

# FRANCESC LÓPEZ SEGUÍ

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## Summary

Health Economist at Hospital del Mar (Barcelona). Doctor in Biomedicine (Pompeu Fabra University -UPF) and Master in Economics (Erasmus School of Economics). Associate Professor at UPF and promoting partner of SalusCoop, a citizen health data cooperative for research. My areas of interest are economic evaluation, technology, and information systems in the framework of public policy.

## Experience

- October 2023 - Current **Direcció de Control de Gestió (Hospital del Mar, Barcelona)**  
Health Economist.
- January 2021 - October 2023 **Gerència Territorial Metropolitana Nord (Catalan Institute of Health)**  
*Germans Trias i Pujol Hospital.* Health Economist.
- January 2021 - October 2023 **Fundació Lluita Contra les Infeccions (Fight Infections Foundation)**  
*Germans Trias i Pujol Hospital.* Health Economist.
- January 2017- Current **Pompeu Fabra University**  
*Economics and Analytical Instruments for the Study of Law. Public Sector Economics.* Associate Professor.
- January 2020- Current **OBS Business School**  
*Digital Health Economics.* Collaborating Professor.
- November 2021- Current **Pompeu Fabra University**  
*Health Economics - Master's Degree in Integrated Care in Chronicity and Aging.* Associate Professor.
- August 2015- June 2020 **TIC Salut Social (Department of Health)**  
Project manager and research assistant for data evaluation and analysis projects. European (ASSEHS, MRESIST) and national (Trend Map, AppSalut, Telemedicine Strategic Plan for Catalonia) projects.
- December 2019- April 2020 **Australian National University - Center for Population Health Research**  
*Visiting Fellow.* Collaborator of the team of Dr. Luis Salvador Carulla.
- August 2015- December 2016 **Catalan Institute of Oncology, QUALY Observatory - WHOCC Palliative Care (Department of Health)**  
Analyst of the Program for comprehensive care for people with advanced diseases. Impact assessment of the observatory's programs (Dr. Gómez-Batiste).
- December 2014- June 2015 **Directorate General of Public Finance Analysis and Monitoring (Department of Economy)**  
Research Assistant in the Economic Evaluation Area of Public Policies (Dr. Anna Tarrach).  
Review of economic and social impact reports.
- October 2014- June 2015 **Catalan Agency for Health Quality and Evaluation (Department of Health)**  
Research assistant (Dr. Cari Almazán). Economic evaluation of the project *Renewing Health*.

## Studies

- October 2017- October 2020 **Doctor Cum Laude in Biomedicine, Pompeu Fabra University (Dept. of Experimental and Health Sciences)**
- Topic: Evaluation of health technologies of the Department of Health.
  - Title "The Digitalization of the Catalan Public Healthcare System: an Opportunity for Economic Appraisal".
  - 18 articles published in indexed journals.
  - Thesis Directors: Dr. Vicente Ortún Rubio, Dra. Anna García Altés, Dr. Francesc García Cuyàs.
- 2013-2014 **M.Sc. Economics and Business, Erasmus School of Economics**
- Specialty Policy Economics
  - Thesis: Cuts in health prevention policies: bread today and hunger tomorrow? Evidence of a health production function. Supervisor: Prof. Pilar García Gómez
- 2010-2013 **Degree in Economics, Pompeu Fabra University**
- University entrance mark: 9.04. Scholarship for the academic excellence of Caixa Manresa (160 best files out of 25,000).

## Languages

**Catalan and Spanish:** Mother tongues; **English:** C1 (*CAE, TOEFL*); **Italian:** B2; **French:** B2 (*DELFB*); **Arabic:** A1.

