas Gerais; Valderio Anselmo Reisen, Univ Federal do Espírito Santo; Céline Lévy-Leduc, Télécom ParisTech

A stochastic model for estimating recruitment and survival of commonly grown plantation tree species in Kenya
Vincent Oeba, Kenya Forestry Res Inst

The stochastic system approach to life-course epidemiology
Daniel Commenges, INSERM; Anne Gégout-Petit, Univ Bordeaux 2

Random walk modeling of fishing vessel trajectories
Rocio Joo, Sophie Bertrand, Inst de Recherche pour le Développement (IRD); Jean-Michel Marin, Univ Montpellier II; Ricardo Oliveros, Insto del Mar del Perú

Improving the Prediction of Non-Linear Time Series with Hybrid Methods Using the Correct Statistical Measure
Aranildo Lima Junior, David Silva, Univ Federal Rural de Pernambuco; Paulo Mattos Neto, Univ Federal de Pernambuco; Tiago Ferreira, Univ Federal Rural de Pernambuco

14:00 CONTRIBUTED ORAL 6: Survival Data III
Chair: Pedro Puig (University Autonomous of Barcelona, Spain)

A New Estimator of Survival When Death Is Reported with Delay
T. Charles Casper, Univ of Utah; Thomas Cook, Univ of Wisconsin-Madison

Islet Transplantation in Diabetes
Jawahar Tiwari, FDA

Time-to-Event Data: A Different Angle by Population Evolution Charts And New Statistical Tests
Joachim Moecks, BIOMCON GmbH; Walter Koehler, baseline statistics GmbH

'Designing' Observational Studies
Cara Dooley, Natl Univ of Ireland, Galway

Lorenz curves, concentration, and treatment-covariate interactions in survival analysis
Marco Bonetti, Bocconi Univ

Competing risks models with unobservable failure cause and dependence between failure causes
Rodrigo Tsai, Luiz K. Hotta, UNICAMP

14:00 JABES SHOWCASE
Presentations of the paper judged as the best publication in JABES in 2008/9 by a member of the IBS, together with presentations of some of the other short-listed papers

15:45 COFFEE BREAK
**16:15 CONTRIBUTED ORAL 7: Animal Science**

*Chair: Juan Steibel (Michigan State University, US)*

Effect of consanguinity on a Holstein’s Dairy Herd fertility of Central Chile. A Bayesian Generalized Mixed Model Approach  
**Mario Martinez Araya**, Univ of Chile; Reinaldo Arellano-Valle, Pontifical Catholic Univ of Chile

Bayesian modelling of the mean and covariance matrix in normal nonlinear models  
**Edilberto Cepeda**, Univ Nacional de Colombia; Vicente Núñez-Antón, Univ del País Vasco

QTL mapping for swine carcass traits: a Bayesian factor analysis approach  
**Fabyano Silva**, Univ Federal de Viçosa; Guilherme J.M. Rosa, Univ of Wisconsin; Gustavo de los Campos, Univ of Alabama; Paulo Sávio Lopes, Simone E. F. Guimarães, Univ Federal de Viçosa

LASSO techniques for predicting complex phenotypes using genetic markers from throughout the genome: A case study with chicken  
**Júlio Bueno Filho**, Univ Federal de Lavras

Spatial analysis of sporadic VTEC cases: clusters and proximity to cattle farms  
**Sharon Kühlmann Berenzon**, Swedish Inst for Infectious Disease Control

**Modeling Measurement Errors for Dependent Data**  
**Tapio Nummi**, Univ of Tampere

**16:15 CONTRIBUTED ORAL 7: Causal Inference**

*Chair: Daniel Commenges (INSERM, University Bordeaux 2, France)*

Mediation Analysis of Survival Data  
**Theis Lange**, Dept of Biostatistics, Univ of Copenhagen

Estimating Optimal Dynamic Treatment Regimes with Shared Decision Rules across Stages: An Extension of Q-learning  
**Bibhas Chakraborty**, Columbia Univ; Erica Moodie, McGill Univ

On model selection in causal inference  
**Maarten Bekaert**, Stijn Vansteelandt, Ghent Univ; Gerda Claeskens, KU Leuven

The random discontinuity design in epidemiology  
**Sara Geneletti**, London Sch of Economics and Political Science; Gianluca Baio, Univ Coll London

Causal Inference in Randomized Controlled Trials with non-adherence - untestable assumptions vs uninterpretable parameters?  
**Krista Fischer**, MRC Biostatistics Unit; Jack Bowden, MRC Clinical Trials Unit; Ian White, Simon Thompson, MRC Biostatistics Unit

Mendelian randomisation analysis of case-control data using Structural Mean Models  
Jack Bowden, MRC Clinical Trials Unit; **Stijn Vansteelandt**, Ghent Univ

**16:15 CONTRIBUTED ORAL 7: Environmental Research I**

*Chairs: Robert Harrison and Marcia Ciol (University of Washington, US)*

A statistical distribution applied to the study of environmental quality in Santiago, Chile  
Carolina Marchant, Victor Leiva, Univ de Valparaiso; **Antonio Sanhueza**, Univ de La Frontera; Fernanda Cavieres, Univ de Valparaiso

Bayesian space-time models for responses in the exponential family: an application to a rainfall data set in Australia  
**Ana Carolina da Costa**, Nícia Hansen, Marina Paez, Flávia Landim, Univ Federal do Rio de Janeiro

Smooth space-time quantile maps based on regularly spaced observations  
**Dana Draghicescu**, Hunter Coll, CUNY

Credibility distributional grade geostatistics for modeling spatial inequalities
16:15 **CONTRIBUTED ORAL 7: Software and Computational Methods**

*Chair:* Geert Molenberghs (University Hasselt, Belgium)

- Teaching Optimal Design of Experiments Using the Software R
  *Edmilson Rodrigues Pinto*, Leandro Alves Pereira, Federal Univ of Uberlandia
- Canonical correlation analysis in education: associations between student evaluations of courses and instructors
  *Tamara Sluisarenko*, Line Harder Clemmensen, Technical Univ of Denmark
- Majority vote with bimodal distribution of noise
  *Aranildo Lima Junior*, Tiago Ferreira, Univ Federal Rural de Pernambuco; Francisco Moreira, Univ Federal de Pernambuco
- Power Enhanced, Bootstrapped Multiple Testing
  *Rajat Mukherjee*, Nestle Res Ctr
- Are descriptive multivariate techniques useful for the determination of protein functions from genomic data?
  *Liliana López Kleine*, Luis Eduardo Ospina Forero, Univ Nacional de Colombia

18:15 **AWARDS PRESENTATION AND CELEBRATION OF 25 IBCs**

19:30 **Wednesday, 8 December 2010**

**MID-CONFERENCE TOURS**

**Thursday, 9 December 2010**

08:15 **CONTRIBUTED ORAL 8: Agriculture II**
Confidence intervals for cavalieri sampling  
**Chris Glasbey**, Biomathematics & Statistics Scotland

Modelling a repeated ordered categorical response with penalised splines using MCEM  
**Sue Welham**, Rothamsted Res; Tu Ho, James Carpenter, London Sch of Hygiene and Tropical Med

Modeling Multivariate Overdispersed Binomial Data  
**Eduardo Davila**, Luis Alberto López, Univ Nacional de Colombia

Fractional and factorial designs as components of a research methodology for testing crop production technologies  
**Janusz Golaszewski**, Anna Zaręba, Dariusz Żaluski, Anna Imiołek, Aneta Stawiana-Kosiorek, Krystyna Żuk-Golaszewska, Univ of Warmia and Mazury

Spatio-Temporal Modelling for Pricing Area Yield Crop Insurance Contracts  
**Ramiro Ruiz-Cardenas**, Federal Univ of Minas Gerais; Elias Teixeira Krainski, Federal Univ of Paraná

Size and power properties of some tests in the Birnbaum-Saunders regression model  
Artur Lemonte, **Silvia Ferrari**, Univ of Sao Paulo

08:15 CONTRIBUTED ORAL 8: Clustering in Genetics and Genomics  
*Chair: Elizabeth Thompson (University of Washington, US)*

Analyzing Time-Course Microarray Data using Functional Data Analysis  
**Norma Coffey**, Natl Univ of Ireland, Galway

Clustering with exclusion zones: Genomic applications  
**Mark Segal**, Yuanyuan Xiao, Univ of California San Francisco

Assessing Similarity of DNA Profiles  
**Graham Hepworth**, Ian Gordon, The Univ of Melbourne

Improving visualization of interaction effects of expressed genes in microarray studies  
**Elmer Fernandez**, Univ Catolica de Cordoba; Edgardo Salvatierra, Carolina Bizama, Felipe Benavente, Manuel Gidekel, VentureLab; Osvaldo Podhajcer, Insto leilor; Monica Balzarini, Univ Nacional de Cordoba

QTL Mapping in sugarcane using Composite Interval Mapping considering an integrated genetic map  
**Rodrigo Gazaffi**, Gabriel R. A. Margarido, Marcelo Molinari, Maria Marta Pastina, ESALQ/USP; Karine Miranda de Oliveira, CTC; Anete Pereira de Souza, UNICAMP; Antonio Augusto Franco Garcia, ESALQ/USP

Gene expression profiling of multiple autoimmune diseases  
**Joanlise Leon Andrade**, Univ de Brasília

08:15 CONTRIBUTED ORAL 8: Latent Variable Methods  
*Chair: John Neuhaus (University of California, San Francisco, US)*

