

PERSONAL INFORMATION



JESUS LOPEZ-FIDALGO

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Sex Male | Date of birth 30/05/1963 | Nationality Spanish

WORK EXPERIENCE

Current Positions:

- **Director of the Institute of Data Science and Artificial Intelligence** of the University of Navarre.
- Full Professor of Statistics.
- ISI Elected Member.

Relevant past Positions

- *Visiting Scholar, UCLA*, Department of Biostatistics, 2024.
- *President of the Spanish Statistical and Operations Research Society (SEIO): 2019-2021.*
- *Editor-in-chief of TEST form 2017-2020.*
- *Visiting Professor, University of Alberta*, Department of Mathematical and Statistical Sciences, 2019.
- **European Regional Committee (ERC)** of the Bernoulli Society (2014-2018).
- Dean of the Industrial Engineering School (University of Castilla-La Mancha, Spain), 2008-2016.
- *Associate and Full Professor at the University of Castilla-La Mancha, Department of Mathematics (2005-2016).*
- Executive Committee of the Spanish Statistical and Operations Research Society, 2013-2015.
- Person in charge of Mathematics in the Spanish **National Research Agency** (2009-2011).
- Academic Committee of the Spanish Statistical and Operations Research Society, 2007-2009.
- *Associate Professor at the University of Salamanca, Department of Statistics (1994-2005).*
- *Visiting Professor, University of California, Riverside (UCR), Department of Statistics, 2005.*
- SOCRATES committee, University of Salamanca for Statistics (1996-2005).
- Professor at the National Spanish Police School (1999-2002).
- *Visiting Scholar, University of California, Los Angeles (UCLA), Department of Biostatistics, 1998-99.*
- *Postdoctoral fellow, University of Manchester; Institute of Sciences and Technology (UMIST), 1992.*
- Member of the committee SC3 Statistical methods of AENOR (Spanish association for the ISO norms).
- Evaluator of the EU FP6 and the FWO Belgium agency.

EDUCATION AND TRAINING

Bch and MSc in Mathematics (1986)  
 PhD in Statistics (1991)

PERSONAL SKILLS

Mother tongue(s) Spanish

Other language(s)

|   | UNDERSTANDING |         | SPEAKING           |                   | WRITING |
|---|---------------|---------|--------------------|-------------------|---------|
|   | Listening     | Reading | Spoken interaction | Spoken production |         |
| English   | C1            | C1      | C1                 | C1                | C1      |
| I do not have any official certificate. Apart from publications and conference oral talks. I taught two courses as Associate Professor for a quarter in the University of California, Riverside |               |         |                    |                   |         |
| French  | A1            | A2      | -                  | -                 | A1      |
| High School   |               |         |                    |                   |         |

Levels: A1/2: Basic user - B1/2: Independent user - C1/2 Proficient user  
 Common European Framework of Reference for Languages

- Communication skills** Good communication skills gained through my experience in different positions as those mentioned above.  
LECTURE COURSES DELIVERED: 1. Undergraduate: Big Data, Algebra, Calculus, Probability and Statistics, Sampling and Quality Control, Probability Theory, Operational Research, Multivariate Analysis, Linear Models (ANOVA and regression), Statistical Decision Theory, Design of Experiments. 2. Postgraduate: Big Data, Optimal Experimental Design, Operational Research, Mathematical Programming, HTML Language, How to teach Mathematics in the High School.
  
- Organisational / managerial skills** Good organization skills gained through my experience as Dean of the Industrial Engineering School, leader of the research group in “Experimental Design” with 21 people from 6 universities, member of several committees and person in charge of Mathematics in the Spanish National Research Agency. Experience in organising four conferences in Applied Statistics with an average of 200 attendees during the years 1998, 1999, 2000 and 2001. These conferences got together people from industry, private companies and academia, including researchers from medicine, educational science, computer science and chemistry, among others. Experience in organising international seminars: ERASMUS co-ordinator of Statistics at the University of Salamanca. I have organized several national and international workshops as well as the following conferences: MODA8 in 2007, Summer School in 2011, Conference of the Spanish Region of the International Biometrics Society, Conference of the Spanish Society SEIO in 2016, Young Researchers in Design of Experiments and Data Science in 2023.
  
- Job-related skills** Research in Statistics (experimental design) and Statistical Consulting in different areas such as Engineering, Medicine, Pharmacokinetics, Biology, Genomics (Bioinformatics). Popularization of Science (Statistics). Involvement in Big Data Science, both in research and training.
  
- Computer skills** Especially those related to Statistics such as R, STATA or SPSS and mathematics: Mathematica, Python.

**Content**

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| Short research stays .....   | 9  |
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| Contracts with Companies .....   | 11 |
| International Conferences (invited, organizer of especial session) ..... | 11 |
| PhD theses .....   | 13 |

## Honours and awards

- 1992 Second prize for the thesis from the Spanish Royal Academy of Doctors.
- 1999 Scalpar-Novartis prize.
- 2000 Prize of the Royal Academy of Medicine of Salamanca.
- 2002 Police Merit State Decoration.

## Publications

### Books

“Optimal Experimental Designs: A Concise Introduction for researchers”. Springer, 2023.

"Randomness does not exist". Ed. Electolibris: Murcia, 2015. (in Spanish)

"Methodology of the Research in Police Sciences". Center of Publications of the Spanish Ministry of Justice and Domestic Affairs. Series: Training Book notes, 5 authors, 1996. (in Spanish)

"Survival analysis". Ed. La Muralla: Madrid, 2000. (in Spanish)

"Course of data analysis with SPSS". Ed Hespérides: Salamanca (9 authors), 2001. (in Spanish)

The menopause, a change for better: An educational program for development of the personality and the quality of life of climacteric women. Royal academy of Medicine of Salamanca, 5 authors, 2003. (in Spanish)

## Papers

### 2023

de la Calle-Arroyo, C.; Amo-Salas, M.; López-Fidalgo, J.; Rodríguez-Aragón, L. J.; Wong, W. K.. (3/5). 2023. A methodology to D-augment experimental designs. CHEMOMETRICS AND INTELLIGENT LABORATORY SYSTEMS. 237, pp.104822. ISSN 0169-7439. <https://doi.org/10.1016/j.chemolab.2023.104822>.

