



## Professional Experience



### UPC (Universitat Politècnica de Catalunya)

2012-cur.

#### Teaching

- Assistant professor: *Statistics and Probability* (degree in Computer Science, since 2012), *Marketing quantitative techniques* (Master in statistics, since 2017), *Statistical Software* (degree in Statistics, 2012) and *Statistics* (degree in Mathematics, 2013)
- Co-director of 2 Bachelor's and 2 Masters' thesis
- Lecturer in the course "[Biostatistics for non-statisticians](#)"
- Lecturer in seminars at Ferrer, Novartis among others

#### Achievements

- Scores above the average (of department, center or university) on all items of teaching performance surveys
- Grades of 9.5 and 8.5 (3) in the four final thesis that I was advisor
- More than 300 students enrolled (mostly doctors) in the course "Biostatistics for non-statisticians" in the last 6 years

2008-14  
2017-18

#### Research

- Study of the sample size and behavior of the hazard ratio in time-to-event clinical trials with composite endpoints
- Methodological papers in topics such as survival analysis or reporting guidelines published in journals with high impact factor (IF) like BMJ or JCE
- Book chapter about reporting guidelines
- Participation with oral presentations and posters in several biostatistics congresses

#### Achievements

- Development of a web-platform to design RCTs with composite events
- Fourteen published papers: 12 of them in journals with IF and 5 in the Q1 of their respective area
- One book chapter
- Participation in several congresses: 8 oral dissertations
- h-index: [6](#)

2011-14

#### Consultancy (Biostatistics)

- Collaboration in two multi-center trials: analysis of ICTUS and sequential design of REVASCAT
- Statistical consultant at Neuroscience department of HUGTiP
- Member of the EIOLAB service with customers such as Bayer, Actelion Pharmaceuticals, among others

#### Achievements

- Sample size design in REVASCAT trials with sequential analysis based on Whitehead methodology.
- Secondary analyses performed for ICTUS trial with the aim of explaining observed interactions.

2011-14

#### Other Projects

- Filtering, profiling and fusion of traffic data and database design for companies Betterways and SenseFields
- Behavior prediction of web users for company Educaweb [<https://www.eio.upc.edu/noticies/professors-del-departament-deio-participen-en-el-projecte-educalab>]

#### Achievements

- Establishment of web platform for data traffic analysis in company Betterways
- An improvement of 12% in the number of "clicks" by the Educaweb users



### IDIAP – Jordi Gol

2015-17

#### Statistical consultant

- Statistician in various projects within the drug studies department.

#### Achievements

- Conducting studies for pharmaceutical companies such as Pfizer or Servier and for independent researchers.

2016

#### Teaching

- R software applied to health sciences

#### Achievements

- Average of 9.2 in the global assessment of the course.



### La Salle – Ramon Llull

2015-cur

#### Teaching

- Professor of *Statistics* on Big Data Master.

#### Achievements

- An average grade of 8.3 (2015), 7.2 (2016) and 7.2 (2017) in the students enrolled on the course.



### Educaweb

2014-15

#### Business Intelligence

- Behavioral targeting. Reports with Reporting Services (SSRS). Predictive maintenance.

#### Achievements

- Study of the evolution and predictability of the leads rejection (company product) by the centers.

## Education

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- Master's in Statistics and Operations Research, specialized in Biostatistics (2011, grade: 9.34)
- Bachelor's degree in Statistical Sciences and Techniques (2011, grade: 9.08, first of the promotion)
- Diploma in Statistics (2008, grade: 9.35, first of the promotion)
- Several courses about drug development, survival analysis and graphical representation

## Languages

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- Spanish and Catalan, native languages
- English, intermediate level. High skills in writing reports and scientific papers.
- Translations English-Spanish: *The Vital Link to Applying Evidence in Medical Decisions*; *CONSORT 2001 and CONSORT 2010*

## IT

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- Statistical software: proficiency in R and knowledge of SPSS, Minitab, SPAD and SAS.
- Data visualization: Shiny R-package, SQL Server Reporting Services
- Data base: PostgreSQL, SQL Server and Access.
- Programming languages: R, Matlab, Java and AMPL.
- Others: HTML, Drupal, Microsoft Office.
- Good skills in learning any software.