On assessing age-varying association in bivariate current status data  
**Steffen Unkel**, C. Paddy Farrington, The Open Univ

Latent Class Analysis of Millon Adolescents Clinical Inventory (MACI)  
**Mirta Santana**, Marcela D'Urso, Liliana Galindo, Liliana Fracchia, Univ Nacional de Tucumán

Bayes PLS: Near optimal prediction from relevant components  
Inge Helland, **Solve Saebo**, Hakon Tjelmeland, Norwegian Univ of Life Sciences

Latent class model with familial dependence to address heterogeneity in complex diseases: adapting the approach to family-based association studies  
**Alexandre Bureau**, Univ Laval; Jordie Croteau, Ctr de recherche Univ Laval - Robert-Giffard; Aurélie Labbe, McGill Univ; Chantal Mérette, Univ Laval

Applications of latent variable models in health sciences  
**Meric Yavuz Çolak**, Korkut Ersoy, Başkent Univ healthcare management department

An IRT Probit Model with Skew-normal Latent Traits Distribution: An Application to the
Measurement of Depression Levels

Caio Azevedo, Univ of Campinas; Dalton Andrade, Federal Univ of Santa Catarina; Heleno Bolfarine, Univ of Sao Paulo

08:15 CONTRIBUTED ORAL 8: Miscellaneous
Chairs: Víctor Leiva (Universidad de Valparaíso, Chile) and Antonio Sanhueza (Universidad de la Frontera, Chile)

Time-varying coefficient model component estimation through generalized estimation equations
Juan Sosa, Luis Díaz, Natl Univ of Colombia

Can compositional constraints on ‘omics’ data lead analyses astray?
Warren Muller et al., CSIRO Mathematics, Informatics and Statistics

A cluster analysis based on vital statistics and its characterization in latin american countries
Claudia Castro-Kuriss, Buenos Aires Inst of Technology

Application of neural networks in archaeometrical data
Paulo Oliveira, Casimiro Munita, Ipen-Cnen-Sp

A Bayesian Model Using Non-Proportionally Sampled Survival Data
Samuel Manda, South African Medical Res Council

An analysis of the excess mortality from dengue in epidemic periods
Camila Resende, Dani Gamerman, Univ Federal do Rio de Janeiro

08:15 INVITED SESSION 8: Epidemiological surveillance: space-time approaches and multiple testing problems
Chair: Annibale Biggeri (Italy)

Approaches to Space-time Surveillance
Renato Martins Assunção (Universidade Federal de Minas Gerais, Brazil)

Hierarchical Bayesian modelling of False Discovery Rate in Disease Mapping
Dolores Catelan (University of Florence, Italy)

Point process based infectious disease surveillance
Michael Höhle (Ludwig-Maximilians Universitat, Germany)

Discussant
Paulo Justiniano Ribeiro Jr. (Universidade Federal do Paraná, Brazil)

08:15 INVITED SESSION 9: Statistical issues in vaccine studies
Chair: Tsai-Lien Lin (MD)

Statistical issues in evaluating preventive vaccines: an overview
A. Dale Horne (FDA/CBER, US)

Statistical issues for non-inferiority analysis in multi-valent vaccine trials
Frank Guanghan Liu (Merck Research Laboratories, US)

How to handle safety analyses in vaccine randomized clinical studies
Brigite Cheuvart (GSK Biologicals, Belgium)

New statistical methods for assessing vaccine safety in the field
Paddy Farrington (The Open University, UK)

10:00 COFFEE BREAK

10:20 CONTRIBUTED ORAL 9: Disease Mapping
Chair: Dolores Catelan (University of Florence, Italy)
Chilean cardiovascular disease mortality atlases, 2000-2007
M Gloria Icaza, Loreto Núñez, Univ de Talca; Francisco Torres Avilés, Univ de Santiago de Chile; Nora Díaz Sanzana, Univ de Talca; José Emilio Villarrol de la Sota, Dept de Epidemiología, Ministerio de Salud de Chile

Spatio-temporal modelling of dengue risk sensitivity to climate variability in Brazil
Rachel Lowe, Trevor Bailey, David Stephenson, Univ of Exeter

Inferring the neighborhood structure in Bayesian spatial model
Erica Rodrigues, Renato Martins Assunção, UFMG

Estimating the prevalence and the force of infection of Parovirus B19 in Belgium using hierarchical Bayesian mixture models
Emanuele Del Fava, Hasselt Univ

Covariance Matrices in Space-Time Bayesian Models
Leticia Pinheiro, Renato Assunção, Univ Federal de Minas Gerais

10:20 CONTRIBUTED ORAL 9: Environmental Research II
Chair: Mihoko Minami (The Institute of Statistical Mathematics, Japan)

Prediction Models and Estimation Bias of Forest Above Ground Biomass: the Case of a Atlantic Forest in Espírito Santo, Brazil
Jaime Felipe Medina Sotomayor, Edgar De Souza Vismara, Hilton Thadeu Zarate De Couto, João Luís Ferreira Batista, Univ Of Sao Paulo

A proposal to model tied survival observations in the comparison of Cox and Weibull Proportional Hazard Models: an application in medicine
Luis Grajales, Universidad Nacional De Colombia

Assessing the Impact of Changes in Land-Use on Biodiversity and other Ecosystem Services
Andrew Mead, Dave Skirvin, Carole Wright, Univ of Warwick

A paired-tree approach to predict response of douglas-fir plantations to nitrogen fertilization
Robert Harrison, Kim Litke, David Briggs, Eric Turnblom, Univ of Washington; Scott Holub, Weyerhaeuser NR

Modeling soil water availability for neotropical forest trees
Fabien Wagner, Bruno Herault, Univ Antilles Guyane, UMR Ecofog; Damien Bonal, INRA Nancy, UMR EEF; Vivien Rossi, Cirad, UMR Ecofog

Error propagation through a Bayesian network for biomass estimation in neotropical forests
Quentin Molto, UAG - UMR EcoFog; Vivien Rossi, Lilian Blanc, CIRAD - UMR EcoFog

10:20 CONTRIBUTED ORAL 9: High Dimensional Data III
Chair: Paul Eilers (Erasmus Medical Center Rotterdam, The Netherlands)

Statistical challenges in systems biology studies
Liliana López Kleine, Univ Nacional de Colombia

Improvements on preprocessing of massive microarray datasets
Benilton Carvalho, Univ of Cambridge; Robert Scharpf, Johns Hopkins Univ; Matthew Ritchie, The Walter and Eliza Hall Inst of Medical Res; Rafael Irizarry, Johns Hopkins Univ; Simon Tavare, Univ of Cambridge

rRF: robust random forest for microarray data sets
Erdal Cosgun, Ergun Karaagaoglu, Hacettepe University

A New Principal Component Based Test for Comparing Bacterial Fingerprints
Guo-Chun Ding, Kornelia Smalla, Holger Heuer, Julius Kühn-Inst; Siegfried Kropf, Otto-von-Guericke-Univ

Random Effects Model for Multiple Pathway Analysis with Applications to Type II Diabetes Microarray Data
Herbert Pang, Duke Univ; Inyoung Kim, Virginia Tech; Hongyu Zhao, Yale Univ

Reference Samples in Imputation and its implications in association Analysis results
Mariza de Andrade, Martha Matsumoto, Elizabeth Atkinson, Sooraj Maharjan, Mayo Clinic; Sharon Kardia, Univ of Michigan
10:20 CONTRIBUTED ORAL 9: Times Series Analysis
Chair: Dani Gamerman (Universidade Federal do Rio de Janeiro, Brazil)

Modified Maximum Likelihood Estimators for Left Censored Bivariate Data Under Non-normality
Evrim ORAL, Louisiana State Univ Health Sciences Ctr

Comparison of classical and Bayesian approaches for intervention analysis in structural models
Glaaura Franco, UFMG; Dani Gamerman, UFRJ; Thiago Santos, UFMG

A Temporal Bayesian model with discrete response: An Application in Epidemiology
Francisco Torres-Avilés, Nelly González, Univ de Santiago de Chile; Elena Carrasco, Univ de Chile

Using Cox processes to model the pulse generating mechanism underlying time series of pulsatile hormone data
Nichole Carlson, Gary Grunwald, Univ of Colorado Denver; Timothy Johnson, Univ of Michigan

Estimating Periodicity of Oscillatory Time-Series Through Resampling Techniques
Maria Costa, Barbel Finkenstadt, Univ of Warwick; Peter Gould, Univ of Liverpool; Julia Foreman, Karen Halliday, Univ of Edinburgh; Anthony Hall, Univ of Liverpool; David Rand, Univ of Warwick

Garch models for short-term climate prediction via Bayesian approach
Gabriel Sarmanho, Afrânio Vieira, UnB; Paulo Lucio, UFRN

10:20 INVITED SESSION 10: Missing data in clinical trials: The way forward
Chair: Herbert Thijs (Belgium)

Conceptual Considerations Regarding Choice of endpoints, Hypotheses, and Analyses In Longitudinal Clinical Trials
Craig Mallinckrodt (Eli Lilly and Company, US)

United States committee on national statistics report 'The prevention and treatment of missing data in clinical trials' - a game changer?
James Carpenter (London School of Hygiene and Tropical Medicine, UK)

Methods for handling dropout in clinical trials
Michael G. Kenward (London School of Hygiene and Tropical Medicine, UK)