López-Fidalgo, J. (AC); May, A.; Moler, J. A.. (1/3). 2023. Designing experiments for estimating an appropriate outlet size for a silo type problem. ANNALS OF APPLIED STATISTICS. 17 - 1, pp.606 - 620. ISSN 1932-6157. <https://doi.org/10.1214/22-AOAS1644>.

Lanteri, A.; Leorato, S.; López-Fidalgo, J.; Tommasi, C.. (3/4). 2023. Designing to detect heteroscedasticity in a regression model. JOURNAL OF THE ROYAL STATISTICAL SOCIETY SERIES B-STATISTICAL METHODOLOGY. 85 - 2, pp.315 - 326. ISSN 1369-7412. <https://doi.org/10.1093/jrsssb/qqkad004>.

### 2022

López-Fidalgo, J. (AC); Martin-Martin, R.; Rodriguez-Hernandez, M.. (1/3). 2022. Estimators and D-optimal experimental designs for mixtures of binary responses. COMMUNICATIONS IN STATISTICS-SIMULATION AND COMPUTATION. 51 - 4, pp.1488 - 1502. ISSN 0361-0918. <https://doi.org/10.1080/03610918.2019.1672738>.

Nikiforova, N. D.; Berni, R.; López-Fidalgo, J.. (3/3). 2022. Optimal approximate choice designs for a two-step coffee choice, taste and choice again experiment. JOURNAL OF THE ROYAL STATISTICAL SOCIETY SERIES C-APPLIED STATISTICS. 71 - 5, pp.1895 - 1917. ISSN 0035-9254. <https://doi.org/10.1111/rssc.12601>.

Casero-Alonso, V.; López-Fidalgo, J.; Wong, W. K.. (2/3). 2022. Optimal designs for health risk assessments using fractional polynomial models. STOCHASTIC ENVIRONMENTAL RESEARCH AND RISK ASSESSMENT. 36, pp.2695 - 2710. ISSN 1436-3240. <https://doi.org/10.1007/s00477-021-02155-1>.

López-Fidalgo, J. (AC); Wiens, D. P.. (1/2). 2022. Robust active learning with binary responses. JOURNAL OF STATISTICAL PLANNING AND INFERENCE. 220, pp.1 - 14. ISSN 0378-3758. <https://doi.org/10.1016/j.jspi.2022.01.004>.

Belar, Alazne; Martínez, Marina; Centeno, Carlos; López-Fidalgo, J.; Santesteban, Y.; Lama, M.; Arantzamendi, María. (7/4). 2022. Wish to die and hasten death in palliative care: a cross-sectional study factor analysis. BMJ SUPPORTIVE & PALLIATIVE CARE. ISSN 2045-435X.

### 2021

De La Calle-Arroyo, C.; López-Fidalgo, J.; Rodríguez-Aragón, L. J.. (2/3). 2021. Optimal designs for Antoine Equation. CHEMOMETRICS AND INTELLIGENT LABORATORY SYSTEMS. 214, ISSN 0169-7439. <https://doi.org/10.1016/j.chemolab.2021.104334>.

Belar, Alazne; Arantzamendi, María; Santesteban, Y.; López-Fidalgo, J.; Martínez, Marina; Lama, M.; Rullán, M.; Olza, Inés; Breeze, Ruth ; Centeno, Carlos. (10/4). 2021. Cross-sectional survey of the wish to die among palliative patients in Spain: one phenomenon, different experiences. BMJ SUPPORTIVE & PALLIATIVE CARE. 11 - 2, pp.156 - 162. ISSN 2045-435X.

Pallotti, M. C. ; López-Fidalgo, J.; Centeno, Carlos; Celin, D.; Biasco, G.; Giovannini, M.; Maltoni, M.; Noguera, Antonio Luís. (8/2). 2021. Does delirium phenomenology in persons with advanced cancer follow a specific pattern?. JOURNAL OF PALLIATIVE MEDICINE. 24 - 7, pp.1061 - 1066. ISSN 1096-6218.

Gamero-Salinas, Juan; Kishnani, Nirmal; Monge, Aurora; López-Fidalgo, J.; Sánchez-Ostiz, Ana. (5/4). 2021. Evaluation of thermal comfort and building form attributes in different semi-outdoor environments in a high-density tropical setting. BUILDING AND ENVIRONMENT. 205, pp.108255. ISSN 0360-1323.

De La Calle-Arroyo, C.; López-Fidalgo, J.; Rodríguez-Aragón, L. J.. (3/2). 2021. Optimal designs for Antoine Equation. CHEMOMETRICS AND INTELLIGENT LABORATORY SYSTEMS. 214, ISSN 0169-7439.

Gamero-Salinas, Juan; Monge, Aurora; Kishnani, N.; López-Fidalgo, J.; Sánchez-Ostiz, Ana. (5/4). 2021. Passive cooling design strategies as adaptation measures for lowering the indoor overheating risk in tropical climates. ENERGY AND BUILDINGS. 252, ISSN 0378-7788.

Gamero-Salinas, Juan; Kishnani, N.; Monge, Aurora; López-Fidalgo, J.; Sánchez-Ostiz, Ana. (5/4). 2021. The influence of building form variables on the environmental performance of semi-outdoor spaces. A study in mid-rise and high-rise buildings of Singapore. ENERGY AND BUILDINGS. 230, pp.110544. ISSN 0378-7788.

## 2020

R. García-Ródenas, JC García-García, J. López-Fidalgo, JA. Martín-Baos, WK. Wong. A comparison of general-purpose optimization algorithms for finding optimal approximate experimental designs. *Computational Statistics & Data Analysis* 144.