## Reviews

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- Reviewer of journals *Trials*(IF: 2.1), *Medicina Clínica* (IF: 1.3) and *Fisioterapia* (IF: NA)

## Papers

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1. Gomez-Lumbreras A, **Cortés J**, Giner-Soriano M, Quijada-Manuitt MA, Morros R. [Characteristics of Apixaban-Treated Patients, Evaluation of the Dose Prescribed, and the Persistence of Treatment: A Cohort Study in Catalonia](#). Journal of cardiovascular pharmacology and therapeutics. First Published May 23, 2018. doi: 10.1177/1074248418778544
  2. Benitez M, Morros R, Pera H, Dalfo A, Bayó J, Rebagliato O, **Cortés J**, García A, Roca C, Coll de Tuero G, Vinyoles-Bargalló E. [Effect of effervescent paracetamol on blood pressure: a crossover randomized clinical trial](#). Journal of Hypertension. Publish Ahead of Print(); MAR 2018. doi: 10.1097/HJH.0000000000001733
  3. **Cortés J**, González JA, Medina MN et al. [Does evidence support the high expectations placed in precision medicine? A bibliographic review \[version 1; referees: 2 approved with reservations, 1 not approved\]](#). F1000Research 2018, 7:30 doi: 10.12688/f1000research.13490.1
  4. Giner-Soriano M, Sotorra Figuerola G, Cortés J, Pera Pujadas H, Garcia-Sangenis A, Morros R. [Impact of Medication Adherence on Mortality and Cardiovascular Morbidity: Protocol for a Population-Based Cohort Study](#). JMIR Res Protoc 2018;7(3):e73DOI: 10.2196/resprot.8121
  5. Llor C, Pérez A, Carandell E, García-Sangenis A, Rezola J, Llorente M, Gestoso S, Bobé F, Román-Rodríguez M, Cots JM, Hernández S, **Cortés J**, Miravittles M, Morros R. [Efficacy of high doses of penicillin versus amoxicillin in the treatment of uncomplicated community acquired pneumonia in adults. A non-inferiority controlled clinical trial](#). Aten Prim. 2017. DOI: 10.1016/j.aprim.2017.08.003
  6. Carrera D, Campbell BC, **Cortés J**, Gorchs M, Querol M, Jiménez X, Millán M, Dávalos A, Pérez de la Ossa N. [Predictive Value of Modifications of the Prehospital Rapid Arterial Occlusion Evaluation Scale for Large Vessel Occlusion in Patients with Acute Stroke](#). J Stroke Cerebrovasc Dis. 2016; pii: S1052-3057(16)30304-4. doi: 10.1016/j.jstrokecerebrovasdis.2016.08.032 (16).
  7. López-Cancio E, Ricciardi AC, Sobrino T, **Cortés J**, Pérez de la Ossa N, Millán M, Hernández-Pérez M, Gomis M, Dorado L, Muñoz-Narbona L, Campos F, Arenillas JF, Dávalos A. [Reported Prestroke Physical Activity Is Associated with Vascular Endothelial Growth Factor Expression and Good Outcomes after Stroke](#). J Stroke Cerebrovasc Dis
  8. **Cortés J**, Casals M, Langohr K, Gonzalez JA. [Importancia de la potencia y la hipótesis en el valor p](#). Med Clin. 2016; 146 (4): 178-81.
  9. **Cortés J**, González JA, Campbell MJ, Cobo E. [A hazard ratio was estimated by a ratio of median survival times, but with considerable uncertainty](#). J Clin Epidem. 2014; 67 (10): 1172-77 DOI: 10.1016/j.jclinepi.2014.05.017.
  10. Montesinos J, **Cortés J**, Arnau A, Elmore M, Macia N, Santistevé R, Bosch J. [Barcelona baby boom: does sporting success affect birth rate?](#) BMJ 2013; 347:f7387.
  11. Riera J, Pérez P, **Cortés J**, Roca O, Masclans JR, Rello J. [Effect of high flow nasal cannula and body position on end-expiratory lung volume. A cohort study using electrical impedance tomography](#). Respir Care. 2012;8.
  12. Vilas D, Gomis M, Blanco M, **Cortés J**, Millán M, Pérez de la Ossa N, Dorado L, López-Cancio E, Suñol A, Dávalos A. [Circadian Rhythms in the Efficacy of Intravenous Alteplase in Patients With Acute Ischemic Stroke and Middle Cerebral Artery Occlusion](#). Chronobiol. Int 2012. Early Online: 1–7. DOI: 10.3109/07420528.2012.728655.
  13. Cobo E, **Cortés J**, Ribera JM, Cardellach F, Selva-O'Callaghan A, Kostov B, García L, Cirugeda L, Altman DG, González JA, Sánchez JA, Miras F, Urrutia A, Fonollosa V, Rey-Joly C, Vilardell M. [Effect of using reporting guidelines during peer review on quality of final manuscripts submitted to a biomedical journal: masked randomised trial](#). BMJ 2011;343:d6783.
  14. Díez E, Oliva JC, **Cortés J**, Cobo E, Gómez S, Vadillo V, Cabanas M, Barcons N, Perez G, Foz M, Estruga L, Almirall R, Vela E, Martínez C, Artazcoz L, Pidelaserra F, Lopez S, Cabús E. [Promoció de la contracepció en dones immigrades i autòctones de Barcelona: anàlisi intermèdia del programa SIRIAN](#). Barcelona Societat: revista d'informació i estudis socials, ISSN 1133-6315, N°16, 2009; 89-102.
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## Book chapters