## Associative interests & responsibilities

- 2018 - current **SalusCoop:** citizen health data cooperative for research
- 2011 - present **Mifirma.com:** Founding partner and president
- 2009 - 2017 **Scouts and Guides of Catalonia:** Former Commissioner (Barcelona Demarcation - Sots I)

## Publications

Lopez Segui F, Pratdepadua Bufill C, Abdon Gimenez N, Martinez Roldan J, Garcia Cuyas F. The Prescription of Mobile Apps by Primary Care Teams: A Pilot Project in Catalonia. JMIR Mhealth Uhealth 2018

López Seguí F, Pratdepàdua Bufill C, Rius Soler A, de San Pedro M, López Truño B, Aguiló Laine A, Martínez Roldán J, García Cuyàs F. Prescription and Integration of Accredited Mobile Apps in Catalan Health and Social Care: Protocol for the AppSalut Site Design. JMIR Res Protoc 2018

Salvador Verges À, Fernández-Luque L, López Seguí F, Yildirim M, Salvador-Mata B, García Cuyàs F. Orthopedic Surgeons' Perspectives on the Decision-Making Process for the Use of Bioprinter Cartilage Grafts: Web-Based Survey Interact J Med Res 2019

López Seguí F, de San Pedro M, Aumatell Verges E, Simó Algado S, Garcia Cuyàs F. An Intergenerational Information and Communications Technology Learning Project to Improve Digital Skills: User Satisfaction Evaluation. JMIR Aging 2019

López Seguí F, Vidal Alaball J, Sagarra Castro M, García Altés A, García Cuyàs F. General Practitioners' Perceptions of Whether Teleconsultations Reduce the Number of Face-to-face Visits in the Catalan Public Primary Care System: Retrospective Cross-Sectional Study. JMIR 2020

López Seguí F, Martí Aguasca T. The economic impact of the digital transformation of the public health system of Catalonia. Economy Note. Monographic "The digital revolution in Catalonia". Pages 181-192. 2019

Vidal-Alaball, J., Franch-Parella, J., Lopez Seguí, F., Garcia Cuyàs, F., & Mendioroz Peña, J. Impact of a Telemedicine Program on the Reduction in the Emission of Atmospheric Pollutants and Journeys by Road. International Journal of Environmental Research and Public Health. 2019

López Seguí, F.; Ander Egg Aguilar, R.; de Maeztu, G.; García-Altés, A.; García Cuyàs, F.; Walsh, S.; Sagarra Castro, M.; Vidal-Alaball, J. Teleconsultations between Patients and Healthcare Professionals in Primary Care in Catalonia: the Evaluation of Text Classification Algorithms Using Machine Learning. International Journal of Environmental Research and Public Health. 2020

López Seguí, F.; Franch Parella, J.; Gironès García, X.; Mendioroz Peña, J.; García Cuyàs, F.; Adroher Mas, C.; García-Altés, A.; Vidal Alaball, J. A Cost-minimization Analysis of a Medical Record-based, Store and Forward and Provider-to-provider Telemedicine Compared to Usual care in Catalonia: More Agile and Efficient, Especially for Users. International Journal of Environmental Research and Public Health 2020

López Seguí F, Batlle Boada A, García García JJ, López Ulldemolins A, Achotegui del Arco A, Adroher Mas C, García Cuyàs F. Families' degree of satisfaction with pediatric telehomecare: a pilot study in Catalonia. JMIR Pediatrics. 2020

Vidal-Alaball J, López Seguí F. It has come to stay: benefits and disadvantages of eConsulta. Practical Primary Care. 2020

Vidal-Alaball, J.; Flores Mateo, G.; Garcia Domingo, JL; Marín Gomez, X.; Sauch Valmaña, G.; Ruiz-Comellas, A.; López Seguí, F.; García Cuyàs, F. Validation of a Short Questionnaire to Assess Healthcare Professionals' Perceptions of Asynchronous Telemedicine Services: The Catalan Version of the Health Optimum Telemedicine Acceptance Questionnaire. Int. J. Environ. Research. Public Health. 2020