Scientific paper. Higuera, M.; Howes, A. ; López-Fidalgo, J.. (3/3). 2020. Optimal experimental design for cytogenetic dose-response calibration curves. INTERNATIONAL JOURNAL OF RADIATION BIOLOGY. 96 - 7, pp.894 - 902. ISSN 0955-3002. <https://doi.org/10.1080/09553002.2020.1741719>.

Students inventory of professionalism (SIP): a tool to assess attitudes towards professional development based on Palliative Care Undergraduate Education. Noguera, Antonio Luís; Arantzamendi, María; López-Fidalgo, J.; Alfredo Gea; Alberto Cancela; Arbea, Leire; Centeno, Carlos. International journal of environmental research and public health 16, 4925. 10.3390/ijerph16244925

Clark, D.; Centeno, Carlos; Clelland, D.; Garralda, Eduardo; López-Fidalgo, J.; Downing, J.; Varghese, C.; Connor, S.. (8/5). 2020. How are palliative care services developing worldwide to address the unmet need for care?. Global atlas of palliative care. Worldwide Palliative Care Alliance. pp.45 - 58. ISBN 978-0-9928277-2-4.

Pallotti, M. C.; López-Fidalgo, J.; Biasco, G.; Celin, D.; Centeno, Carlos; Paragona, M. ; Moroni, M.; Noguera, Antonio Luís. (8/2). 2020. Delirium rates in advanced cancer patients admitted to different palliative care settings: does it make the difference?. JOURNAL OF PALLIATIVE MEDICINE. 23 - 9, pp.1227 - 1232. ISSN 1096-6218.

Moreno, David; Irimia, Pablo; Rodríguez, José Antonio; Garcia-Velloso, Maria Jose; López-Fidalgo, J.; Fernández, Leopoldo; Grochowicz, Lukasz Karol; Muñoz, R.; Domínguez, Pablo Daniel; Gállego-Culleré, J.; Martínez Vila, E.. (11/5). 2020. Elevated circulating metalloproteinase 7 predicts recurrent cardiovascular events in patients with carotid stenosis: a prospective cohort study. BMC CARDIOVASCULAR DISORDERS. 20 - 1, pp.93. ISSN 1471-2261.

Clark, D.; Baur, N.; Clelland, D.; Garralda, Eduardo; López-Fidalgo, J.; Connor, S.; Centeno, Carlos. (7/5). 2020. Mapping levels of palliative care development in 198 countries: the situation in 2017. JOURNAL OF PAIN AND SYMPTOM MANAGEMENT. 59 - 4, pp.794-807.e4. ISSN 0885-3924.

López-Fidalgo, J.; Amo-Salas, M. (2/1). 2020. Optimal dose calibration in radiotherapy. RADIATION PHYSICS AND CHEMISTRY. 174, pp.108917. ISSN 0969-806X.

Higuera, M.; Howes, A. ; López-Fidalgo, J.. (3/3). 2020. Optimal experimental design for cytogenetic dose-response calibration curves. INTERNATIONAL JOURNAL OF RADIATION BIOLOGY. 96 - 7, pp.894 - 902. ISSN 0955-3002.

Arias, Natalia Sofía; López-Fidalgo, J.; Garralda, Eduardo; Pons, Juan José; Rhee JY; Radbruch L; de Lima L; Centeno, Carlos. (8/2). 2020. Trends analysis of specialized palliative care services in 51 countries of the WHO European region in the last 14 years. PALLIATIVE MEDICINE. 34 - 8, pp.1044 - 1056. ISSN 0269-2163.

Landeche, Manuel Fortún; Alegría-Murillo L.; López-Fidalgo, J.; Colina, María Inmaculada; Satesteban B; García-Unciti, M; Beloqui, Óscar; Frühbeck, Gema; Cuervo, M. (9/3). 2020. Unravelling gender-specific factors that link obesity to albuminuria. EUROPEAN JOURNAL OF CLINICAL INVESTIGATION. 50 - 11, pp.e13307. ISSN 0014-2972.

## 2019

Estimators and D-optimal experimental designs for mixtures of binary responses. Lopez-Fidalgo, Jesus ; Martin-Martin, Raul ; Rodriguez-Hernandez, Mercedes. Communications in statistics-simulation and computation 144.

Uncertainty's Indices Assessment for Calibrated Energy Models. Gutierrez Gonzalez, Vicente; Alvarez Colmenares, Lissette; Lopez Fidalgo, Jesus Fernando; et ál. *Energies* 12(11), No. 2096.

Optimal bioassay time allocations for multiple accidental chronic intakes of radioactive particles. Lopez-Fidalgo, J.; Sanchez, J. G. *Stochastic environmental research and risk assessment* 33(3), 905-914

Multicenter Study of the Psychometric Properties of the New Demoralization Scale (DS-II) in Spanish-Speaking Advanced Cancer Patients. Belar, Alazne; Arantzamendi, Maria; Rodriguez-Nunez, Alfredo; et ál. *Journal of pain and symptom management* 57(3), 627-634

Consensus Building on Health Indicators to Assess PC Global Development With an International Group of Experts. Arias-Casais, N, Garralda, E , Lopez-Fidalgo, J; Rhee, JY; Pons, JJ; de Lima, L; Centeno, C. *Journal of pain and symptom management*, 58(3), 445- . DOI: 10.1016/j.jpainsymman.2019.04.024.

Delirium Rates in Advanced Cancer Patients Admitted to Different Palliative Care Settings: Does It Make the Difference? Pallotti, Maria Caterina ; Lopez-Fidalgo, Jesus ; Biasco, Guido; Celin, Daniela; Centeno, Carlos; Paragona, Marco; Moroni, Matteo; Noguera, Antonio. *Journal of palliative medicine*. 10.1089/jpm.2019.0414

Arias-Casais, N.; Garralda, Eduardo; López-Fidalgo, J.; de Lima, L.; Rhee, J. Y.; Pons, Juan José; Centeno, Carlos. (7/3). 2019. Brief manual on health indicators monitoring global palliative care development. IAHP Press. ISBN 978-0-9989787-1-0.