Discussant
Geert Molenberghs (Universiteit Hasselt and Katholieke Universiteit Leuven, Belgium)

12:05 LUNCH

13:35 POSTER SESSION 3

Session: Ecological and Environmental Research; Epidemiology and Infectious Diseases

A distribution-dependent vegetation survey method
Masae Shiyomi, Ibaraki Univ

Sensitivity of resistance risk estimates to parameter input distributions
Aline Maia, Embrapa Meio Ambiente; Durval Dourado-Neto, Esalq/Univ de São Paulo

Discrete choice model in the random selection resource the habitat selection of the owl spotted (Strix occidentalis)
Sandra Vergara Cardozo, Natl Univ; Carlos Tadeu Dos Santos Dias, Univ de Sao Paulo USP/ESALQ; Bryan Frederick John Manly, Western EcoSystemsTechnology, Inc.; Luis Alberto Lopez Perez, Natl Univ

Bayesian Analysis to Correct False-negative Errors in Capture-recapture Photo-id Abundance
Estimates
Cibele da Silva, Univ de Brasilia-UnB

Analysis on differentials in health self-awareness levels among the adult population of Brazil according to PNAD 2003
José Rodrigo de Moraes, Univ Federal Fluminense

Using wavelets to compare PM10 time series in São Paulo, Brazil
Thelma Safadi, Federal Univ of Lavras

Comparing methods for developing water quality criteria for lakes in Puerto Rico
Raul Macchiavelli, Alexander Martínez, Univ of Puerto Rico; Jhonny Demey, Insit de Estudios Avanzados; Gustavo Martinez, David Sotomayor, Univ of Puerto Rico

Symmetric Analysis of k pairs of ecological tables
Nelida Winzer, Univ Nacional del Sur; Claudia Marinelli, Univ Nacional del Ctr de la Provincia de Buenos Aires; Rosana Cepeda, Univ Nacional del Ctr de la Prov. de Buenos Aires

The effect of disturbance on the adaptation of a community in a competition model
Ágota Drégelyi-Kiss, Óbuda Univ; Levente Hufnagel, „Adaptation to Climate Change” Res Group of the Hungarian Acad of Sciences

Lag structure estimation of particulate air pollution and hospital admissions in amazon region
Cleber do Carmo, Mariane Alves, Univ Federal do Rio de Janeiro; Sandra Hacon, Fundação Oswaldo Cruz

Using the TGLM to model species-area relationship
Marinho Andrade, USP; Kaitane Conceição, UFSCar; Werner Ulrich, Nicolaus Copernicus Univ

Analyzing the Sexual Cycle of Anemone Viridis (Forskal, 1775) in the Nw Coast of Spain Through Use of Categorical Additive Regression Models
Vicente Lustres-Pérez, Univ de Santiago de Compostela

Passive participants? Role of biometricians in climate change research
Elias Obudho, Univ of Nairobi; Vincent Oeba, Kenya Forestry Res Inst; Elizabeth Muthiani, Joseph Ndungu, Univ of Nairobi

Evaluation of Attitudes of European Citizens Towards The Environment by Joint Correspondence Analysis
Zerrin AŞAN, Anadolu Univ

Mixed linear model for improving height-diameter relationship modelling in Eucalyptus grandis plantations
Samuel Carvalho, João Batista, Edgar Vismara, Marcos Nicoletti, Tito Castro, Univ of São Paulo

Outliers in rainfall time series: a study of the San Francisco Basin
Alyne Silva, Nerilson Santos, Fernando Pruski, Univ Federal de Viçosa

Relative Contributions of Crown and Phenological Traits to Growth of a Pseudo-Backcross Family ((P.elliottii x P. taeda) x P. elliottii) and the Open-Pollinated Families of its Pure Species Progenitors
Patricio Munoz, Dudley Huber, Timothy Martin, Univ of Florida

The problem of the estimation in models of linear calibration involving amazon forest trees
Cássio Pinho dos Reis, Silvia dos Santos de Almeida, Edson Marcos Leal Soares Ramos, Univ Federal do Pará

Multifractal analysis of time series of hotspots in Brazil
Rosilda Souza, Tatijana Stosic, Univ Federal Rural de Pernambuco

Multifractal analysis of temporal series of precipitation in Piracicaba, Brazil
Antonio Samuel Silva, Univ Federal Rural do Pernambuco; Rosilda Benício, Dâmocles Aurélio Silva, Tatijana Stosic, Univ Federal Rural de Pernambuco

A new method for Spatial Proximity Matrix
Gérson Santos, João Louzada, Marcelo Oliveira, Univ Federal de Lavras

A Bayesian Aproach for Nonlinear Models For Longitudinal Data
Everton Rocha, Roseli Leandro, Univ of São Paulo
Time series analysis applied to average velocity of winds in São João do Cariri, Brazil
Silvio Fernando Junior, Felipe Gusmão, Cintia Ferreira, Tiago Ferreira, UFRPE

Spatially Varying Autoregressive Processes
Aline Nobre, Fundação Oswaldo Cruz; Bruno Sansó, Univ of California Santa Cruz; Alexandra Schmidt, Federal Univ of Rio de Janeiro

Wind shear coefficients for São João do Cariri, Brazil
Diego Ferreira, Anderson Araújo, Djalma Farias, Milton Melo, Borko Stosic, Tatijana Stosic, UFRPE

General additive models to analyze urban thermal comfort in Curitiba, Brazil
Peter Bröde, Leibniz Res Ctr for Working Environment and Human Factors (IfADo); Eduardo Kruger, Univ Tecnológica Federal do Paraná – UTFPR

Cokriging and multivariable functional spatial prediction
Ramón Giraldo, Univ Nacional de Colombia; Pedro Delicado, Univ Politècnica de Catalunya; Jorge Mateu, Univ Jaume I

Bootstrap hypothesis testing in generalized additive models for comparing curves of treatments in longitudinal studies
María Laura Nore, Daniel Wunderlin, María del Pilar Díaz, Univ Nacional de Córdoba

Ecological Risk Assessment Modelling for offshore oil and gas drilling wells
Leticia Falcão Veiga, PETROBRAS - Ctr de Pesquisas e Desenvolvimento - CENPES; Fernando Hepp Pulgati, Jandyra M.G. Fachel, UFRGS - Univ Federal do Rio Grande do Sul

Leptospirosis Incidence Study Using Spatial-Longitudinal Models
Wagner Tassinari, UFRJ

Regression Models for Analysis of Truncated Count Data
Nívea da Silva, Unicamp; Leila D. Amorim, Rosemeire L. Fiaccone, UFBA; Vanessa Morato, ISC - UFBA; Márcio Pires, ISC - UFBA

Latent Growth Curve Modeling with Missing Data: Strategies for Evaluating Children’s Growth
Leila Amorim, Rosemeire Fiaccone, Lia Moraes, Ana Clara Campos, Ana Marlucia Assis, Univ Federal da Bahia; Nelson Oliveira, Univ Estadual de Feira de Santana

Comparison of Estimation Procedures for Longitudinal Count Data
Rosemeire Fiaccone, Leila Denise A. F. Amorim, Federal Univ of Bahia; Nívea Silva, State Univ of Campinas; Jackson S. Conceição, Federal Univ of Bahia

Simple dependence analysis
José Cordeiro, Sch of Med of S. J. Rio Preto

Multiple dependence analysis
José Cordeiro, Sch of Med of S. J. Rio Preto

Corrected Hellinger distance test for independence in 2x2 frequencies tables
José Cordeiro, Sch of Med of S. J. Rio Preto

Marilyn Agranonik, Hosp de Clínicas de Porto Alegre; Marcelo Goldani, Suzi Alves Camey, Hosp de Clínicas de Porto Alegre / Univ Federal do Rio Grande do Sul

Elaboration and standardization of a questionnaire for the assessment of knowledge about mouth cancer validated by the Item Response Theory
Maria Lucia Sundefeld, Marco Aurélio Borrella Rodrigues, Univ of São Paulo State; Dalton Francisco Andrade, Federal Univ of Santa Catarina

Evaluation of statistical methods in food intake data analysis
Eloisa Elena Paschoalinotte, Jose Eduardo Corrente, Univ Estadual Paulista Julio de Mesquita Filho

The contraceptive methods among adolescents attending public schools in Santiago Island, Cape Verde
Carlos Tavares, Néia Schor, Ivan França Junior, Claudia Barros, Faculdade de Saúde Pública-USP
Efficiency of the Scott-Wild estimator for generalised case-control studies under general misspecification
Jennifer Wilcock, Alan Lee, Univ of Auckland

Outline of Adult Patients with SIDA Registered in the State of Pará, from January of 2007 to October of 2009
Myrlene Campos, Edson Marcos Leal Soares Ramos, Univ Federal do Pará

A model of time series of counts to study the association between air pollution and hospital visits for respiratory
Alyne Silva, Univ Federal de Viçosa; Valdério Reisen, Univ Federal do Espírito Santo

Panel Data Methodology for Assessment Impact of Shares of Sanitation, Education and Health in Reduce Number of Deaths of Children in Brazil: 1993-2005
Elizangela Broetto, Insto Federal do Espírito Santo; Alyne Silva, Univ Federal de Viçosa; Paulo Sérgio Tafner, Univ Cândido Mendes

A prognostic score for prediction of alzheimer dementia: comparison of Cox regression with classification tree analysis and clustering methods
Birgitt Wiese, Susanne Steimann, Jana Proktein, Inst for Biometrics

