



Tuesday, 22nd of September

ARRIAGA	
15:00-16:55	Preliminary I Introducción a los modelos conjuntos de supervivencia y datos longitudinales <i>Carmen Armero. Universitat de Valencia</i>
LABOA	
16:55-17:05	Coffee break
ARRIAGA	
17:05-18:45	Preliminary II Introducción a los modelos conjuntos de supervivencia y datos longitudinales <i>Carmen Armero. Universitat de Valencia</i>
TOWN HALL	
19:00-20:30	Welcome Reception

HALL

8:45-9:30 **Registration and Documentation**

MITXELENA

9:30-10:30 **Opening**

HALL

10:30-11:10 **Coffee break**

MITXELENA

11:10-12:10 **Plenary I**
 Chair: Vicente Núñez Antón
 Speaker: **David Conesa** (Universidad de Valencia)
Revisiting Bayesian hierarchical models, a tool to approach many highly complicated real systems

12:15-13:35 **Young Session** (Sponsored by International Biometric Society (IBS))
 Chair: David Conesa

12:15 **D. Ayma** (Universidad Carlos III de Madrid. España - Región Chilena), M. Durbán, D.J. Lee.
Penalized composite link mixed models for spatial count data

12:35 **G. Giménez** (Universidad Nacional del Comahue. Argentina - Región Argentina), V. Tassile.
Using Non-linear mixed models and artificial neural network in the fitting growth pattern in pears cv. 'Williams' to predict final sizes at harvest

12:55 **M. Higuera** (Public Health England. Reino Unido - Región Española), P. Puig, E. A. Ainsbury, K. Rothkamm, V. V. Vinnikov.
A new Bayesian model for partial body irradiation dose Estimation

13:15 **L.H. Vanegas** (Universidad Nacional de Colombia. Colombia - Región de Centroamérica y el Caribe), G. A. Paula.
Log-symmetric Regression Models: A semiparametric approach

TORRE IBERDROLA

13:35-15:30 **Lunch**

MITXELENA

15:30-17:10 **Parallel Session I: Statistical Methods in Medicine I**

(Sponsored by Syntax for Science)

Chair: Dae-Jin Lee

- 15:30 **I. Guler**, C. Faes, L. Teixeira, A. Rodrigues, D. Mendonca and C. Cadarso-Suárez
Joint modelling for bivariate longitudinal and survival data: application to peritoneal dialysis programme
- 15:50 **R. Clèries**, J.C. Oliva and the Colontif Group
Improving colorectal cancer screening detection programs through Bayesian Networks and graphical modelling
- 16:10 **O. Aydin**
The R GUI: best body size estimator for optimum total cholesterol level and total cholesterol level estimator by age groups
- 16:30 S. Escudeiro, **A. Freitas** and V. Afreixo
A new adjusted confidence interval for a linear combination of independent binomial proportions
- 16:50 **J. Martín**, U. Aguirre, A. Padierna, A. Antón and J.M. Quintana
Modelling the gender perspective in caregivers of patients with eating disorders

BAROJA

15:30-17:10 **Parallel Session II: Mixed Effects Models**

(Sponsored by Syntax for Science)

Chair: Cristian Meza

- 15:30 **P. Soret**, C. Meza, K. Bertin, M. Avalos and P. Hellard
Function selection in mixed effects models using L1-penalization
- 15:50 **M.M. Ojeda** and A. Reyes
Multilevel models for intensive longitudinal data: modelling mental workload of unmanned aerial vehicle pilots
- 16:10 **I. García Ledo**, V. Núñez-Antón and S. Orbe Mandaluniz
P-Splines approaches for longitudinal data: Flexible modelling proposals and their advantages
- 16:30 **A. Adin**, M.D. Ugarte and T. Goicoa
On Bayesian P-splines in disease mapping
- 16:50 **E. López Vizcaíno** and M.J. Lombardía Cortiña
Model selection for the estimation of prevalence of smokers in small areas in Galicia

ARRIAGA

15:30-17:10 **Parallel Session III: Multivariate Analysis I**
(Sponsored by Syntax for Science)
Chair: Fernando Casanoves