Noguera, Antonio Luís; Arantzamendi, María; López-Fidalgo, J.; Gea, A.; Acitores, A.; Arbea, Leire; Centeno, Carlos. (7/3). 2019. Student's inventory of professionalism (SIP): a tool to assess attitudes towards professional development based on Palliative Care Undergraduate Education. *INTERNATIONAL JOURNAL OF ENVIRONMENTAL RESEARCH AND PUBLIC HEALTH*. 16 - 24, ISSN 1660-4601.

## 2018

Optimal Experimental Design for Model Selection: A Partial Review. Lopez-Fidalgo, Jesus; Tommasi, Chiara. *In: mathematics of the uncertain: a tribute to Pedro Gil. Studies in Systems Decision and Control* 142, 253-263.

An Analysis of Palliative Care Development in Africa: A Ranking Based on Region-Specific Macroindicators. Rhee, John Y.; Garralda, Eduardo; Namisango, Eve; et ál. *Journal of pain and symptom management* 56(2), 230-238.

Publications on Palliative Care Development Can Be Used as an Indicator of Palliative Care Development in Africa. Rhee, John Y.; Garralda, Eduardo; Torrado, Carlos; et ál. *Journal of palliative medicine* 20(12), 1372-1377.

## 2017

Special issue on Design of Experiments. Donev, Alexander N.; Lopez-Fidalgo, Jesus; Wiens, Douglas P. (eds.). *Computational statistics & data analysis* 113, 194-195.

Optimal experimental design on the loading frequency for a probabilistic fatigue model for plain and fibre-reinforced concrete. Rivas-Lopez, M. J.; Yu, R. C.; Lopez-Fidalgo, J.; et ál. *Computational statistics & data analysis* 113, 363-37.

Publications on Palliative Care Development Can Be Used as an Indicator of Palliative Care Development in Africa. John Y. Rhee, Eduardo Garralda, Carlos Torrado, Santiago Blanco, Ibone Ayala, Eve Namisango, Emmanuel Luyirika, Liliana de Lima, Richard A. Powell, Jesús López-Fidalgo, and Carlos Centeno. *Journal of palliative medicine*, 2017. DOI: 10.1089/jpm.2017.0168.

18F-fluorodeoxyglucose positron emission tomography in the diagnosis of malignancy in patients with paraneoplastic neurological syndrome: a systematic review and meta-analysis Ana María García Vicente, Roberto C. Delgado-Bolton, Mariano Amo-Salas, Jesús López-Fidalgo, et al. *Eur J Nucl Med Mol Imaging*. DOI 10.1007/s00259-017-3722-4

Utility of 18F-FDG-PET/CT in patients suspected of paraneoplastic neurological syndrome: importance of risk classification. By: Pena Pardo, F J; Garcia Vicente, A M; Amo-Salas, M; et al. *Clinical & translational oncology* 19(1), 111-118, 2017.

A computer tool for a minimax criterion in binary response and heteroscedastic simple linear regression models  
By: Casero-Alonso, V.; Lopez-Fidalgo, J.; Torsney, B. *Computer methods and programs in biomedicine* Volume: 138 Pages: 105-115, 2017.

## 2016

Optimal designs for model discrimination and fitting for the flow of particles. By: Amo-Salas, Mariano; Delgado-Marquez, Elvira; Filova, Lenka; et al. *Statistical papers* Volume: 57 Issue: 4 Special Issue: SI Pages: 875-891.

Examination of experimental conditions for the production of proton-rich and neutron-rich hypernuclei  
By: Rappold, C.; Lopez-Fidalgo, J.

*Physical review C* Volume: 94 Issue: 4 Article Number: 044616 Published: OCT 25 2016

D-optimal experimental designs for a mixture of Adair models. By: Lopez-Fidalgo, J.; Rodriguez-Hernandez, M. M. *Chemometrics and intelligent laboratory systems* Volume: 154 Pages: 150-161 Published: MAY 15 2016

Max-min optimal discriminating designs for several statistical models. Tommasi, C.; Martin-Martin, R.; Lopez-Fidalgo, J. *Statistics and computing* 26(6), 1163-1172, 2016

Basal F-18-FDG PET/CT in follicular lymphoma: A comparison of metabolic and clinical variables in the prognostic assessment. Jimenez Londono, G. A.; Garcia Vicente, A. M.; Poblete Garcia, V. M.; et ál. *Revista española de medicina nuclear e imagen molecular* 35(5), 298-305, 2016.

D-optimal experimental designs for a mixture of Adair models. Lopez-Fidalgo, J.; Rodriguez-Hernandez, M. M. *Chemometrics and intelligent laboratory systems* 154, 150-161, 2016.

Glycolytic activity in breast cancer using F-18-FDG PET/CT as prognostic predictor: A molecular phenotype approach. Garcia Vicente, A. M.; Soriano Castrejon, A.; Amo-Salas, M.; et ál. *Revista española de medicina nuclear e imagen molecular* 35(3), 152-158, 2016.

Optimal Experimental Designs in the Flow Rate of Particles. Amo-Salas, Mariano; Delgado-Marquez, Elvira; Lopez-Fidalgo, Jesus. *Technometrics* 58(2), 269-276, 2016.

KI-optimal experimental design for discriminating between two growth models applied to a beef farm. Campos-Barreiro, Santiago; Lopez-Fidalgo, Jesus. *Mathematical biosciences and engineering* 13(1), 67-82, 2016.

## 2015

Optimal designs subject to cost constraints in simultaneous equations models. Casero-Alonso, Victor; Lopez-Fidalgo, Jesus. *TEST* 24(4), 701-713, 2015.

Basal F-18-fluoro-2-deoxy-d-glucose positron emission tomography/computed tomography as a prognostic biomarker in patients with locally advanced breast cancer. Garcia Vicente, Ana Maria; Soriano Castrejon, Angel; Fernando Lopez-Fidalgo, Jesus; et ál. *EUROPEAN journal of nuclear medicine and molecular imaging* 42(12), 1804-1813, 2015.