Solans Fernández O, Lopez Seguí F, Vidal-Alaball J, Bonet Simo JM, Hernandez Vian O, Roig Cabo P, Carrasco Hernandez M, Olmos Dominguez C, Alzaga Reig X, Díaz Rodríguez Y, Medina Peralta M, Hermosilla E, Martínez León N, Gimferrer N, Abizanda González M, García Cuyàs F, Pérez Sust P. Primary Care Doctor Characteristics That Determine the Use of Teleconsultations in the Catalan Public Health System: Retrospective Descriptive Cross-Sectional Study. JMIR Med Inform. 2020

López Seguí F, Walsh S, Solans O, Adroher Mas C, Ferraro G, García-Altés A, García Cuyàs F, Salvador Carulla L, Vidal-Alaball J. Teleconsultation Between Patients and Healthcare Professionals in the Catalan Primary Care Service: Descriptive Analysis through Message Annotation in a Retrospective Cross-Sectional Study. JMIR. 2020

Vidal-Alaball, J; Acosta-Rojas, R; Pastor, N; Sanchez, U; Morrison, D; Narejos, S; Pérez Llano, J; Salvador, A; López Seguí, F. Telemedicine in the face of the COVID-19 pandemic. Primary Care. 2020

Ahmed W, Vidal-Alaball J, Downing J, López Seguí F. COVID-19 and the 5G Conspiracy Theory: Social Network Analysis of Twitter Data. JMIR. 2020

Vidal-Alaball, J.; López Seguí, F.; Garcia Domingo, JL; Flores Mateo, G.; Sauch Valmaña, G.; Ruiz-Comellas, A.; Marin-Gomez, FX; García Cuyàs, F. Primary Care Professionals' Acceptance of Medical Record-Based, Store and Forward Provider-to-Provider Telemedicine in Catalonia: Results of a Web-Based Survey. Int. J. Environ. Research. Public Health 2020

Ahmed W, López Seguí F, Vidal-Alaball J, Katz MS. COVID-19 and the "Film Your Hospital" Conspiracy Theory: Social Network Analysis of Twitter Data. JMIR, 2020

López Seguí, F. Measures of environmental sustainability in the pharmaceutical industry. A critical review of health economics based on the European Commission's strategic approach. Health Economics Research Center (CRES). Health Policy Papers Collection. 2020

Wasim A, Vidal-Alaball J, Lopez Segui F, Moreno-Sánchez PA. Social Network Analysis of Tweets Related to Masks and COVID-19. IJERPH 2020

Lopez Segui, F. "Essays on Digital Health Interventions. The Digitalization of the Catalan Public Healthcare System: an Opportunity for Economic Appraisal". Diss. Pompeu Fabra University, 2020

Solans O, Vidal-Alaball J, Roig Cabo P, Mora N, Coma E, Bonet Simó JM, Hermsilla Pérez E, Saigí-Rubió F, Olmos Domínguez C, Piera-Jiménez J, Abizanda González M, López Seguí F. Characteristics of Citizens and Their Use of Teleconsultations in Primary Care in the Catalan Public Health System Before and During the COVID-19 Pandemic: Retrospective Descriptive Cross-sectional Study. *J Med Internet Res* 2021

Marin-Gomez, F. X., Fàbregas-Escurriola, M., Seguí, F. L., Pérez, E. H., Camps, M. B., Peña, J. M., ... & Vidal-Alaball, J. Assessing the likelihood of contracting COVID-19 disease based on a predictive tree model: A retrospective cohort study. *PLOS one* 2021.