15:30 **C. Arenas**, I. Irigoien and F. Mestres
Identifying extreme observations: a robust distance-based function

15:50 **G. Sabino**, S. Boché and S. Bramardi
Análisis comparativo de técnicas de Análisis Multivariado para tratamiento de datos mixtos

16:10 **M.C. Vega Hernández**, M.C. Patino Alonso, M.P. Galindo Villardón and M.P. Vicente Galindo
Multivariate characterization of the relationships between emotional intelligence and learning strategies

16:30 **C. Castro**, M.M. Ojeda and A. Tenorio
Characterization of legal and illegal drugs users: segmentation using TAID-LCA analysis

16:50 M.L Zingaretti, J. Demey-Zambrano, G. Dean, O. Ruiz, J.A. Di Rienzo, M.P. Galindo-Villardón, J.L. Vicente-Villardón and **J.R. Demey**
Identification of candidate genes associated to several cell lines of the cancers tumors using text-mining, co-expression network analysis and comparative genomics: A STATIS-ACT methodology approach

CHILLIDA

17:15-18:45 **Poster Session and Coffee Break**
(Sponsored by Basque Center for Applied Mathematics – BCAM)

Poster Session I
Chair: Itziar Irigoien
(Presentations from 17:15-18:00)

Poster Session II
Chair: María Xosé Rodríguez Álvarez
(Presentations from 18:00-18:45)

19:00 **Social activity**

MITXELENA

9:00-10:00

Plenary II

Chair: Raúl Macchiavelli

Speaker: **Helene Jacqmin-Gadda** (INSERM U897 - ISPED, Bordeaux, France)*Joint modelling of cognitive decline, dementia and death accounting for interval censoring of age at dementia*

HALL

10:00-10:30

Coffee break

MITXELENA

10:30-12:10

Parallel Session IV: Bayesian Statistics I

Chair: Rolando de la Cruz Mesía

10:30 **E. Cepeda-Cuervo**, M. Córdoba and V. Núñez-Antón*Spatial overdispersed models: A new proposal*10:50 **D. Alvares**, C. Armero, A. Forte and L. Rubio*Strolling through the Bayesian modeling to assess plant disease epidemiology*11:10 **I. Barranco-Chamorro**, J.L. Moreno-Rebollo, M.D. Jiménez-Gamero and M.V. Alba-Fernández*Estimation in the generalized half-logistic distribution under different loss functions*11:30 **L.M. Rondon** and H. Bolfarine*Bayesian analysis of flexible measurement error models*11:50 **A. Forte**, C. Forné, M. Rué, C. Armero, H. Perpiñán and M. Baré*Bayesian modeling of the association between mammographic breast density and breast cancer risk*

BAROJA

10:30-12:10

Parallel Session V: Clinical Trials

Chair: Nuria Porta Bleda

10:30 **T. Haas**, H. Cauwel, P. Gallo and D. Xi*Futility interim analyses in Phase III registration trials*10:50 **M. Gómez Mateu** and G. Gómez Melis*Probability and hazard ratio for combined endpoints: extending CompARE*

- 11:10 **G. Gómez Melis**
Sample size computation when the hazard ratio is not constant
- 11:30 **J.R. Marsal**, S. Bertran, I. Ferreira-González
The use of a binary composite endpoint instead of a primary endpoint could imply a lower or higher sample size requirement: influence of endpoints relationship and how to assess it
- 11:50 **G. Castellà**, A. Espinal, M. Sánchez, F. Barbé and J. Valls
Predicting the remaining time to achieve the required number of needed patients or events in an ongoing clinical trial