Role of 18F-FDG PET/CT and a new score system to measure the pre-test clinical risk in patients suspected of paraneoplastic neurological syndrome. Pena Pardo, F. J.; Palomar Munoz, A.; Garcia Vicente, A. M.; et ál. *European journal of nuclear medicine and molecular imaging* 42(1), S390-S391, 2015.

S. Campos-Barreiro, J. López-Fidalgo (2015). D-optimal experimental designs for a growth model applied to a Holstein-Friesian dairy farm. *Statistical Methods & Applications* 24 (3), 491-505.

V. Casero-Alonso, J. López-Fidalgo (2015). Optimal designs subject to cost constraints in simultaneous equations models. *TEST* 24(4), 701-713.

M. Amo Salas, J. López-Fidalgo, D. J. Pedregal (2015). Experimental designs for autoregressive models applied to industrial maintenance. *Reliability Engineering & System Safety* 133, 87–94.

M. Stehlik, J. López-Fidalgo, V. Casero-Alonso, E. Bukina, (2015). Robust integral compounding criteria for trend and correlation structures. *Stochastic Environmental Research and Risk Assessment*, 29(2), 379-395.

V. Casero Alonso, J. López-Fidalgo (2015). Experimental Designs in Triangular Simultaneous Equations Models. *Statistical Papers* 56(2), pp. 273-290.

## 2014

M. Amo Salas, M.M. Arroyo-Jiménez, D. Bustos-Escribano, E. Fairén-Jiménez, J. López-Fidalgo (2014). New Indices for Refining Multiple Choice Questions. *Journal of Probability and Statistics*, Vol. 2014, Article ID 240263, 8 pages.

M. J. Rivas López, J. López-Fidalgo, R. Del Campo (2014). Optimal experimental designs for accelerated failure time with Type I and random censoring. *Biometrical Journal* 56(5), 819–837.

J. López-Fidalgo, M. Rodríguez-Hernández (2014). Experimental designs for the Adair model. *Chemometrics and Intelligent Laboratory Systems* 138, pp. 133-141.

J. López-Fidalgo, M. J. Rivas-López (2014). Optimal experimental designs for partial likelihood information. *Computational Statistics & Data Analysis*. 71, 859–867.

## 2013

A. Biswas, J. López-Fidalgo (2014). Compound designs for dose-finding in the presence of nondesignable covariates. *Pharmaceutical*

statistics 12(2), 92-101.

M. Amo-Salas, J. López-Fidalgo, E. Porcu (2013). Optimal designs for some stochastic processes whose covariance is a function of the mean. *Test* 22(1), 159-181.

S. Campos Barreiro, J. López-Fidalgo. (2013). Experimental designs for a Benign Paroxysmal Positional Vertigo model. *Theoretical Biology and Medical Modelling* 10: 21.

## 2012

J. López-Fidalgo (2012). Discussion on the paper: Optimal Design for Statistical Inference; by Steven G. Gilmour and L.A. Trinca. *Journal of the royal statistical society series c-applied statistics* 61(3), 386-387.

M. Amo-Salas, J. López-Fidalgo, V. López-Rios (2012). Optimal designs for two nested pharmacokinetic models with correlated observations. *Communications in Statistics - Simulation and Computation*, 41(7): 944-963.

M. Arévalo - Villena, M. Fernández Guerrero, J. López Fidalgo, A. Breiones (2012). Pectinases yeast production using grape skin as carbon source. *Advances in Bioscience and Biotechnology*, 2 (2): 89-96.

## 2011

F. Feo Brito, P. Mur Gimeno, J. Camés, R. Martín-Martín, et al. (2011). Olea europaea pollen counts and aeroallergen levels predict clinical symptoms in patients allergic to olive pollen. *Annals of Allergy, Asthma & Immunology*, 106 (2): 146–152.

J. López-Fidalgo, S. Garcet-Rodríguez (2011). Optimal experimental designs when an independent variable is potentially censored. *Statistics*, 45(2): 143 — 154.

J. López-Fidalgo, I. Ortíz-Rodríguez, W. K. Wong (2011). Design issues for population growth models. *Journal of Applied Statistics*, 38(3): 501–512.

## 2010

Amo-Salas, M., López-Fidalgo, J. And Rodríguez-Díaz, J.M. (2010). Optimizing the test power for a radiation retention model in the human body. *Pharmaceutical Statistics*, 9(1):55-66.

Tommasi, Ch., And López-Fidalgo. J. (2010). Bayesian optimum designs for discriminating between models with any distribution. *Computational Statistics & Data Analysis*, 54(1):143-150.

## 2009

López-Fidalgo, J., (2009). A critical overview on optimal experimental designs. *Boletín de Estadística e Investigación Operativa*, 25(1):14-21.

López-Fidalgo, J., Rivas-López, M. J., And Del Campo, R. (2009). Optimal designs for Cox regression. *Statistica Neerlandica*, 63(2):135-148.

## 2008

López-Fidalgo, J., Tommasi, Ch., And Trandafir, C. (2008). Optimal designs for discriminating between some extensions of the Michaelis-Menten model. *Journal of Statistical Planning and Inference*, 138(12):3797-3804.

Garcet Rodríguez, S., López-Fidalgo, J., And Martín Martín, R. (2008). Some complexities in optimal experimental designs introduced by real life problems. *Tatra Mt. Math. Publ*, 39:135-143.

López-Fidalgo, J., Martín-Martín, R., And Stehlik, M. (2008). Marginally restricted D-Optimal designs for correlated observations. *Journal of Applied Statistics*, 35(6): 617 - 632.

Stehlik, M., Rodríguez-Díaz, J.M., Müller, W.G., And López-Fidalgo, J. (2008) Optimal allocation of bioassays in the case of parametrized covariance functions: an application to lung's retention of radioactive particles. *Test*, 17(1):56-68.

## 2007

Laycock, P.J., López-Fidalgo, J. (2007). Design of Experiments for Extreme Value Distributions. *In MODA8-Advances in Model Oriented Design and Analysis*, 101-107, Springer, New York.

López-Fidalgo, J., Rivas-López, M.J. (2007). MV-Optimality Standardized through the Coefficient of Variation. *Journal of Statistical Planning and Inference*, 137(8):2666-2680.