Saigí-Rubió F, Vidal-Alaball J, Torrent-Sellens J, Jiménez-Zarco A, López Seguí F, Carrasco Hernandez M, Alzaga Reig X, Bonet Simó JM, Abizanda González M, Piera-Jimenez J, Solans O. Determinants of Catalan Public Primary Care Professionals' Intention to Use Digital Clinical Consultations (eConsulta) in the Post-COVID-19 Context: Mixed Methods Study. *J Med Internet Res* 2021

Lopez Segui F, Hernandez Guillamet G, Pifarré Arolas H, Marin-Gomez FX, Ruiz Comellas A, Ramirez Morros AM, Adroher Mas C, Vidal-Alaball J. Characterization and Identification of Variations in Types of Primary Care Visits Before and During the COVID-19 Pandemic in Catalonia: Big Data Analysis Study. *J Med Internet Res* 2021

López Seguí, F.; Navarrete Duran, J.M.; Tuldrà, A.; Sarquella, M.; Revollo, B.; Llibre, J.M.; Ara del Rey, J.; Estrada Cuxart, O.; Paredes Deirós, R.; Hernández Guillamet, G.; Clotet Sala, B.; Vidal Alaball, J.; Such Faro, P. Impact of Mass Workplace COVID-19 Rapid Testing on Health and Healthcare Resource Savings. *Int. J. Environ. Res. Public Health* 2021

Pascual Roig Cabo, Francesc López Seguí, Rosa María Sierra Lujan, Gemma Seda Gombau, Nemesio Moreno Millán, Pere Torán Monserrat. Impact of the eConsultation on the primary care agenda. *Atención Primaria* (2021).

López Seguí, F.; Estrada Cuxart, O.; Mitjà i Villar, O.; Hernández Guillamet, G.; Prat Gil, N.; Maria Bonet, J.; Isnard Blanchar, M.; Moreno Millan, N.; Blanco, I.; Capella, M.V.; Català Sabaté, M.; Aran Solé, A.; Argimon Pallàs, J.M.; Clotet, B.; Ara del Rey, J. A Cost-Benefit Analysis of the COVID-19 Asymptomatic Mass Testing Strategy in the North Metropolitan Area of Barcelona. *Int. J. Environ. Res. Public Health* 2021

Pifarré i Arolas, H.; Vidal-Alaball, J.; Gil, J.; López, F.; Nicodemo, C.; Saez, M. Missing Diagnoses during the COVID-19 Pandemic: A Year in Review. *Int. J. Environ. Res. Public Health* 2021

Adroher Mas C, Esposito Català C, Batlle Boada A, Casadevall Llandrich R, Millet Elizalde M, García García JJ, del Castillo Rey M, García Cuyàs F, Pons Serra M, López Seguí F. Pediatric Tele-Home Care Compared to Usual Care: Cost-Minimization Analysis. *JMIR Pediatr Parent* 2022

Meis-Pinheiro U, Lopez-Segui F, Walsh S, Ussi A, Santaeugenia S, Garcia-Navarro JA, et al. (2021) Clinical characteristics of COVID-19 in older adults. A retrospective study in long-term nursing homes in Catalonia. *PLoS ONE*

López Seguí F, Oyón Lerga U, Laguna Marmol L, Coll P, Andreu A, Meulbroek M, et al. (2023) Cost-effectiveness analysis of the daily HIV pre-exposure prophylaxis in men who have sex with men in Barcelona. *PLoS ONE* 18(1): e0277571. <https://doi.org/10.1371/journal.pone.0277571>

Adroher, C.; Calvo, C.; Pavon, L.; Casadevall, R.; Alvarez, E.; Marsal, M.; Lopez, F.; Morales, A. Implementation of clinical assistants in a pediatric oncology department: An impact analysis. *Health Services Management Research*. 2023;0(0). doi:10.1177/09514848231165193.