ARRIAGA

- 10:30-12:10 **Parallel Session VI: Space and Space-Time Modelling**
Chair: María L. Durbán Reguera
- 10:30 **M.A. Martínez Beneito** and M. Mari-Dell'Olmo
Incorporating statistical design in multivariate ecological regression studies: A real case study
- 10:50 **P. Carracedo** and A. M. Debón
Implementation of new methods of measurement and comparison of longevity in Europe
- 11:10 **J. Martínez-Minaya**, D. Conesa, A. López-Quílez and A. Vicent
Climatic and spatial factors associated with citrus black spot. A Bayesian analysis of disease spread in South Africa
- 11:30 **O.O. Melo**, S.M. Buitrago and Z.L. Cárdenas
Generalized linear model spatio-temporal for the bovine brucellosis in Colombia
- 11:50 **J.M. Polanco-Martínez** and D.-J. Lee
Correlation analysis for unevenly spaced environmental time series

MITXELENA

- 12:15-13:35 **Parallel Session VII: Bayesian Statistics II**
Chair: Carmen Armero
- 12:15 **K. Flores-Lozano**, A. Corberán-Vallet and J.D. Bermúdez
A Bayesian model with an underlying cluster structure for Disease Mapping
- 12:35 **M. Corrales-Bossio** and E. Cepeda-Cuervo
Bayesian skew-normal regression models
- 12:55 **E. Lazaro**, C. Armero, L. Rubio
Bayesian correlated binary models for assessing the prevalence of viruses in organic agriculture
- 13:15 **M. López-Lacort**, F.J. Santonja and A. Corberán-Vallet
Bronchiolitis dynamics in the region of Valencia: an aged Bayesian discrete-time model

BAROJA

12:15-13:35 **Parallel Session VIII: Statistical Genetics** Chair: M. Luz Calle

12:15 **J.R. González**, I. Subirana, G. Lucas, C. Lluís-Ganella and R. Elosua
Exact distribution of genetic risk score for estimating personal risk in complex diseases

12:35 **J. Graffelman**
The mid p-value and exact statistical inference on Hardy-Weinberg equilibrium

12:55 **S. Eyheramendy** and E. Eskin
Estimating Kinship matrices in the presence of linkage disequilibrium

13:15 **M. Rodríguez Gironde**
Augmented prediction in high-dimensional omic applications

ARRIAGA

12:15-13:35 **Parallel Session IX: Design of Experiments** Chair: María Jesús Rivas López

12:15 J.A. Moler, F. Plo, H. Urmeneta and **A. Galbete**
Adaptive designs in dose-response experiments

12:35 **S.E. Melo**, W.E. Galindo and O.O. Melo
Response surface methodology for overdispersion generalized linear Models

12:55 M. Amo Salas, A. Jiménez Alcázar and **J. Lopez-Fidalgo**
Optimal designs for a nonlinear calibration models in radiology

13:15 **N.Vilor-Tejedor**, S. Alemany, A. Cáceres, M. Bustamante, J. Sunyer and J.R. González
Independent Multifactorial Association Analysis to analyze multiblock data: application in an Imaging Genetic study of Attention-Deficit/Hyperactivity Disorder

TORRE IBERDROLA

13:35-15:30 **Lunch**

MITXELENA

15:30-17:10 **Invited session EMR-Italy-Portugal** Chair: Klaus Langohr

15:30 **V. Djordjilovi** (University of Padova - Italian Region), M. Chiogna and J. Vomlel
An empirical comparison of popular algorithms for learning gene networks

15:50 **K. Nasserinejad** (Erasmus Medical Center - EMR), J. van Rosmalen, W. de Kort, D. Rizopoulos and E. Lesaffre
Latent Class Mixed-Effects Transition Model: A model to predict haemoglobin in blood donors

16:10 **F. Ambrogi** (University of Milan -Italian Region) and T. Scheike
Penalised competing risks regression

16:30 **D. Karlis** (Athens University of Economics - EMR), U. Dafni and X. Pedeli
A new adaptive design for Phase II clinical trials

16:50 **G.L. Silva** (Universidade de Lisboa – Portuguese Region), E. Juarez-Colunga and C. Dean
A joint analysis of counts and severity with zero-inflated longitudinal data

CHILLIDA

17:15-17:45 **Coffee break**

BAROJA

17:45-18:00 **Presentation CEB 2017**

18:00-19.15 **Assembly (SEB)**

21:30 **Conference Dinner (Hotel Hesperia Zubialde)**

MITXELENA

9:00-10:00

Plenary III

Chair: Inmaculada Arostegui

Speaker: **Alvaro Muñoz** (Johns Hopkins University, Maryland, USA)*The perilousness of proportional hazards models in the competing risks setting*