Lopez-Fidalgo, J., Rivas-López, M.J., and FERNÁNDEZ-GARZÓN, B. (2007). A-Optimality Standardized Through the Coefficient of Variation. *Communications in Statistics-Theory and Methods*, 36(4):781–792.

López-Fidalgo, J., Trandafir, C., And Tommasi, Ch. (2007). An optimal experimental design criterion for discriminating between non-Normal models. *Journal of the Royal Statistical Society, Series B*, 69(2): 231–242.

López-Fidalgo, J., And Villarroel, J. (2007). Optimal designs for radiation retention with Poisson correlated response. *Statistics in Medicine*, 26(9):1999-2016.

Martín-Martín, R., Torsney, B., And López-Fidalgo, J. (2007). Construction of marginally and conditionally restricted designs using multiplicative algorithms. *Computational Statistics & Data Analysis*. 51(12):5547-5561.

RODRÍGUEZ-ARAGÓN, L.J., And LÓPEZ-FIDALGO, J. (2007). T-, D- and c- Optimum Designs for BET and GAB Adsorption Isotherms. *Chemometrics and Intelligent Laboratory Systems*. 89(1):36-44.

## 2006

Prieto, C., Rivas, M.J., Sánchez, J.M., López-Fidalgo, J., And De Las Rivas, J. (2006). Algorithm to find gene expression profiles of deregulation and identify families of disease-altered genes. *Bioinformatics*, 22(9):1103-1110.

Kitsos, Ch.P., López-Fidalgo, J. , And Trandafir, P.C. (In press). Optimal designs for Michaelis-Menten model. *Proceedings of the Greek Statistical Institute annual meeting*.

## 2005

López-Fidalgo, J., Garcet Rodríguez, S., And Varela, G. (2005). Optimal experimental designs for prediction of morbidity after lung resection. *Quantitative Methods for Cancer and Human Risk Assessment*, Wiley.

López-Fidalgo, J., Rodríguez-Díaz, J.M., Sánchez, G., Santos-Martín, M.T. (2005). Optimal designs for compartmental models with correlated observations. *Journal of Applied Statistics*, 32(10): 1075 - 1088

López-Fidalgo, J., And Sánchez-León, G. (2005). Statistical criteria to predict internal doses. *Health Physics* 89(4): 333-338.

Rodríguez-Aragón, L.J., And López-Fidalgo, J. (2005). Optimal Designs for the Arrhenius Equation. *Chemometrics and Intelligent Laboratory Systems*, 77(1-2): 131-138.

## 2004

López-Fidalgo, J., Tommasi, Ch., And Trandafir, P.C. (2004). T-optimality: a stopping rule for a first order algorithm. *Research Papers in Economics, Business, and Statistics*, 30:1-14.

López-Fidalgo, J., Garcet Rodríguez, S.A., (2004). Optimal Experimental Designs When Some Independent Variables Are not Subject to Control. *Journal of the American Statistical Association*, 99(468): 1190-1199.

López-Fidalgo, J., Rodríguez-Díaz, J.M. (2004). Elfving's method for m-dimensional models. *Metrika*, 59(3): 235-244.

Tommasi, Ch., López-Fidalgo, J., (2004). Minimax Designs for a Parameterization of Binary Response Models. *Communications in Statistics-Theory and Methods*, 33(11):2787-2798.

Trandafir, P.C. López-Fidalgo, J. (2004). Optimal design for pharmacokinetics models. *In Model Oriented Data Analysis and Experimental Design (VII)*, 173-181, Physica-Verlag, New York.

## 2003

López-Fidalgo, J., Tommasi, CH. (2003). Construction of MV- and SMV-optimum designs for binary response models. *Journal of Computational Statistics and Data Analysis*, 44(3):465-475.

Rodríguez-Díaz, J.M, López-Fidalgo, J. (2003). A bidimensional class of optimality criteria involving  $\Phi_p$  and Characteristic Criteria. *Statistics*, 37(4):325-334.

Sánchez-León, G., López-Fidalgo, J. (2003). Mathematical techniques for solving analytically large compartmental systems. *Health Physics*, 85(2):184-193.

## 2002

López-Fidalgo, J., Wong, W.K. (2002). Design Issues for the Michaelis-Menten Model. *Journal of Theoretical Biology*, 215(1):1-11.



**2001**

López-Fidalgo, J., Vaduva, I. (2001). On simulation of a multivariate normal distribution. *Analele Univ. Bucuresti: Matematica-Informatica*, 50(1): 97-104.

Imhof, L., López-Fidalgo, J., Wong, W. K. (2001). Efficiencies of Optimal Approximate Designs for Small Samples. *Statistica Neerlandica*, 55(3):301-318.

Torsney, B., López-Fidalgo, J. (2001). Minimax designs for logistic regression in a compact interval. *In Advances in Model-Oriented Design and Analysis*, 243-250, Physica-Verlag, New York.

**2000**

López-Fidalgo, J., Wong, W.K. (2000). A comparative study of MV- and SMV-optimal designs for binary response models. *In Advances in stochastic simulation methods (St. Petersburg, 1998)*, 135-151, Stat. Ind. Technol., Birkhäuser, Boston.

Rodríguez-Díaz, J.M., López-Fidalgo, J. (2001). Optimal characteristic designs for polynomial models. *In Optimum design 2000 (Cardiff)*, 123-130, Nonconvex Optim. Appl., 51, Kluwer Acad. Publ., Dordrecht.

**1999**

Arduany, R., López-Fidalgo, J., Laycock, P.J., Wong, W.K. (1999). When is an equally-weighted design D-optimal? *Annals of the Institute of Statistical Mathematics*, 51(3): 531-540.