López, F.; Català, M.; Prats, C.; Estrada, O.; Oliva, I.; Prat, N.; Isnard, M.; Vallès, R.; Vilar, M.; Clotet, B.; Argimon, J.M.; Aran, A.; Ara, J. A Cost-Benefit Analysis of COVID-19 Vaccination in Catalonia. *Vaccines* 2022

Fuster-Casanovas A, Das R, Vidal-Alaball J, Lopez Segui F, Ahmed W. The #VaccinesWork Hashtag on Twitter in the Context of the COVID-19 Pandemic: Network Analysis. *JMIR Public Health Surveill* 2022

Abella, E., Pradenas, E., Muñoz-Lopez, F., Garcia-Pallarols, F., Lahsen, R. B. A. B., Trinité, B., ... & VAC-COV-GM-HMAR, K. I. N. G.. Efficacy of SARS-CoV-2 vaccination in patients with monoclonal gammopathies: A cross sectional study. *Life Science Alliance*, (2022).

Galdeano Lozano, M.; Alfaro Álvarez, J.C.; Parra Macías, N.; Salas Campos, R.; Heili Frades, S.; Montserrat, J.M.; Rosell Gratacós, A.; Abad Capa, J.; Parra Ordaz, O.; López Seguí, F. Effectiveness of Intermediate Respiratory Care Units as an Alternative to Intensive Care Units during the COVID-19 Pandemic in Catalonia. *Int. J. Environ. Res. Public Health* 2022

Hernández Guillamet, Guillem; López Seguí, Francesc; Vidal-Alaball, Josep; López, Beatriz. CauRuler: Causal irredundant association rule miner for complex patient trajectory modelling. *Computers in Biology and Medicine*. 2023. 106636, ISSN 0010-4825,

Garcia-Olive I, Lopez Seguí F, Hernandez Guillamet G, Vidal-Alaball J, Abad J, Rosell A. Impact of the COVID-19 pandemic on diagnosis of respiratory diseases in the Northern Metropolitan Area in Barcelona. *Medicina Clínica* (2023)

Adroher Mas, C.; Calvo Aroca, C.; Casadevall Llandrich, R.; López Seguí, F.; Martin Carpi, J.; García-Cuyàs, F. Evaluation of the Effectiveness of Telemedicine Visits in a Pediatric Gastroenterology Service in the Context of COVID-19. *Int. J. Environ. Res. Public Health* 2022

Rosell, A.; Baeza, S.; Mouriño, R.; Saigí, M.; Munné, M.; Lopez de Castro, P.; Bechini, J.; Estrada, O.; Ara, J.; López Seguí, F. Implementation of the International Lung Screening Trial in Catalonia (Spain): An Economic Analysis. *Preprints* 2023, 2023010107 (doi: 10.20944/preprints202301.0107.v1)

Codina, P.; Vicente Gómez, J.A.; Hernández Guillamet, G.; Ricou Ríos, L.; Carrete, A.; Vilalta, V.; Estrada, O.; Ara, J.; Lupón, J.; Bayés-Genís, A.; López Seguí, F. Assessing the Impact of Hemodynamic Monitoring with CardioMEMS on Heart Failure Patients: A Cost-effectiveness Analysis. Preprints 2023, 2023010116 (doi: 10.20944/preprints202301.0116.v2)

López Seguí F, Cos Codina J, Ricou Ríos L, Martínez Segura MI, Miró Mezquita L, Escrich Navarro R, Davins Riu M, Estrada Cuxart O, Anashkin Kachalin G, Moreno-Martínez D. Readiness for Change in the Implementation of a 3D Printing Initiative in a Catalan Tertiary Hospital Using the Normalization Process Theory: Survey Study. JMIR Hum Factors 2023;10:e47390. doi: 10.2196/47390. PMID: 378013

Roure S, López F, Oliva I, Pérez-Quílez O, March O, Chamorro A, et al. Schistosomiasis screening in non-endemic countries from a cost perspective: Knowledge gaps and research priorities. The case of African longterm residents in a Metropolitan Area, Spain. PLoS Negl Trop Dis 2023. <https://doi.org/10.1371/journal.pntd.0011221>

Pérez-Montes, A.; Ricou Ríos, L.; Pons Calsapeu, A.; López Seguí, F.; Riera, C.; Sirvent, M.; Reynaga, E.; Viadé, J.; Malagon, P.; Soldevila, B.; Perez, R.; Casademunt, E.; Bonet, G.; Puig Domingo, M.; Estrada, O.; Alonso, N. Economic Impact of the Implementation of a Multidisciplinary Diabetic Foot Clinic in a Tertiary Hospital. Preprints.org 2023, 2023040930.