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1. **Cortés J.**, Cobo E. [Un paseo estadístico por las guías de publicación](#). A: Jiménez J., Argimon JM., Martín A., Vilardell M. *Publicación Científica Biomédica*. Barcelona: Elsevier, 2010, p. 125-144.
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## Oral presentations

1. **Cortés J**, Bofill M, Gómez G. *Sample size using CompARE*. III Jornadas Científicas de Estudiantes de la SEB, January, 18-19, 2018.
2. **Cortés J**, González JA, Cobo E. *Mediation analysis in randomized trials: the direction of bias*. ISCB 2017: 38th Annual conference of the International Society for Clinical Biostatistics: Vigo, Spain: July 9-13, 2017.
3. **Cortés J**, Vilaró M, González JA, Cobo E. *Shiny: una herramienta para compartir datos en la era del Open Data*. 3ra Reunión General de Biostatnet, Santiago de Compostela, January, 20-21, 2017.
4. Giner-Soriano M, Prieto-Alhambra D, **Cortés J**, Quijada-Manuitt MA, Vlachó B, Mustata C, Morros R. *Assessment of drug safety: post-authorisation safety studies and drug utilization studies with SIDIAP participation*. XXIX Congreso de la Sociedad Española de Farmacología Clínica, Barcelona, October, 19-21, 2016
5. **Cortés J**, Cobo E, González JA, Vilaró M, Salicrú M. *Constant effect assumption versus individualized medicine*. International Society for Clinical Biostatistics Conference. Birmingham, 2016.
6. **Cortés J**, Vogler M, Medina M, González JA, Cobo E. *Constant effect assumption versus individualized medicine*. XVth Spanish Biometry Conference and 5<sup>th</sup> Ibero-American Biometry Meeting. Bilbao, September 22-25, 2015.
7. Vogler M, **Cortés J**, Cobo E, González JA, Serrat C. *Power and effect size in repeated measures modelling*. XVth Spanish Biometry Conference and 5<sup>th</sup> Ibero-American Biometry Meeting. Bilbao, September 22-25, 2015.
8. López D, **Cortés J**, Fernández M, Parcerisa JM, Tous R, Tubella J. *La influencia del orden de las preguntas en los exámenes de primer curso*. XIII Jornadas sobre la Enseñanza Universitaria de la Informática (JENUI). Castellón de la Plana, July 10-12, 2013.
9. **Cortés J**, Cobo E, González JA. *Reporting of censures in survival studies*. XIVth Spanish Biometry Conference and 4<sup>th</sup> Ibero-American Biometry Meeting. Ciudad Real, May 22-24, 2013.
10. **Cortés J**, Cobo E, González JA. *Readability of the effect measures on health interventions*. XIIIth Spanish Biometry Conference and 3<sup>rd</sup> Ibero-American Biometry Meeting. BCN, Sept. 7-9, 2011.
11. **Cortés J**, García L, Adriyanov B, Fonollosa V, Rius R, Vilaseca J, Ribera JM, Cardellach F, Selva A, Urrutia A, Rey-Joly C, Vilardell M, Belmonte M, Cobo E. *Desvíos más frecuentes de las recomendaciones metodológicas*. XIIth Spanish Biometry Conference. Cádiz, 23-25, 2009.
12. Díez E, Gómez S, Cobo E, **Cortés J**, Oliva JC, Almirall R, Vela E, Martínez C, Pérez G. *Promoción de la salud reproductiva en mujeres inmigrantes y autóctonas. Resultados preliminares del ensayo SIRIAN*. XXVI Reunión científica anual de la Sociedad Española de Epidemiología. Girona, October 15-17, 2008.