Nutritional profile of children infected with human immunodeficiency virus(HIV) attending a public hospital in the city of BELÉM – PA
Cássio Pinho dos Reis, Mônica Francisca Morais Lins, Gisele Rocha da Silva, Ana Carla Moreira da Silva, Ana Lúcia Araújo Satô, Silvia dos Santos de Almeida, Univ Federal do Pará

Comparison of methods estimation kriging and conditional simulation applied of vector Leathopper
Ana Cristina Garcêz, Univ Federal do Oeste do Pará; Edson Ramos, Marcello de Mello, Adrilayne Araújo, Silvia Almeida, Univ Federal do Pará

The basic reproduction number in SI staged progression model: a probabilistic approach
Juliana Kodaira, José Raimundo Passos, UNESP

Modeling spatial distribution of cancer incidence in Cordoba, Argentina
María del Pilar Díaz, Univ of Córdoba; José Eduardo Corrente, Insto de Biociencias. Univ do Estado de Sao Paulo (UNESP). Campus de Botucatu.; Alberto Rubén Osella, Epidemiology and Bioestatistics Lab, IRCCS “Saverio de Bellis”; Sonia Edith Muñoz, Laura Rosana Aballay, Univ of Córdoba

Profile of the premature babies that were born in the foundation santa casa de misericórdia do Pará
Edson Marcos Leal Soares Ramos, Jaqueline Mateus Furtado, Danielle da Silva Pompeu, Silvia dos Santos de Almeida, Adrilayne dos Reis Araújo, Univ Federal do Pará

Kriging and conditional simulation applied on incidence of larvae of the vector aedes aegypti
Ana Cristina Garcêz, Edson Ramos, Marcello de Mello, Adrilayne Araújo, Silvia Almeida, Univ Federal do Pará

A warning about the use of small samples in logistic regression
Rodrigo Coster, Vanessa Leotti Torman, Suzi Alves Camey, UFRGS

Confidence intervals of prevalences in Argentina national health and nutrition survey
Olga Filippini, Hugo Delfino, Natl Univ of Lujan

Analysis of correlated clustered data from families predisposed for Coronary Artery Disease
Sridhara Hebbagodi, Thrombosis Research Institute

Models in time series forecast for dengue
Carolina Bicalho, Iraziet Charret, Univ Federal de Lavras

Latent Determinants Of Low Birth Weight Neonates In Sunyani (Brong Ahafo Region), Ghana
Atinuke Adebajji, Kwame Nkrumah University of Science and Technology

Optimal designs for discretely observed binary Markov process
Juha Mehtälä, Kari Auranen, Sangita Kulathinal, Natl Inst for Health and Welfare

Can Dietary Patterns Help to Identify Associations Between Diet and Disease?
Ioannis Bakolis, Imperial Coll London

Analysis of accidental falls and level of physical activity in senior citizens
Cecília Candolo, Univ Federal de São Carlos; Priscila Carneiro Valim-Rogatto, Univ Federal de Lavras

The effect of cost in add frailty in cure model
Vinícius Calsavara, Vera Tomazella, José Fogo, Univ Federal de São Carlos

General latent and lineal mixed models for obesity in Córdoba Argentina
Laura R Aballay, Biostatistics Unit, Sch of Nutrition, Faculty of Medical Sciences, Univ of Córdoba, Córdob; Alberto R. Osella, Lab of Epidemiology and Biostatistics,IRCCS Saverio de Bellis, Castellana Grotte, Bari, Italy.; María del Pilar Díaz, IBiostatistics Unit, Sch of Nutrition, Faculty of Medical Sciences, Univ of Córdoba, Córdob

Analysis of individuals with tuberculosis diagnosed and confirmed in the urban area of the municipal district of Belem
Edson Marcos Leal Soares Ramos, Eder Martins da Rocha, Silvia dos Santos de Almeida, Adrilayne dos Reis Araújo, Anna Alice Garcia Caldas Nunes, Pâmela Tamiris Caldas Serra de Souza, Univ Federal do Pará

Evaluation of association between adherence to HAART and HIV-positive patients’ clinical evolution
Dayse Campos, Marília Carvalho, Luiz Antonio Camacho, Fundação Oswaldo Cruz

Use of non-homogeneous Poisson processes to analyze pollution data: a Bayesian approach
Lorena Vicini, UNICAMP

13:35 CONTRIBUTED ORAL 10: Cancer Research
Chair: Timo Hakulinen (Finnish Cancer Registry, Finland)

Biostatistical strategies for the identification of "Single Nucleotide Polymorphisms" as predictive markers of response to radiochemotherapy in rectal cancer
Caroline Bascoul-Mollevi, CRLC Val d'Aurelle; Bruno Pereira, CHU Clermont-Ferrand; Evelyne Crapez, Eric Assenat, CRLC Val d'Aurelle; Andrew Kramar, Ctr Oscar Lambret

Comparing the cumulative false-positive risk of screening mammography programs using a discrete time survival model allowing for non-ignorable drop-out
Rebecca Hubbard, Diana Miglioretti, Group Health Res Inst

A Hidden Markov Model for Lung Cancer: Estimation of the 'Force of Exposure' and of Time to Diagnosis
Marc Chadeau-Hyam, Imperial Coll London; Pascale Tubert-Bitter, Chantal Guineenuec-Jouyaux, INSERM, U1018, Biostatistic Team; Sandro Galea, Mailman Sch of Public Health, Columbia Univ; Paolo Vineis, Imperial Coll London

Nutrient-based dietary patterns and the risk of cancer
Valeria Edefonti, Univ degli Studi di Milano; Francesca Bravi, Univ degli Studi di Milano; Istituto di Ricerche Farmacologiche; Monica Ferrarioni, Univ degli Studi di Milano; Adriano Decarli, Univ degli Studi di Milano; Istituto Nazionale dei Tumori, Milano

The Performance of Methods for Correcting Measurement Error in occupational cohort studies
Allodji Rodrigue, Institute For Radiological Protection And Nuclear Safety (Irsn)

13:35 CONTRIBUTED ORAL 10: Categorical Data
Chair: Brigitte Cheuvart (GSK Biologicals, Belgium)

Statistical methods for analysing ordinal categorical data arising from the clinical trial of drugs from the pharmaceutical industry
Nazneen Shariff, Edinburgh Univ, Scotland, UK

Reliable confidence intervals for the difference of independent binomial proportions
Stephan Morgenthaler, EPFL
Adaptive designs for phase II studies in oncology
Meinhard Kieser, Stefan Englert, Inst of Medical Biometry and Informatics, Univ of Heidelberg

Sample Size Determination for Two Independent Populations when the Binomial Proportions are Small
Susan Halabi, Bercedis Peterson, Duke Univ

Stochastic Curtailed Two-stage Designs with One or Two Endpoints
Cornelia Ursula Kunz, Meinhard Kieser, Univ of Heidelberg

Graphical displays for incomplete contingency tables
Serpi Aktas, Hacettepe Univ

13:35 CONTRIBUTED ORAL 10: Fisheries Research
Chair: Afranio Vieira (Universidade de Brasilia, Brazil)

Statistical analysis of the biological effects of man-induced seabed disturbance
Beth Norris, Martin Ridout, Univ of Kent; Jon Barry, Cefas; Byron Morgan, Univ of Kent

Intensity-dependent marking of Cox processes with pairwise interaction
Kasper Berthelsen, Aalborg Univ

Bayesian spatial modelling of coastal fisheries survey data
Raymond Webster, Intl Pacific Halibut Commission

Modelling marine biodiversity with error in covariates
Hideyasu Shimadzu, Geoscience Australia; Scott Foster, Ross Darnell, CSIRO Mathematics, Informatics and Statistics

Estimating patterns of co-occurrence in species abundances using point counts and foraging guilds
Robert Dorazio, Univ of Florida; Edward Connor, San Francisco State Univ

Approaches to analysing fishery dependent data
Veronica Boero Rodriguez, Bureau of Rural Sciences

13:35 CONTRIBUTED ORAL 10: Medical Research
Chair: Nélida Winzer (Universidad Nacional del Sur, Argentina)

Drip-Feed Education: Statistics Notes in the British Medical Journal
John Martin Bland, Univ of York

Studentized Modified Maximum Contrast Method for Unequal Sample Sizes in Pharmacogenomics Studies
Kengo Nagashima, Josai Univ; Yasunori Sato, Harvard Sch of Public Health; Chikuma Hamada, Tokyo Univ of Science

Comparison of artificial neural network and logistic regression techniques for prediction of malignant breast lesions from MRI features
Christine McLaren, Wen-Pin Chen, Ke Nie, Min-ying Su, Univ of California, Irvine

Mixed treatment comparisons: combining direct and indirect evidences to compare statin doses
Patricia Ziegelmann, Federal Univ of Rio Grande do Sul

Adriana Dornelles, Janet Rice, Larry Webber, Diego Rose, Tulane Univ

Performance evaluation for prediction models with three outcomes: A discrimination index applied for the prediction of pregnancy location
Ben Van Calster, Katholieke Univ Leuven; Yvonne Vergouwe, Erasmus MC; Vanya Van Belle, Katholieke Univ Leuven; Ewout Steyerberg, Erasmus MC; Tom Bourne, Imperial Coll London; Dirk Timmerman, Univ
13:35 INVITED SESSION 11: Heteroscedasticity and models for dispersion parameters with applications to Genetics and Spatial Statistics