HALL

10:00-10:30

Coffee break

MITXELENA

10:30-12:10

Parallel Session X: Epidemiology

Chair: Pere Puig

10:30 **M. Née**, M. Avalos, L. Orriols and E. Lagarde*Impact of unmeasured covariates on bias and statistical power in health administrative databases: a simulation study*10:50 **A. Arrospide**, M. Rué, N.T. van Ravesteyn, M. Comas, M. Soto-Gordoa, N. Larrañaga, T. Acaiturri, G. Sarriugarte and J. Mar*Breast cancer screening program evaluation in the Basque Country: Health benefits, harms and related costs through discrete event simulation*11:10 **S. Karahan**, E. Karaismailoglu and D. Goksuluk*Covariate adjustment in weighted Kappa coefficient*11:30 **J. Valls**, G. Castellà, T. Dyba and R. Clèries*Selecting the minimum prediction base of historical data to perform cancer predictions: the GoF-optimal method*11:50 **J. Najera**, D.-J. Lee and I. Arostegui*Modeling over-dispersion in binomial regression: a case study of chronic obstructive pulmonary disease patients through the SF-36 health survey*

BAROJA

10:30-12:10 **Parallel Session XI: Statistical Methods in Medicine II**

Chair: Jhonny Demey

- 10:30 A.M. Candela-Toha, M.C. Pardo, **T. Pérez**, A. Muriel and J. Zamora
Evaluating the predictive ability of a new biomarker for acute kidney injury in patients undergoing major cardiac surgery: time dependent ROC
- 10:50 M.A. Pérez Vaquer, C. Gorria, **M. Lezaun**, F.J. López, J. Monge, C. Eguizabal and M.A. Vesga
Mathematical simulation to optimize the platelet concentrate stocks in the CVTTH16
- 11:10 **A. Jiménez García**, D.J. Lee and U. Aguirre Larracoechea
Statistical modelling of Health Related Quality of Life measures for Colorectal Cancer with beta-binomial and quantile regression approaches
- 11:30 **H. Perpiñán**, C. Armero and A. Forte
Bayesian hierarchical models for longitudinal and time-to-event data: the case of chronic kidney disease in children
- 11:50 **M. Álvarez Hernández** and A. Martín Andrés
One-tailed asymptotic inferences for the ratio of proportions

ARRIAGA

10:30-12:10 **Parallel Session XII: Multivariate Analysis II**

Chair: Arantza Urkaregi

- 10:30 **N. Perez-Alvarez**, E. Vegas, J.A. Jiménez Lasanta and R.V Rodríguez
Exploration of liver fibrosis based on machine learning analysis
- 10:50 **C.A. Ávila Zarza** and J.L. Sánchez Hernández
Nonlinear multivariate analysis as a tool to validate the theory of worlds of production: the case of Spanish wine production
- 11:10 **M.D. Jiménez-Gamero**, M.V. Alba-Fernández, P. Jodrá and I. Barranco-Chamorro
A bootstrap test for the k-sample problem
- 11:30 **P. Vicente-Galindo**, T. Norohna, E. Vaz and E. Vicente Galindo
Reporting sustainability by using the multicriteria logistic biplot: the case of Spain and Portugal
- 11:50 **A. Ayala**, M. J. Forjaz
Fuzzy clustering algorithm for multimorbidity patterns

MITXELENA

12:15-13:35 **Parallel Session XIII: Survival Analysis**

Chair: Guadalupe Gómez i Melis

12:15 **C. Barroeta**, O. Julià and A. Espinal*Different estimation methods for discrete survival time data with frailty*12:35 **A.M. Franco-Pereira** and M.C. Pardo*Looking for alternatives to AUC for comparing crossing ROC curves and its application to a health care data set*12:55 **J.L. Jiménez** and J. R. Dorronsoro*Proximal Methods for Lasso Penalties in the Cox Proportional Hazards Model*13:15 **I. Barrio**, M.X. Rodríguez-Álvarez, L. Meira-Machado and I. Arostegui*Comparison of discrimination ability estimators in the categorisation of continuous predictors in a Cox Proportional Hazards Model*