## Editorial acting

- Editor-in-chief of TEST from 2017 to 2020 and AE since then.
- Editor of a Special issue of CSDA.
- Editor of the Special issue 56(5) of Biometrical journal.
- Former Editor of the Bulletin of the Spanish Statistical Society.
- Editor of the proceedings MODA8 (Springer).
- Associate Editor of Test, Shankhia, ISRN Probability and Statistics and The Open Medical Informatics Journal.
- Frequent referee of (among other): Journal of Statistical Planning and Inference; Journal of Biochemical and Biophysical Methods; Journal of the Royal Statistical Society (Series C and B); Journal of the American Statistical Association; Test; Computational Statistics and Data Analysis; Statistics in Medicine; Biometrics; proceedings MODA7 and 9 (Springer).

## Short research stays

University of Manchester (UMIST): 1994, 1996, 2003.

University of Glasgow: 1994, 2000, 2001, 2002.

University of Hull: 1996.

University of California, Los Angeles (UCLA), 1997.

University of Padua: 1999.

University of Bucharest: 2003.

Economics University of Vienna: 2004, 2005.

University of Navarre, 2007.

Indian Statistical Institute, 2010.

Isaac Newton Institute, Cambridge (UK), 2011.

Harvard University, 2012.

University of Manitoba, Canada, 2017.

Invited seminars in a number of national and international institutions, such as the Universities of Johannes Kepler, Linz; California, San Diego; Missouri, Columbia; California, Riverside; Comenius of Bratislava; Glasgow; Bologna; Padua; UCLA, Manitoba or CIMAT in Mexico.

## Principal Investigator in Research Grants

### From the Research Spanish National Agency:

- PLEC2023-010353: 2024 – 2026, 345.582 €
- PID2020-113443RB-C21, 2021 – 2025, 50.820 €
- PC032-033 BuildTwin, 2022 – 2024, 370.917,55 € MTM2016-80539-C2-1-R: 2017-2020, 82.700 € + Overheads.
- MTM2013-47879-C2-1-P: 2014-2016, 63.450,00€
- FECYT (FCT-14-8405): PI of one of the eight nodes of the Spanish network of Biostatistics. 2014-2015, 18,000€
- MTM2012. PI of one of the eight nodes of the Spanish network of Biostatistics, 2013-2014, 37,000€
- MTM2010: 2011-2013, 120.879€
- MTM2009. PI of one of the eight nodes of the Spanish network of Biostatistics, 2010-2011, 11,200€
- CONSOLIDER IMATH (CSD2006-32, 9415): PI of one of the 283 groups involved. 2006-2010, 7,500,000€
- MTM2006: 2007-2010, 33,200€
- MTM2004-06641-C02-01: 2005-2007, 38,800€.

### European:

- Application- and Methodology-Driven Innovation in Design Of Experiments (AMIDOE). ESF - Research Networking Programme - Call 2008, 08-RNP-096 and MICINN (awarded by ESF and supported by Research Spanish National Agency, without final agreement for some of the 15 countries involved), 2010. PI of the Spanish team.
- HU2003-0026 (University of Salamanca and Vienna University of Economics): 2004-2005, 10,812€

### Regional Research Agency (from the Autonomy):

- Castilla y León (JCYL SA 04/01): 2001-2003, 1,326,000 pesetas.
- Castilla y León (SA125/04): 2004-2006, 14,180€
- Castilla y León (OTP/02/08): 2002, 3,500€
- Castilla y León: 2003, 3,000€
- Castilla-La Mancha: 2007-2009, 28,084€

- Castilla-La Mancha: 2010-2012, 133,731€

## Contracts with Companies

- FERROVIAL CORPORACIÓN, SA, 2017, 5.400 €
- COMPAÑIA LOGISTICA DE HIDROCARBUROS CLH, SA, 2013, 1,500€
- OASIS Project- Observatory on State Aid Impact. European Program Interreg IVC. Personas. 2013, 1,000€
- Fundación para la investigación sanitaria de Castilla-La Mancha, 2012, 1,000€
- ISFOC - INSTITUTO SISTEMAS FOTOVOLTAICOS DE CONCENTRACIÓN, 2011, 1,900€

## International Conferences (invited, organizer of especial session)

**Scientific committee:** 13th conference on Model-Oriented Data Analysis and Optimum Design. 09/07/2023. UK. Participatory - oral communication. Conference.

**Organizer of the invited session:** International Conference on Design of Experiments (ICODOE 2022). 08/05/2023. USA. Participatory - oral communication. Conference.

**Organizer of the invited session:** RSS International Conference 2022. 12/09/2022. Reino Unido. Participatory - oral communication. Conference.

**Invited speaker.** Design and Analysis of Experiments The DAE Conference Series in North America.. 05/10/2021. USA. Participatory - oral communication. Conference.

**Invited speaker.** ROeS 2021-Conference of the Austrian-Swis Region of the International Biometric Society. 07/09/2021. Participatory - oral communication. Conference.

**Invited speaker.** 50th Scientific Meeting of the Italian Statistical Society Virtual Conference. 21/06/2021. Italy. Participatory - invited/keynote talk. Conference.

**Keynote speaker.** X Seminario Internacional de Estadística Aplicada. 11/05/2021. Ecuador. Participatory - oral communication. Conference.

**Keynote speaker.** Statistics and innovation for Industry 4.0. 20/02/2020. Italy.

**Scientific committee:** MODA 13, Slovaquia, 2019.

**Organizer of a special international session** on Experimental design techniques applied to treatment of Big Data and talk in the Conferecne of the Real Sociedad Matemática Española, 2019

**Invited speaker.** 10th Conference of the Eastern Mediterranean Region of the Intrnational Biometric. Jerusalem, Israel, 2018.

**Organizer of the invited session** in the XXIXth International Biometric Conference (selected out of about 70 candidates for 15 sessions): Experimental Design as a Framework for Solving Challenging Problems in Clinical Drug Development. 2018.

**Invited speaker** at IX International Workshop on Simulation, Barcelona, 2018.

**Keynote speaker** in Design of experiments for quality of products and sustainability in agri-food systems, Florence, Italy, 2018.

**Invited speaker** at Latest Advances in the Theory and Applications of Design and Analysis of Experiments. Banff, Alberta, Canada, 2017.