## Posters

1. Pladeva M, Hallas J, Schink T, Morros R, Poblador-Plou B, Forns J, Hellfritzsch M, Reinders T, Giner-Soriano M, Prados-Torres A, Cainzos-Achirica M, Pottegård A, Kollhorst B, **Cortés J**, Aguado J, Perlemuter G, Castellsague J, Jacquot E, Deltour N, Perez-Gutthann S. *Agomelatine and Risk of Hospitalization for Acute Liver Injury: Nested Case-Control Study in Spain, Germany, and Denmark*. 33rd International Conference on Pharmacoeconomics & Therapeutic Risk Management (ICPE); August 29, 2017. Montreal, Canada.
2. Garcia A, Pera H, Vlachó B, Moreno MP, Mustata CE, Giner-Soriano M, **Cortés J**, Morros R. *Ensayos clínicos independientes con medicamentos en atención primaria*. XXIX Congreso Sociedad Española de Farmacología Clínica. 20/10/2016, Barcelona.
3. Vilaró M, **Cortés J**, González JA, Cobo E. *Improving quality of biomedical scientific research*. International Society for Clinical Biostatistics Conference. Birmingham, 2016.
4. Vilaró M, **Cortés J**, Ribera JM, Cardellach F, Selva-O'Callaghan A, Urrutia A, Cobo E. *Improving biomedical research impact*. XVth Spanish Biometry Conference and 5<sup>th</sup> Ibero-American Biometry Meeting. Bilbao, September 22-25, 2015.
5. Vogler M, **Cortés J**, Medina M, Cobo E, González JA. *Negative outcome-baseline correlations in psychological variables*. XVth Spanish Biometry Conference and 5<sup>th</sup> Ibero-American Biometry Meeting. Bilbao, September 22-25, 2015.
6. Torres JV, Heinzl H, **Cortés J**, Chadha-Boreham H. *Refined nomograms to enhance the interpretation of clinical risk prediction models*. 33rd Annual Conference of the International Society for Clinical Biostatistics (ISCB). Bergen, Norway: 19-23 August 2012, p. 93. [www.iscb2012.info](http://www.iscb2012.info)
7. Torres JV, **Cortés J**, González JA, Sánchez JA, Secades J, Cobo E. *Stroke clinical trials efficiency can be improved*. 31st Annual Conference of the International Society for Clinical Biostatistics (ISCB). Montpellier, France: 29 August-2 September 2013.
8. Torres JV, **Cortés J**, González JA, Muñoz Gracia MP, Sánchez JA, Secades J, Cobo E. *Efficiency in the design of clinical trials with ordinal scales*. A: XII Conferencia Española de Biometría. "XII Conferencia Española de Biometría". Cádiz: 2009, p. 253-254.
9. Cobo E, **Cortés J**, Fonollosa V, Urrutia A, Selva-O'Callaghan A, Cardellach F, Ribera JM, Miras F, Adriyanov B, García L, Belmonte M, Rey-Joly C, Vilardell M. *ET Study (Enhancing Transparency of Biomedical Journals). A masked randomized trial*. The Sixth International Congress on Peer Review and Biomedical Publication. September 10-12, 2009.