BAROJA

12:15-13:35 **Parallel Session XIV: Statistical Methods I**

Chair: Jesús López Fidalgo

12:15 **R.E. Macchiavelli**, A. Calvo and P. Torres-Saavedra*Semiparametric mixed beta regression for modeling disease severity in Plants*12:35 **C. Castro-Kuriss** and V. Leiva*Assessing Models in Non-Location Scale Family: its application in Biostatistics*12:55 **M.J. Ginzo Villamayor** and R.M. Crujeiras*Onomastic modelling for genetics*13:15 **A. Herrera**, P. Calle, O. Alvarado, A. Quintero, A. Lovato, D. Drouet and F. Andrade*Metodología para el análisis multivariante en evaluaciones ecotoxicológicas de ambientes marino-costero*

ARRIAGA

12:15-13:35 **Parallel Session XV: Statistical Methods II**

Chair: Susana Eyheramendy

- 12:15 **S. Pérez-Álvarez**, N. Marina, B. Arza and M. Sales
Variance evaluation on immunoassay pre-diluted calibrators
- 12:35 **N. Meric Konar**, O. Dag and A. Dolgun
Effects of non-normality and heterogeneity on tests for one-way independent groups design: type I error and power comparisons
- 12:55 **A. Fernández-Fontelo** and P. Puig
A new underdispersed count model with applications
- 13:15 **I. Paradinas**, D. Conesa, A. López-Quílez and J. M. Bellido
Comparing alternative Bayesian structures for semi-continuous and spatio-temporally correlated data: an application to fisheries

TORRE IBERDROLA

13:35-15:30 **Lunch**

MITXELENA

15:30-17:10 **Parallel Session XVI: Miscellaneous I**

Chair: Rosa M. Crujeiras

- 15:30 **A. Vázquez**, A. Espinal and O. Julià
Partial Likelihood and Models for binary response
- 15:50 **K. Langohr**, N. Pérez-Alvarez, E. Negredo, A. Bonjoch and G. Gómez
Multi-state model for the progression to osteopenia and osteoporosis among HIV-infected patients
- 16:10 M. Boubeta, **M.J. Lombardía**, M. Marey-Pérez and D. Morales
Studying the evolution of forest fires in Galicia using area-level Poisson mixed models with time effects
- 16:30 **I. Galván** and J. Graffelman
IBS.IBD.studies: an R package for relatedness research using microsatellites and SNP data

BAROJA

15:30-17:10 **Parallel Session XVII: Miscellaneous II**
Chair: Jesus Orbe Lizundia

- 15:30 **M.M. Ortega-Hidalgo**, E. Bolaños-Iparraguirre and M. Barrenetxea-Aretxabala
Photogrammetric techniques applied to morphometric studies in soft-bodied invertebrates
- 15:50 **D. García, R. Prellezo**, P. Sampedro, J. Castro and S. Cerviño
Bio-economic impact assessment of new European landing obligation policy in the Spanish demersal fishery system in Iberian waters
- 16:10 Cortés, M.N. Medina, M. Vogler, **E. Cobo** and J.A. González
Constant effect assumption versus individualized medicine

CHILLIDA

17:15-17:45 **Coffee break**

MITXELENA

17:45-19:15 **Invited Session Ibero-American**
Chair: Julio di Rienzo

- 17:45 **M.X. Rodríguez** (Universidad de Vigo – Región Española), P.H.C. Eilers, M. Boer and F. van Eeuwijk
P-spline models for agricultural field data
- 18:08 A. Arribas-Gil, **R. de la Cruz** (Pontificia Universidad Católica de Chile – Región Chilena), E. Lebarbier and C. Meza
Classification of longitudinal data through a semiparametric mixed-effects model based on lasso-type estimators
- 18:31 **F. Casanoves** (Centro Agronómico Tropical de Investigación y Enseñanza, CATIE – Región Argentina)
Estimates of carbon sequestration from national forest inventories
- 18:53 **L.F. Grajales** (Universidad Nacional de Colombia – Región de Centroamérica y Chile), L.A. López and O.O. Melo
A restricted variable dispersion beta regression model: A frequentist approach in 2^{k-p} experiments