Chair: Daniel Gianola (WI)

Modelling heterogeneous variances in linear, generalized linear and non linear mixed models with applications to genetics and biostatistics
Jean-Louis Foulley (INRA Jouy-en-Josas, France)

Analyzing spatial heterogeneity with geo-additive regression models
Thomas Kneib (Carl von Ossietzky Universität, Germany)

Utilizing biological information to model heterogeneous variability and co-expression in microarray experiments
Guilherme J.M. Rosa (University of Wisconsin, US)

Discussant
Juan P. Steibel (Michigan State University, US)

15:20 COFFEE BREAK

15:40 CONTRIBUTED ORAL 11: Biosurveillance and Biosecurity

Chair: Renato M. Assuncao (Universidade Federal de Minas Gerais, Brazil)

Iris Recognition Using Singular Value Decomposition
Prachi Joshi, Government Polytechnic, Aurangabad; Vivek Kshirsagar, Government Coll of Engineering, Aurangabad

The application of biometric information to authorization of vehicle control
Petr Barton, Jana Kalikova, Marek Kalika, Czech Technical Univ in Prague

Statistical models in biological dosimetry
Pedro Puig, Univ Autònoma de Barcelona

Dynamic Spatial Bayesain Models for Radioactivity Deposition
Alvaro Faria, The Open Univ

Statistical applications to the eradication of introduced pests
David Baird, VSN Intl

15:40 CONTRIBUTED ORAL 11: Ecological Research

Chair: Byron Morgan (University of Kent, Canterbury, UK)

Interpretative comparison of functional diversity indices
Laura Pla, UNEFM; Fernando Casanoves, CATIE; Julio Di Rienzo, UNC

Biometric study of shea tree (vitellaria paradoxa gaertn.) In nigerian grove ecology
Maxwell Okoye, Nigerian Institute For Oil Palm Research (Nifor)

Comparison of multiple imputation methods applied to the imputation of data used to discriminate species of sand flies (diptera: psychodidae, phlebotominae): Lutzomyia Intermedia and L. Neivai
Rafael Eduardo Borges Peña, Daniel Eduardo Paredes Moreno, Univ de Los Andes

Modelling occupancy from detection data collected along transects
Gurutzeta Guillera-Arroita, Martin S. Ridout, Byron J.T. Morgan, Univ of Kent

Inferring evolutionary birth and death rates under different species sampling schemes
Tom Britton, Stockholm Univ

Distributional Regression Trees: A method for studying spatial-temporal pattern in length-
CONTRIBUTED ORAL 11: Epidemiological Methods III

**Chair:** Rebecca Hubbard (Group Health Research Institute, US)

Parsimonious evaluation of interactions in epidemiology studies  
**Jaya Satagopan**, Memorial Sloan-Kettering Cancer Ctr; Robert Elston, Case Western Reserve Univ Sch of Med

A multi-phase design strategy for dealing with participation bias  
**Sebastien Haneuse**, Group Health Res Inst; Jinbo Chen, Univ of Pennsylvania

Multivariate Modeling of Longitudinal Observations with Excess Zeros and Measurement Error  
**Victor Kipnis**, Natl Cancer Inst, USA; Raymond Carroll, Texas A&M Univ; Laurence Freedman, Gertner Inst for Epidemiology and Health Policy Res; Douglas Midthune, Natl Cancer Inst, USA

The impact of multivariate measurement error in epidemiologic studies  
**Anne Thiebaut**, Laurence Watier, INSERM, U657; Douglas Midthune, Natl Cancer Inst, Div of Cancer Prevention; Jacques Benichou, INSERM, U657; Arthur Schatzkin, Natl Cancer Inst, Div of Cancer Epidemiology and Genetics; Victor Kipnis, Natl Cancer Inst, Div of Cancer Prevention

A nonlinear measurement error model to estimate usual and energy intake for episodically consumed foods  
**Adriana Perez**, The Univ of Texas Health Science Ctr at Houston; Saijuan Zhang, Texas A&M University; Victor Kipnis, National Cancer Institute, US; Laurence S. Freedman, Gertner Institute for Epidemiology & Health Policy Research, Israel; Raymond J. Carroll, Texas A&M Univ

Individual patient data meta-analysis with measurement error and missing data: a unified approach through multiple imputation  
**James Carpenter**, Joanna Dobson, Michael Kenward, London Sch of Hygiene & Tropical Med; Harvey Goldstein, Graduate Sch of Education, Univ of Bristol

CONTRIBUTED ORAL 11: Survival Data IV

**Chair:** Hans van Houwelingen (Leiden University, The Netherlands)

A new method for estimating the average number of recurring interdependent events in survival data analysis  
**Sudipta Bhattacharya**, Frank Fleischer, Erich Bluhmki, Boehringer Ingelheim Pharma GmbH & Co KG

The estimation of the force of infection for HCV among Injecting Drug Users using Interval Censored Data  
**Amparo Castro Sánchez**, Ziv Shkedey, Niel Hens, Marc Aerts, Hasselt Univ; Ronald Geskus, Maria Prins, Public Health Service of Amsterdam; Lucas Wiessing, European Monitoring Ctr for Drug and Drug Addiction; Mirjam Kretzchmar, Univ Medical Ctr Utrecht

Risk-Adjusted Monitoring of Time to Event  
Axel Gandy, Imperial Coll London; **Jan Terje Kvaløy**, Univ of Stavanger; Alex Bottle, Fanyin Zhou, Imperial Coll London

Estimating and modelling cure within the framework of flexible parametric survival models  
**Therese Andersson**, Sandra Eloranta, Paul Dickman, Karolinska Instt; Paul Lambert, Univ of Leicester

Partitioning of excess mortality associated with a diagnosis of Hodgkin’s Lymphoma using flexible parametric survival models  
**Sandra Eloranta**, Karolinska Instt; Paul Lambert, Univ of Leicester; Magnus Björkholm, Karolinska Univtssjukhuset, Solna; Therese Andersson, Paul Dickman, Karolinska Instt

Modeling bivariate survival data based on copulas: an application on diabetic retinopathy data  
**Francisco Louzada-Neto**, Adriano Suzuki, Univ Federal de São Carlos; Vicente Cancho, Univ de São Paulo
15:40 INVITED SESSION 12: Statistical challenges and advancements in eQTL mapping studies
Chair: Yuehua Cui (MI)

Design of microarray experiments for genetical genomics studies with outbred populations
Guilherme J.M. Rosa (University of Wisconsin, US)

Hierarchical modeling of clinical and expression quantitative trait loci
Mikko J. Sillanpää (University of Helsinki, Finland)

Linear mixed model analysis to identify cis-acting eQTL and candidate genes in crosses between breeds of livestock
Juan P. Steibel (Michigan State University, US)

Single Feature Polymorphism Detection in Mapping Population and their Application in eQTL Analysis
Xinping Cui (University of California Riverside, US)

20:00 Conference Party: Praia Mole Eco Village (located between Mole Beach and Conceição Lagoon). Bus transportation will be provided from official hotels to conference party.

01:00

Friday, 10 December 2010

08:30 CONTRIBUTED ORAL 12: Epidemiological Methods IV
Chair: James Carpenter (London School of Hygiene & Tropical Medicine, UK)

Spatial analysis of occupational accidents in Piracicaba, sp: an multinominal approach
Ana Carolina Mafra, Luciana Bertoldi Nucci, Celso Stephan, Ricardo Cordeiro, State Univ of Campinas - UNICAMP; Licipiana Vaz de Arruda Silveira, São Paulo State Univ - UNESP

Bayesian analysis of the log-binomial model: a comparison with the frequentist approach through simulation
Vanessa Torman, Suzi Alves Camey, UFRGS

Use of mixture models with spatial correlation in mapping the risk of lung cancer mortality in Southern Brazil
Márcia Barbian, UFMG

Detecting Rupture Events in the Development of Therapeutic Alliance
Ines Sousa, Univ do Minho

Propensity score and areas under a ROC curve in repeated measures clinical studies
Alberto Morabito, Giovanni Muestraletti, Univ of Milan

Spatial risk for ordinal responses: An example of overweight distribution
Luciana Nucci, Ana Carolina Mafra, Univ Estadual de Campinas; Licipiana Silveira, Univ Estadual Paulista; Lia Zangiolon, Celso Stephan, Ricardo Cordeiro, Univ Estadual de Campinas

08:30 CONTRIBUTED ORAL 12: Genetics in Agriculture
Chair: Jean-Louis Foulley (INRA Jouy-en-Josas, France)

Modeling High Resolution Association Mapping of QTLs at the population level
Prem Narain, INSA Honorary Scientist

Modelling genetic dependencies in qtl mapping studies by means of mixed models
Marcos Malosetti, Martin Boer, Biometris, Wageningen UR; Ana Casas, CSIC Aula Dei Experimental Station; Jose Luis Molina Cano, Ctr Udl-IRTA; Fred A van Eeuwijk, Biometris, Wageningen UR
Multi-Harvest-Location QTL Analysis for Sugarcane Using Mixed Models

Maria Marta Pastina, ESALQ/USP; Marcos Malosetti, Biometris/ WUR; Rodrigo Gazaffi, Marcelo Mollinari, Gabriel Rodrigues Alves Margarido, ESALQ/USP; Karine Miranda Oliveira, CTC; Anete Pereira de Souza, CEBMEG/UNICAMP; Fred van Eeuwijk, Biometris/ WUR; Antonio Augusto Franco Garcia, ESALQ/USP