**Keynote speaker** at Pharma-Bayes 17, Albacete, Spain, 2017

**Session organizer and scientific committee.** ERCIM 2016, Sevilla, Spain.

**Invited talk, Committee of Internal Cooperation of FENStatS.** Conference of European Statistics Stakeholders. Budapest, 20–21 October 2016.

**Session organizer and scientific committee.** ERCIM 2015, London (UK).

**Invited speaker:** Probastat 2015, Smolenice (Eslovaquia).

**Session organizer.** ERCIM 2014, Pisa (Italy).

**Invited speaker:** ENBIS 2014, Linz (Austria).

**Scientific committee.** INTERNATIONAL WORKSHOP mODa 10 (Model-Oriented Data Analysis and Optimum Design), Lagow Lubuski (Poland), 2013.

**Scientific committee.** 5th International Conference of ERCIM Working Group on Computing and Statistics, 2012, London.

**Scientific committee. Session organizer. Invited talk.** Statistische Woche 2012: The International Society for Business and Industrial Statistics, Vienna (Austria), 2012.

**Invited talk.** IMS/ASA Spring Research Conference 2012: Enabling the Interface between Statistics & Engineering, Harvard University, 2012.

4th International Conference of ERCIM Working Group on Computing and Statistics, London (UK), 2011. **Scientific committee. Session organizer. Invited talk.**

**Invited talk.** Optimal Design of Experiments - Theory and Application, Vienna (Austria), 2011.

The Pyrenees International Workshop and Summer School on Statistics, Probability and Operations Research, 2011 (**invited short course**), Jaca (Spain).

**Invited talk.** DEMA2011 (Experiments for Processes with Time or Space Dynamics), Isaac Newton Institute (Cambridge, UK), 2011.

Summer School on Statistical Experimental Design, Almagro (Spain), 2011. **President of the organizing and scientific committee.**

CFE-ERCIM, London, 2010. **Scientific committee. Session organizer. Invited talk.**

International Congress of Mathematicians 2010, Hyderabad (India).

LinStat 2010, Portugal. **Session organizer. Invited talk.**

IX Model Oriented and Design Analysis, Bertinoro (Italy), 2010. **Scientific committee. Invited talk.**

Simposio Iberoamericano en Diseño de Experimentos 2009, Guanajuato (Mexico). **Scientific committee. Invited talk.**

Winter Workshop on Mathematical Statistics Bratislava 2008, Bratislava (Eslovaquia). **Invited talk.**

**Invited talk.** II Iberian Meeting of Mathematics, Badajoz (Spain), 2008.

I Spanish-British Workshop on Optimal Design, Salamanca (Spain), 2007. **Scientific committee.**

56th Session of the International Statistical Institute, Lisbon (Portugal), 2007.

8th Model Oriented Design & Analysis Workshop, Almagro (Spain), 2007. **President of the organizing and scientific committee.**

International Congress of Mathematicians, 2006, Madrid (Spain).

**Invited talk.** International Conference on Mathematica and Statistical Modelling. Ciudad Real (Spain), 2006.

**Invited talk.** Fifth International Conference of Mathematical Statistics PROBASTAST 2006, Smolenice Castle (Eslovaquia). **Invited talk.**

25th European Meeting of Statisticians. Oslo (Norway), 2005.

5th Workshop on Simulation. Saint Petersburg (Russia), 2005. **Session organizer. Invited talk.**

**Invited talk.** Seventh International Workshop on Model Oriented Data Analysis, Heeze (Holland), 2004.

**Invited talk.** Actuarial Mathematics on Risk classification. ASTIN section on the International Actuarial Association (IAA), Bucharest (Romania), 2003.

**Invited talk.** International Conference on Cancer Risk Assessment (ICCRA). Mathematical, Statistical and Computational Methods, Athens (Greece), 2003.

**Invited talk.** 5th Congress of Romanian Mathematicians, Pitesti (Romania), 2003.

**Invited talk.** Sixth International Workshop on Model Oriented Data Analysis, Vienna (Austria), 2001.

**Invited talk.** Optimum Design 2000, Cardiff (UK), 2000.

**Invited talk.** Fifth International Workshop on Model Oriented Data Analysis, Marseille (France), 1998.

**Invited talk.** Fourth International Workshop on Model Oriented Data Analysis, Athens (Greece), 1995.

**Invited talk.** Workshop on Statistical Analysis and Design, Bratislava (Czechoslovakia), 1992.

**Invited talk.** Third International Workshop on Model Oriented Data Analysis, Saint Petersburg (Russia), 1992.

**Invited talk representing Spain.** 7th European Young Statisticians Meeting, Oberwolfach (Germany), 1991.

## PhD theses

### Supervised:

1. C. de la Calle. **Assistant Professor.**
2. M. Mercedes Rodríguez Hernández. **High School teacher.**
3. Elvira Delgado Márquez. **Associate Professor.**
4. Del Campo, Rodrigo, UCLM, 2015. **Bank.**
5. Campos Barreiro, Santiago, UCLM, 2015. **High School teacher.**
6. Casero Alonso, Víctor Manuel, UCLM, 2014. **Associate Professor.**
7. Amo Salas, Mariano, UCLM, 2009. **Full Professor.**
8. Rodríguez Aragón, Licesio J., UCLM, 2008. **Associate Professor.**
9. Trandafir, C., UCLM, 2006. **Associate Professor.**
10. Martín Martín, Raul, UCLM, 2006. **Associate Professor.**
11. Garcet Rodríguez, S., University of Salamanca, 2002. **Research Associate Lab. of Investigative Dermatology. Rockefeller University.**
12. Tommasi, Ch., Padua (Italy), 2001. **Full Professor.**
13. Rodríguez Díaz J.M., University of Salamanca, 2000. **Full Professor and vice-dean.**
14. Chamoso Sánchez, J.M., University of Salamanca, 2000. **Full Professor and former head of department.**

### External examiner:

A number of them in Spain and three abroad: CIMAT, Mexico (2008), Magdeburg University, Germany (2014), University of Bogota, Colombia (2015).