19:15 **Closing**

Poster Session I – Wednesday (17:15-18:00)

Chair: Itziar Irigoien

- P1. **E. Agirre**, A. Anta and L.J.R. Barron
Artificial neural networks: forecasting tools in air quality
- P2. **U. Aguirre Larracoechea**, I. Arostegui and J.M. Quintana
SimStatPerf: A statistical toolkit to assess the performance of simulation studies
- P3. **S. Alberich**, C. Bermúdez, A. Ugarte, P. Vega, M. Martínez- Cengotitabengoa, J. Zugasti and A. González-Pinto
Analysis of the cannabis use in a long-term follow-up with mixed effects models
- P4. **M.H. Alonso**, R. Sanz-Pamplona and V. Moreno
Comprehensive analysis of copy number aberrations in colorectal cancer
- P5. **A. Antón**, S. García-Gutierrez, N. Soldevilla, A. Dominguez and I. Arostegui
Deriving and validating subtypes of physicians regarding their attitude to influenza vaccination
- P6. J. Arnau, R. Alarcón, R. Bendayan, R. Bono and **M.J. Blanca**
Influence of variance heterogeneity and non-normality on the robustness of ANOVA
- P7. **C.A. Ávila Zarza**, R. Muñoz Castañeda, D. Díaz López, M.J. Moutin, L. Peris, A. Andrieux and E. Weruaga Prieto
Compositional Data Analysis: the effect of tubulin polyglutamylaton on microtubules dynamics
- P8. **A. Benchimol**, I. Albarrán, J.J. Marín and P.J. Alonso-González
Hierarchical Lee-Carter model estimation through data cloning applied to demographically linked countries
- P9. **C. Bermúdez-Ampudia**, S. Alberich, M. Fernández, I. González-Ortega, A. García-Alocén, S. García and A. González-Pinto
Mixed-effects models: family burden and functionality in patients with bipolar disorder
- P10. **A. Bilbao**, A. Escobar, L. García-Pérez, G. Navarro and R. Quiros
Factor structure of the Minnesota living with heart failure questionnaire
- P11. **R. Blagus** and L. Lusa
ICV-EasyEnsemble and StochasticEasyEnsemble: efficient combination of bagging and boosting for accurate prediction of class-imbalanced high-dimensional data
- P12. G.R.R. Bóbeda, L.I. Giménez, J.E. Gaiad, V.A. Rodríguez and **S.M. Mazza**
Comparison of methods for estimating fruits per tree in 'Salustiana' sweet orange in Corrientes, Argentina
- P13. G. R.R. Bóbeda, L. I. Giménez, J.E. Gaiad, M.D. Chabbal and **S.M. Mazza**
Modeling the growth of 'Tangor Murcott' fruit