Three-point appraisal of genetic linkage maps

Sue Welham, Jun Wang, Graham King, Wally Gilks, Rothamsted Res

Simulating realistic GxE and QTLxE in pepper using a crop growth model with physiological parameters without GxE

Paulo C Rodrigues, Ep Heuvelink, Marco Bink, Leo Marcelis, Fred van Eeuwijk, Wageningen UR

Statistical Analysis for Epistasis and Q x E interactions in molecular markers of a double haploid Rice population

Sridhara Hebbagodi, Thrombosis Research Institute

08:30 CONTRIBUTED ORAL 12: Imaging
Chair: Chris Glasbey (BioSS)

Model selection with adaptive grouping of variables for enhanced interpretation and generalization

Line Clemmensen, Andrea Mazzaretto, Technical Univ of Denmark

Nonparametric and Parametric Methods for Evaluating Observer Agreement via the Coefficient of Individual Equivalence

Michael Haber, Yi Pan, Emory Univ

A Bayesian Spatial Model for Identifying Localized Brain Activity Changes and Functional Connectivity

DuBois Bowman, Emory Univ

Assessing the effectiveness of tele-radiology application with latent class analysis

Meriç Yavuz Çolak, Korkut Ersoy, Başkent Univ, healthcare managemnt department

Graphical validation of unidimensionnality

Mounir Mesbah, Univ Pierre et Marie Curie, Paris 6

08:30 CONTRIBUTED ORAL 12: Infectious Diseases
Chair: Michael Höhle (Robert Koch Institute Berlin, Germany)

Synergy effects of directly acting antiviral therapies for hepatitis C in combination with standard treatment

Tje Lin Chung, Inst for Biostatistics and Mathematical Modelling

Poisson mixture regression model to analyse hiv/aids length of stay

Sara S. Dias, Faculdade de Ciências Médicas - Univ Nova de Lisboa; Valeska Andreozzi, Ctr de Estatística e Aplicações da Univ de Lisboa; Maria O. Martins, Insto de Higiene e Medicina Tropical - Univ Nova de Lisboa

Impact of Tuberculosis on Mortality among HIV Infected Patients Receiving Antiretroviral Therapy: A Comparison of Propensity Score Methods

Rong Chu, McMaster Univ; Edward Mills, St Paul's Hosp, British Columbia Ctr for Excellence in HIV/AIDS; Joseph Beyene, McMaster Univ; Christine Nabiryo, The AIDS Support Organization (TASO); Lehana Thabane, McMaster Univ

Methodological challenges for estimating when to start antiretroviral therapy in HIV+ subjects

Liliana Orellana, Univ de Buenos Aires; Andrea Rotnitzky, Univ Torcuato Di Tella - Harvard Univ

Statistical methods for dealing with missing data due to informative censoring and with time-dependent confounding, when comparing the effect of three nutritional supplementation programs on the well-being of HIV-infected infants

Francesca Little, Univ of Cape Town
INVITED SESSION 13: **Multivariable model-building with continuous variables – a comparison of flexible regression approaches**

*Chair:* Elia Biganzoli (Italy) and Willi Sauerbrei (Institute of Medical Biometry and Informatics, Freiburg, Germany)

Comparison of alternative strategies for building a flexible regression-spline based multivariable survival model
- Michal Abrahamowicz (McGill University, Canada)

Model building with P-splines and fractional polynomials
- Paul Eilers (Erasmus University Rotterdam, The Netherlands)

Comparison of fractional polynomial and spline approaches in simulated and real data based on new measures
- Harald Binder (University Medical Centre, Freiburg, Germany)

Discussant
- Christel Faes (Hasselt University, Belgium)

**10:45**

CONTRIBUTED ORAL 13: **Disease Epidemiology**

*Chair:* Patricia Ziegelmann (Federal Univ of Rio Grande do Sul, Brazil)

Modeling Plague. Nonantola, Italy, 1630: A preliminary analysis
- Marco Bonetti, Guido Alfani, Rodolfo Baggio, Bocconi Univ; Pasquale Cirillo, Univ of Bern; Rebecca Graziani, Bocconi Univ

The effect of sampling interval on the estimation of transmission dynamics of streptococcus pneumoniae
- Panu Erästö, Natl institute for health and wellfare; Fabian Hoti, Aalto Univ Sch of Science and Technology; Kari Auranen, Natl institute for health and wellfare

Statistical issues in studying the relative importance of Body Mass Index, Waist Circumference, Waist Hip Ratio and Waist Stature Ratio to predict type 2 diabetes
- Narasimha Bhamidipati, Natl Inst of Epidemiology

Estimating Vaccination Coverage for the Trivalent Measles-Mumps-Rubella Vaccine
- Nele Goeyvaerts, Niel Hens, Hasselt Univ; Heidi Theeten, Univ of Antwerp; Marc Aerts, Hasselt Univ; Pierre Van Damme, Philippe Beutels, Univ of Antwerp

Estimation of prevalence of dementia in France
- Pierre Joly, Daniel Commenges, Hélène Jacqmin-Gadda, Karen Leffondré, INSERM, U897

Pregnancy-associated breast cancer (PABC) and mortality: the influence of proximity to delivery and time-since-diagnosis
- Anna Johansson, Therese Andersson, Karolinska Insst; Sven Cnattingius, Karolinska Insst at Karolinska Univ Hosp Solna; Chung-Cheng Hsieh, Univ of Massachusetts Medical Sch; Mats Lambe, Karolinska Insst

**10:45**

CONTRIBUTED ORAL 13: **Genetics**

*Chair:* Robert Elston (Case Western Reserve University, US)

Applying nonlinear mixed regression models in the design of new probiotic products
- Birgitt Wiese, Inst for Biometrics; Elena Bru, María Silvina Juarez Tomás, Carolina Espeche, Ctr de Referencia para Lactobacilos; Natalia Cecilia Maldonado, Ctr de Referencia; Esteban Vera Pingitore, María
Elena Fatima Nader-Macias, Ctr de Referencia para Lactobacilos
Symbolic SNP tree for Hepato Cellular Carcinoma Progression
Tae Rim Lee, Korea Natl Open Univ; Edwin Diday, Univ 9 at Dauphine Paris
Descent patterns in pedigrees imputed from genomic marker data
Elizabeth Thompson, Univ of Washington
Mixed Models in Genetic Mapping using Family-Based Designs
Nubia Esteban, Univ of São Paulo
Gene-specific Dosing
Ishapathik Das, Indian Inst of Technology Bombay; Nathan H. Xu, Medical Coll of Georgia; Siuli Mukhopadhyay, Indian Inst of Technology Bombay

10:45 CONTRIBUTED ORAL 13: Modelling
Chair: John Hinde (National University of Ireland, Galway, Ireland)
Mixed effects models with censored response
Florin Vaida, Univ of California, San Diego
Unbiased Estimates of Uncertainty in General Linear Regression
Kenneth K. Lopiano, Linda J. Young, Univ of Florida; Carol A. Gotway, Ctrs for Disease Control
Cross validation of linear prediction models
Wiebe Pestman, Univ Medical Ctr Utrecht
Modelling of vaccine preventable diseases by age-dependent branching processes
Maroussia Slavtchova-Bojkova, Sofia Univ
Analysing child survival in Ghana
Kaku Nokoe, Univ for Development Studies
Bayesian Estimation Methods in Beta Regression Models
Mariana Souza, Helio Migon, UFRJ

10:45 CONTRIBUTED ORAL 13: Multiple Testing
Chair: Víctor Kipnis (National Cancer Institute, US)
Multiple comparison procedures in general parametric models
Ekkehard Glimm, Frank Bretz, Novartis; Torsten Hothorn, Inst f ur Statistik, Ludwig-Maximilians-Univ Munchen; Peter Westfall, Texas Tech Univ
Simultaneous confidence intervals based on the signed root deviance applying linear constraints on the parameters
Daniel Gerhard, Univ of Hannover
Minimal cost multi stage designs for genome wide association studies using customized DNA chips
Hans-Helge Müller, Univ of Munich; Thuy Trang Nguyen, Roman Pahl, Helmut Schäfer, Philippy-Univ Marburg
Multiple Testing Methods in Clinical Trials
David Afshartous, Univ of Miami; Michael Wolf, Univ of Zurich
Evaluation of testing methods for multiple correlated endpoints
Ting-Li Su, John Whitehead, Lancaster Univ, UK; Michael Branson, Ekkehard Glimm, Novartis Pharma AG, Basel, Switzerland
One sided-tests based on efficacy-toxicity trade-off in randomized controlled trials
Masako Nishikawa, Natl Inst of Public Health; Toshiro Tango, Ctr for Medical Statistics; Megu Ohtaki, Hiroshima Univ; Eisuke Hida, Natl Inst of Public Health

10:45 INVITED SESSION 14: Modern developments in the design and analysis of plant and tree breeding variety trials
Chair: Emlyn Williams (Australia)

Linear variance models for plant breeding trials
Hans-Peter Piepho (Universitat Hohenheim, Germany)

Embedded partially replicated designs for grain quality testing
Robin Thompson (Queen Mary College, University of London, UK)

Efficiency of unreplicated field trials for estimating genetic values
Salvador Gezan (University of Florida, US)

The use of modern experimental design and analysis methodology in a commercial breeding company
Mark Cooper (Pioneer Hi-bred International, US)