Ricou Ríos, L., Esposito Català, C., Pons Calsapeu, A... Lopez Seguí, F. Implementation of a vascular access specialist team in a tertiary hospital: a cost-benefit analysis. Cost Eff Resour Alloc 21, 67 (2023). <https://doi.org/10.1186/s12962-023-00464-6>

Castillo Rodenas M, Vicente Gómez JA, Fuster Casanovas A, Miró Catalina Q, Vidal-Alaball J, López Seguí F. Impact of COVID-19 on the paediatric primary care model in Catalonia: analysis of changes in the number and type of face-to-face and remote visits. JMIR Preprints. 14/06/2023:49943

Hernández Guillamet G, Morancho Pallaruelo AN, Miró Mezquita L, Miralles R, Mas MÀ, Ulldemolins Papaseit MJ, Estrada Cuxart O, López Seguí F- Machine Learning Model for Predicting Mortality Risk in Patients With Complex Chronic Conditions: Retrospective Analysis. Online J Public Health Inform 2023;15:e52782 doi: 10.2196/52782

Castillo Rodenas M, Vidal-Alaball J, Solanas Bacardit N, Farràs Company C, Fuster-Casanovas A, Miró Catalina Q, López Seguí F. Feasibility of a paediatric acute videoconsultation process among healthcare professionals in Primary Care in a rural setting in Catalonia: Protocol for a Prospective Validation Study. JMIR Preprints. 20/09/2023:52946

Hernández Guillamet, Guillem & López, Beatriz & Estrada, Oriol & Seguí, Francesc. (2023). Hipertension Demand Forecasting Using Cross-Correlation and Lagged Multiple Linear Regression Models for Anticipating Health Resources Needs. 10.3233/FAIA230682.

Lozano, M. G., Pascual, A. M., Arias, C. F., Pallaruelo, A. N. M., Guillamet, G. H. G. H., Seguí, F. L., ... & Capa, J. A. (2023). Analysis of the clinical characteristics and comorbidities of patients with COPD and home mechanical ventilation. European Respiratory Journal. DOI: 10.1183/13993003.congress-2023.PA526

Mas MÀ, Miralles R, Ulldemolins MJ, Garcia R, Gràcia S, Picaza JM, Navarro Fernández M, Rocabayera MA, Rivera M, Relaño N, Torres Asensio M, Laporta P, Morcillo C, Nadal L, Hervás R, Fuguet D, Alba C, Miralles Banqué N, Jiménez Panés S, Moreno Moreno M, Nogueras C, Manjón Navarro H, López R, Hernández G, López-Seguí F, Ríos LR, Pons A, Prat N, Ara Del Rey J, Estrada O. Evaluating Person-Centred Integrated Care to People with Complex Chronic Conditions: Early Implementation Results of the ProPCC Programme. International Journal of Integrated Care, 2023;

## **Thesis supervision**

Thesis title: Machine learning models for improving individualized diagnosis  
University: Universitat de Girona  
PhD candidate: Guillem Hernández Guillamet  
Expected defense date: 01/03/2025

Thesis title: Multicenter evaluation in a rural setting of a pediatric acute teleconsultation process in Primary Care  
University: Universitat de Vic  
PhD candidate: Marta Castillo Ródenas  
Expected defense date: 01/09/2026

Thesis title: Comprehensive assistance to improve the impact on the quality of life and healthcare costs of patients with chronic home ventilation (VMD) - Project HomeVent  
University: Universitat Autònoma de Barcelona  
PhD candidate: Agnes Hernández Biette  
Expected defense date: 01/09/2026