- P14. A. Bodé, **M. Graciela Estévez**, M. Varela and J.A. Vilar
Functional analysis of abundances of phytoplankton species in shelf waters of the Galician upwelling (NW Spain)
- P15. **R. Bono**, J. Arnau, M.J. Blanca, R. Alarcón and R. Bendayan
Simulating binary or ordinal longitudinal data: Algorithm implementation for SAS IML
- P16. **R. Bono**, J. Gómez, I. Bayés, C. González and J. Arnau
Non-normal distributions in data from the health and social sciences: A systematic review
- P17. **P. Botella-Rocamora**, F. Zamora-Martínez, F.J. Muñoz-Almaraz and J. Pardo-Albiach
Model combination in a problem of epileptic seizure prediction
- P18. **F. Casanoves**, J.A. Di Rienzo, A. Purvis, S.M. Diaz and L. Enrico
FDiversity 2015. Phylogenetic Diversity Indices
- P19. V. Casero-Alonso and **J. Lopez-Fidalgo**
MV-optimization in binary response models
- P20. **R. Clèries**, M. Buxó, Y. Yasui, R. Marcos-Gragera, J.M. Martínez, A. Ameijide, J. Galceran, J.M. Borràs and A. Izquierdo
Long-term excess mortality during 1985-2004 for women diagnosed of breast cancer before the age of 50 years in Girona: a Bayesian approach
- P21. **E. Delgado**, M. Amo-Salas, L. Filova, R. Harman and J. López-Fidalgo
Optimal Experimental Design: A discriminative study
- P22. **J. Demey-Zambrano**, G. Dean, M.L. Zingaretti, O. Ruiz, M.P. Galindo-Villardón, J.L. Vicente-Villardón and J.R. Demey
Quality assessment of studies to evaluate if psychosocial interventions are effective in reducing fatigue in cancer patients receiving active treatment: a Biplot approach
- P23. **C.J. Flores**, A. Aguilar, L. Pinillos and C. Vallejos
Incidence and survival of breast cancer at Oncosalud-AUNA: a dynamic cohort study
- P24. **I. Garcia-Ceciaga**, E. Diaz-Ereño, I. Aróstegui and B.M. Jugo.
Identificación de patrones dietéticos mediante análisis multivariante en una muestra de población laboral de la Universidad del País Vasco UPV/EHU
- P25. **S. García-Gutiérrez**, A. Antón Ladislao, I. Lafuente Guerrero, M.J. Legarreta Olabarrieta and J.M. Quintana Lopez
Creation and validation of a predictive model to assess poor outcomes in acute decompensated heart failure
- P26. M. González, C. Gutiérrez, R. Martínez and **M. Mota**
Bisexual branching processes as models for the evolution of some recessive pernicious alleles of X-linked genes in a population
- P27. **N. Gutierrez**, I. Barrio, J.M. Lacave, A. Orbea and I. Arostegui
Comparison and implementation of statistical methodology in environmental toxicology
- P28. **M. Higuera**s, J.F. López-Fidalgo, A. Jiménez, P. Puig and E.A. Ainsbury
On the optimal design of cytogenetic dose-response curves

- P29. **A. Larrañaga**, D.-J. Lee and I. Arostegui
Testing differences for ecosystem totals: a statistical approach to work with stratified random sampling
- P30. **M.J. Legarreta**, I. Barrio, A. Unzurrunzaga, J. Lazaro, J.M. Quintana and I. Arostegui
Development of a computer application (PREVEXEPOC) based on a prognostic severity score system for the stratification of risk of mortality in patients with an exacerbation of COPD

Poster Session II – Wednesday (18:00-18:45)

Chair: María Xosé Rodríguez Álvarez

- P31. **J. Libroero**, B. Ibañez, N. Martínez, S. Peiro and E. Bernal-Delgado
Trends and area variations in Potentially Avoidable Hospitalizations for COPD in Spain (2002-2013): a Bayesian space-temporal analysis
- P32. **J. Martín**, A. Antón, A. Padierna³, I. Lafuente, I. Moro and J.M. Quintana
Comparison of prognostic indicators of 3-month mortality after discharge in patients with and without dementia
- P33. **W. Martínez**, C. Melo and O. Melo
Median Polish Kriging for Space-Time Analysis of Precipitation
- P34. **L. Martinez-Indart**, A. Urkaregi and J.I. Pijoan
Adjusted estimation of treatment effects in observational studies using propensity score methods
- P35. **M. Mateo-Abad**, I. Arostegui and A. Urkaregi
Prediction of road accidents with severe consequences in the Basque Country: model development and validation
- P36. **M.M. Ojeda Ramírez** and C. Cruz López
Statistical education in university courses in Mexico
- P37. S. Oseguera, M. Hernández, **P. Vicente-Galindo** and P. Galindo.
Biplot analysis approach for Kano's model
- P38. **M. Paredes**, H. Vilorio and M. Mora
Design and validation of an instrument for measuring the quality of education from a teacher perspective in Venezuela"
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