10:45 INVITED SESSION 15: New directions in interval censored time to event data
Chair: Somnath Datta (KY)

Estimating functions for the analysis of clustered current status data
Richard Cook (University of Waterloo, Canada)

Subtyping of tumors at diagnosis: application of current statusdata methods
Debashis Ghosh (Penn State University, US)

Estimation in illness-death models with all transitions interval-censored
Niels Keiding (University of Copenhagen, Denmark)

Discussant
Hans van Houwelingen (Leiden University, The Netherlands)

12:30 LUNCH

14:15

12:30 POSTER SESSION 4

Session: General applications

Stated Choice Experiments that Incorporate Position Effects
Stephen Bush, Univ of Technology, Sydney

On the superposition of overlapping Poisson processes and nonparametric estimatation of their intensity function
Gustavo Gilardoni, Univ de Brasília; Enrico Colosimo, Univ Federal de Minas Gerais

Random time varying model coefficient estimation through radial basis functions
Juan Sosa, Luis Díaz, Natl Univ of Colombia

Risk Trajectories of Locomotor Disability of the Aging Indian
Dilip Nath, Nazrud Islam, Gauhati Univ

Reference Intervals: Tolerance Estimation versus Quantile Estimation
Karl-Ernst Biebler, Ernst-Moritz-Arndt-Univ

Computation of the noncentral gamma distribution, its inverse and noncentrality parameter
Izabela Oliveira, Daniel Furtado Ferreira, Federal Univ of Lavras

The effects of lifestyle modification on metabolic syndrome: a multivariate meta-analysis using mets-simulator
Kazue Yamaoka, Natl Inst of Public Health; Makoto Zushi, Tsumura & Co, Japan; Eisuke Hida, Natl Inst of Public Health; Toshiro Tango, Ctr for Medical Statistics

RUNNER - A New R Interpreter
Julio A. Di Rienzo, Univ Nacional de Córdoba

Analyzing the time to complete the undergraduate Statistics course at the Federal University
of Parana, Brazil

Nelva Sganzerla, Suely Giolo, Federal Univ of Parana

The latent class model to evaluate genotype and phenotype clinical predictors of oral potentially malignant disorders and oral cancer

Mabel Brunotto, Univ Nacional de Córdoba

A modified approximate cusum chart for monitoring time-series of counts

Giuseppe Rossi, Simone Del Sarto, Natl Res Council - Inst of Clinical Physiology - Unit of Epidemiology and Biostatistics; Marco Marchi, Dept of Statistics, Univ of Florence

The Beta Exponentiated Weibull Distribution

Gauss Cordeiro, Univ Federal Rural de Pernambuco; Antonio Gomes, Cibele da Silva, Univ de Brasília; Edwin Ortega, Escola Superior de Agricultura Luiz de Queiroz - Univ de São Paulo

Method of Fieller versus Bootstrap to estimate the variance of $LD_{50}$ in Dose-Response Models

Silvia Maria de Freitas, Federal University of Ceará

Application of the framework for evaluating complex interventions in health care to care pathways

Massimiliano Panella, Lucio Palin, Amedeo Avogadro Univ; Sara Marchisio, Health Authority of Vercelli

Extent and Influence of Recreational Drug Use on Men and Women Aged 15 Years and Older in South Africa

Peter Njuho, Human Sciences Res Council

Impact of the REUNI governmental program on rental prices in Alfenas, Brazil

Eric Ferreira, Diego Mequelino, Wander Cipriano, Univ Federal de Alfenas

Leverage analysis for linear mixed models

Juvêncio Nobre, Federal Univ of Ceará; Julio Singer, Univ of São Paulo

Item Response Theory Models with Spatial Structure

Sheila Neves, Marina Paez, UFRJ

Consumption frequency of chocolate products by young people in Alfenas, Brazil

Eric Ferreira, Rafael Bastos, Marcela Rocha, Nathalia Santos, Vivian Miranda, Univ Federal de Alfenas

Evaluating the occurrence of cycles in quality control charts for pasteurized milk variables

Eric Ferreira, Rafael Bastos, Univ Federal de Alfenas

Time series with ordinal data

Maria Silvia Moura, UFSCar

Predicting match outcomes in the english premier league: what will be the final rank?

Adriano Suzuki, Francisco Louzada-Neto, Univ Federal de São Carlos

Monitoring of patients reported with aids at the hospital universitário joão de barros barreto via logistic regression

Adrilayne dos Reis Araújo, Shirllaine Moraes e Souza, Univ Federal do Pará

Survival Analysis of Patients with Diabetes hospitalized at the Hospital Universitário João de Barros Barreto

Adrilayne dos Reis Araújo, Gilzibene Marques da Silva, Univ Federal do Pará

Selecting model using the beta modified Weibull distribution in survival analysis

Giovana Silva, Valdemiro Vigas, Federal Univ of Bahia

Method for computing the noncentrality parameter of the sample multiple correlation coefficient distribution

Daniel Ferreira, Univ Federal de Lavras

Linear Mixed Models in Actuary: Diagnostic Methods and Application

Luís Gustavo Pinho, Juvêncio Nobre, FUC - Federal Univ of Ceará

Statistical methods to assess the self-compiled surveillance tool for communication development used in a Primary Health Care Hospital

Legesse Kassa Debuasho, Univ of Pretoria
Factor Structure of the Multi-item Scale to Evaluate the Application of people management in Small and Medium Enterprises
Marcelo Tavares, Claudiê Carvalho, Évora Naves, Univ Federal de Uberlândia

Prediction of cutaneous and ocular lesions in type 2 diabetic patients
Larisa Carrera, Universidad Nacional del Litoral; Alberto D’ottavio, Universidad Nacional de Rosario; Liliana Contini, Mauro Colombini, Marisa Gionotti, Universidad Nacional del Litoral; Mabel D’arrigo, Universidad Nacional de Rosario; Elena Fernandez, Universidad Nacional del Litoral

Principal components analysis in meta-analysis to obtain prediction equations of energetic values of poultry feedstuffs
Flávia Cristina Martins Queiroz Mariano, Renato Ribeiro de Lima, Paulo Borges Rodrigues, Renata Ribeiro Alvarenga, Germano Augusto Jerônimo do Nascimento, Federal Univ of Lavras

Factors Associated with Mental Disorders in Adolescents Pregnant
Silvia Rodrigues, Silvia Almeida, Rodrigo Torres, Edson Ramos, Adrilayne Araújo, Univ Federal do Pará

Statistical evaluation of motorcycle taxi driver’s characteristics of Cabanos Village, Brazil
Adrilayne dos Reis Araújo, Galafrê Guttemberg da Costa Filho, Univ Federal do Pará

Latent Variable Models to assess Relationship between Communication and Information Technology and Socio-economic Development
Cecilia Beatriz Díaz, Margarita Díaz, María del Pilar Díaz, Univ Nacional de Córdoba

Bivariate variable length memory chains applied to linguistics
Denise Duarte, UFMG

Recommendations of the values of standardized decision interval Tabular Cusum Chart
Rodrigo Lara, José Ivo Ribeiro Júnior, Univ Federal de Viçosa

Assessment through control chart of collection preventive exams of cervical cancer, held in para june 2006 to march 2009
Edson Marcos Leal Soares Ramos, Helen Tatiana Saldanha da Silva Ribeiro, Silvia dos Santos de Almeida, Adrilayne dos Reis Araújo, Priscila Alcantara Figueira, José Messias Fonseca da Silva, Univ Federal do Pará

Post-Fractionated Strip-Block Design: A Practical Example
Daniele Rodrigues, Carla Vivacqua, Antônio Carneiro, Diana Oliveira, Elisângela Oliveira, UFV

Comparison of non-parametric estimators for survival functions with interval censoring
Andressa Oliveira, Mário Vivanco, Univ Federal de Lavras

Comparison between the estimator of the population total with replacement in two-stage sampling and the Regression Estimator: Application to real data
Mayo Polo, Mauricio Rodriguez, Universidad Nacional de Colombia

Monitoring of Recurring Event for Demographic and Actuarial Information
Julian Sánchez, Univ Nacional de Colombia

Patients´ satisfaction with health care services in Mexico City
Rebeca Aguirre-Hernandez, Univ Nacional Autonoma de Mexico

Accounting to scaling differences in a TV sensory panel
Isabel Amorim, Technical Univ of Denmark and Ctr Universitário do Sul de Minas; Per Brockhoff, Technical Univ of Denmark

Statistical study from the diet profile of the Federal University of Pará students
Vanessa Mayara Pamplona, Edson Ramos, Gesiane Leao, Priscila Figueira, Monique Gomes, Universidade Federal do Para

Statistical measurement of the predictive capacity of classification models in medical data
Paulo Ferreira da Silva, Francisco Louzada Neto, Univ Federal de São Carlos; Gleici Perdoná, Elisabeth Viera, Univ de São Paulo

A comparative study between conjoint analysis and the constant sum approach to estimate relative importance of factors
Adriana Dias, Univ Federal de Lavras; Carlos Henrique Osório Silva, Fabiano Fonseca e Silva, Luiz Alexandre Peternelli, Valéria Paula Rodrigues Minim, Univ Federal de Viçosa
Column effects model for HIV/AIDS data
Serpil Aktaş, Hande Konşuk, Hacettepe Univ

Multivariate normality of data described by linear model
Zofia Hanusz, Joanna Tarasinska, Univ of Life Sciences

Factor Struture of the CHQ-PF50 Applied to the caregivers of children and adolescents with cerebral palsy
Rogério Pinto, Nivea Morales, Carlos Silva, Renata Sá, Universidade Federal de Uberlândia

Kumaraswamy Regression Model
Luiz Henrique Dore, Univ Federal de Sergipe; Lucas G. M. Soares, Neurotech Ltda.; Oscar F. F. Raposo, Univ Federal de Sergipe

SIMEX estimation in a model with heteroscedastic measurement errors with replicated observations
William Oliveira, Mário de Castro, Insto de Ciências Matemáticas e de Computação, Univ de São Paulo - ICMC / USP

Comparison of area of influence and health service market using tuberculosis notification in the city of Rio de Janeiro, Brazil
Rejane Pinheiro, Marcos Pinheiro, Luís Ivan Valencia, UFRJ; Mônica Magalhães, FIOCRUZ

Proposal and evaluation of the methods: probit up and down and probit isotonic
Lucas Chaves, Univ Federal de Lavras; Edecarlos Miranda de Souza, Univ Federal do Acre; Joel Augusto Muniz, Univ Federal de Lavras

The misuse of margin of error in election polls
Yury Silva, Carlos Henrique Silva, Univ Federal de Viçosa; Leila Chagas, Univ Federal Fluminense; Elisângela Oliveira, Univ Federal de Viçosa; Pitãs Teodoro, Univ Federal Fluminense

The Complementary Exponential-Geometric Distribution with aleatory terms for Univariate Survival Data
Mary Roman, Francisco Louzada Neto, Cynthia Tojeiro, UFSCar

Detection of Significant Spatial Clusters for homogeneous and Non-homogeneous Spatial Point Processes
Marcos Antonio Santos, UFMG

Statistical techniques for the evaluation of new risk markers
Rodrigo dos Reis, Enrico Colosimo, Maria Nunes, UFMG

Corrected Pearson residuals for simplex regression models
Lucimary Santos, Clarice Demétrio, ESALQ/USP; Gauss Cordeiro, Univ Federal Rural de Pernambuco; Mariana Urbano, ESALQ/USP

A Bayesian analysis for repeated, overdispersed count data
Fernanda Rizzato, Clarice Demétrio, Roseli Leandro, ESALQ-USP; Geert Molenberghs, I-BioStat

Bayesian Analysis of Scale Mixtures Log-Birnbaum-Saunders Regression Models with Censored Data
Vicente Cancho, Victor Lachos, Univ de São Paulo; Dipak Dey, Univ of Connecticut

A Bayesian estimation of lag length in distributed lag models
Carlos Diniz, José Galvão Leite, Camila Furlan, UFSCar

Graphical analysis of the efficiency of single imputation by normal distribution and of multiple imputation
Luiz Alexandre Peternelli, Melissa Pitaroglio de Carvalho, Univ Federal de Viçosa; Carina de Oliveira Anoni, Escola Superior de Agricultura Luiz de Queiroz; Emmanuelle Kennedy da Costa Teixeira, Univ Federal de Viçosa

A worst-case bound approach to missing data problems
Masayuki Henmi, The Inst of Statistical Mathematics

Crossover designs in bioequivalence studies: theoretical and practical issues
Arminda Siqueira, Rodolfo Santos, Joyce Rodrigues, Univ Federal de Minas Gerais; Daniela Braga, Agência Nacional de Saúde Suplementar; Paula Chellini, Ctr de Pesquisa em Biotecnologia
Modeling the survival times of patients diagnosed with Chagas disease
*Fabio Demarqui, Rodrigo Reis, Maria Nunes, Enrico Colosimo, UFMG*

Overdispersion and Natural Mortality
*Mariana Urbano, Clarice Demetrio, Dept de Ciencias Exatas, ESALQ/USP; John Hinde, NUI Galway*

Reference prior in variance components estimation
*Adhemar Sanches, Univ Estadual Paulista – UNESP*

Operator BLUP’s characterization in hierarchical linear models
*Fernando Velasco, Mario Ojeda, Univ of Veracruz*

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**14:15**

**CONTRIBUTED ORAL 14: Clinical Trials**

*Chair: Julio da Motta Singer (Universidade de Sao Paulo, Brazil)*

Surrogate markers in multiple trials
*Jeremy Taylor*, Yun Li, Univ of Michigan

Non-parametric two-sample tests: tuning of raw data before ranking
*Joachim Moecks*, BIOMCON GmbH

A new location-scale test based on a combination of the Levene and Lepage tests
*Markus Neuhauser*, RheinAhrCampus

Extending recurrence-time models of periodic screening to accommodate time-varying incidence and sensitivity
*Cristina Oancea*, Timothy Church, Univ of Minnesota

Application of Simple Statistical Methods to Evaluated Possible Data Fabrication: an Example Using the ACT TRIAL
*Mariana T. Carballo*, Alessandra A. Kodama, Alexandre Biai Cavalcanti, Anna M. Buehler, Otavio Berwanger, HCor

Performance of likelihood ratio and score tests for detecting a single outlier under a variance shift outlier model in the linear mixed model
*Freedom Gumedze*, Univ of Cape Town

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**14:15**

**CONTRIBUTED ORAL 14: Correlated Data Methods**

*Chair: Vicente Núñez-Antón (University of the Basque Country, Spain)*

Joint model for times to tumor progression and overall survival dependence: illustration of the R package FRAILTYPACK
*Virginie Rondeau*, INSERM U897 (Biostatistic); Stefan Michiels, Inst Gustave-Roussy; Jean Pierre Pignon, Inst Gustave Roussy

Estimation of covariate effects in generalized linear mixed models with a misspecified distribution of random intercepts and slopes
*John Neuhaus*, Charles McCulloch, Univ of California, San Francisco

Alternative Solution to Separation for Clustered Binary Data
*José Cortiñas Abrahantes*, Hasselt Univ

Semiparametric estimation in the bivariate correlated gamma frailty model
*Diana Pietzner*, Andreas Wienke, Univ Halle-Wittenberg

FRAILTYPACK: An R package for the analysis of correlated survival data
*Virginie Rondeau*, Yassin Mazroui, INSERM; Juan Ramon Gonzalez, CREAL

A Family of Generalized Linear Models for Repeated Measures With Normal and Conjugate Random Effects
*Clarice G.B. Demétrio*, ESALQ/USP; Geert Molenberghs, Ctr for Statistics, Hasselt Univ; Geert Verbeke, Katholieke Univ Leuven; Afrânio Vieira, Univ de Brasília
14:15 CONTRIBUTED ORAL 14: Surveillance and Monitoring
Chair: Stephen T. Buckland (University of St. Andrews, Scotland)

Challenges in adapting sequential designs to observational post-licensure vaccine safety studies

Real-time Bayesian Risk Prediction for Epidemic Management
**Chris Jewell**, Gareth Roberts, Univ of Warwick

A maximum scan score-type statistic based on Anscombe's variance stabilization transformation for disease clustering
**Kunihiko Takahashi**, Natl Inst of Public Health; Toshiro Tango, Ctr for Medical Statistics

Estimating HIV incidence by using data from a virological surveillance of new HIV diagnoses
**Ahmadou Alioum**, INSERM U897-Univ Victor Segalen Bordeaux 2; Cecile Sommen, Observatoire Regional de Santé d'Ile-de-France; Daniel Commenges, INSERM U897-Univ Victor Segalen Bordeaux 2

Space Time Surveillance: A critical reevaluation
**Aline Piroutek**, Renato Assunção, Thais Paiva, Univ Federal de Minas Gerais

Survveillance to detect emerging space-time clusters
**Thais Correa**, Univ Federal de Ouro Preto; Renato Assunção, Univ Federal de Minas Gerais

14:15 CONTRIBUTED ORAL 14: Survival Data V
Chair: Hélène Jacqmin-Gadda (Universite Victor Segalen Bordeaux II, France)

Nonparametric and Semiparametric Analysis of Current Status Data Subject to Outcome Misclassification
**Victor Sal y Rosas**, James Hughes, Univ of Washington

The Log-Beta Generalized Half-Normal Regression Model
**Rodrigo Pescim**, Edwin Ortega, ESALQ/USP; Gauss Cordeiro, UFRPE/PE; Clarice Demétrio, ESALQ/USP

Bivariate recurrent event data with repeated incomplete observation gaps
**Jinheum Kim**, Univ of Suwon

Inverse probability weighted estimators of survival with censored and truncated data
**Ronald Geskus**, Academic Medical Ctr

Smoothing survival estimates through pseudo observations
**Federico Ambrogi**, Elia Biganzoli, Patrizia Boracchi, Univ degli Studi di Milano

Hybrid Intensity Models with threshold Stress and frailty terms for Univariate Survival Data
**Cynthia Tojeiro**, Francisco Louzada Neto, UFSCar

14:15 INVITED SESSION 16: Challenges of multiple gene-based analysis in genome wide association studies
Chair: Taesung Park (Korea, Republic of)

Finding gene-environment and gene-gene interactions to form predictive genetic tests from the results of genome-wide association studies
**Robert C. Elston** (Case Western Reserve University, US)

Design of GWAS and resequencing-based association studies
**Mike L. Boehnke** (University of Michigan, US)

Scientific Evaluation of the Impact of Interventions Associated with Genetic Risk Factor Information
**Barry Davis** (University of Texas at Houston, US)

Identifying gene-gene interactions with survival times using generalized multifactor dimensionality reduction method
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