MINISTERIO
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AGENCIA ESTATAL DE INVESTIGACIÓN

CURRICULUM VITAE ABREVIADO (CVA)

Part A. PERSONAL INFORMATION

First name			
Family name			
Gender (*)		Birth date (dd/mm/yyyy)	
Social Security, Passport, ID number			
e-mail		URL Web	
Open Research and Contributor ID (ORCID)(*)		0000-0002-2644-6268	

(*) Mandatory

A.1. Current position

Position	Full professor
Initial date	11/06/2001
Institution	Universitat de Barcelona
Departament/Center	Dept. Econometrics, Statistics and Applied Economics
Country	Spain / Teleph. number +34934037039
Key words	Insurance, actuarial science, risk, data science

A.2. Previous positions (research activity interuptions, indicate total months)

Period	Position/Institution/Country/Interruption cause
1993-2001	Associate Professor/Spain/Promotion
1987-1993	Lecturer/Spain/Promotion

A.3. Education

PhD, Licensed, Graduate	University/Country	Year
Licen. Mathematics	Univ. Barcelona/Spain	1987
PhD Economics and Business	Univ. Barcelona/Spain	1992
MA Data Analysis	Univ. Essex/United Kingdom	1993
MA Insurance and Risk Mngm	Univ. Nacional Educación a Distancia	2005

Part B. CV SUMMARY *(max. 5000 characters, including spaces)*

JCR articles **195.** Citations: 2950 (WoS), 3484 (Scopus), 9636 (ScholarGoogle)
h index: **32** (WoScience), 36 (Scopus), 53 (Thesis supervised: **20)**

Montserrat Guillén is **Chair Professor at the Department of Econometrics, Statistics and Applied Economics, University of Barcelona** (UB). She is director of Riskcenter, the research group on Risk in Insurance and Finance at UB. She is honorary visiting professor in the **Faculty of Actuarial Science and Insurance at City, University of London (UK**) 2015-2024. She was visiting faculty at the University of Texas at Austin (USA), at the University of Paris II (France) and Invited Researcher at **the University of California-Berkeley.(USA)** She was awarded the **ICREA Academia** distinction in 2011 and in 2019. She was the first woman President of the European Group of Risk and Insurance Economists, Geneva Association, in 2011. She has been plenary lecturer at several conferences and the first plenary speaker from Spain at the international congress on **Insurance Mathematics and Economics**. She is the most highly cited woman (rank #1) in actuarial science (Google, all scientists, rank #13 and #10 in insurance and actuarial science).

Her research focus is on **actuarial statistics and quantitative risk analysis**. She is a highly-cited author in the field of insurance and actuarial science. She has co-supervised the first industrial PhD in Social Sciences at UB with Zurich Insurance. She has been member of international selection committees at Frankfurt (Germany) Cornell and Wisconsin (USA), Oslo (Norway), Heriot-Watt, Imperial College and City University of London (UK), Macquarie University (Australia) and Amsterdam (The Netherlands). She regularly receives international visitors at the UB.

She is chief editor for the **North American Actuarial Journal**, associate editor of **Astin Bulletin - the official journal of the International Actuarial Association**, associate editor of **Insurance, Mathematics and Economics** and was chief editor until 2014 (now editor) of **SORT-Statistics and Operations Research Transactions**.

She has contributed to predictive modelling in insurance (with one book chapter published by Cambridge University Press), applied quantile regression (book by Springer) nonparametric methods for loss/severity assessment (with a book published by CRC/Chapman and Hall) and data analytics in pricing and marketing within the context of digital economics (which inspired the R package Uplift). Some other well-known contributions are in the area of **big data analytics to improve traffic safety**. Her team was awarded the Fundación BBVA support to best projects in Big Data 2018. She pursues the application of insurance principles to improve the life of all citizens, especially when they are fragile and exposed to perils. She studies the implications of risk estimation in the analysis of public policies. This research considers environmental risks and other potential harmful consequences of decisions in extreme scenarios that deviate from the average and may challenge long-term sustainability. In the field of **telematics motor insurance, she is recognized as one of the leading researchers in the world and one of the creators of the concept "Telematics Insurance"**. She has participated in European research projects. She has also conducted **dissemination activities** with direct impact on the society with **open access** contributions, editorial work, active networks and regular participation on the media. She has also cared about the career **development for young researchers**. She is the co-leader on a National Project on **Ciber Risk Analysis** (INCIBE, Instituto Nacional de Ciberseguridad, Spain).

She was awarded by the Casualty Actuarial Society, the International Actuarial Association and she received the International Insurance Prize among others. She has served in boards, scientific groups, international programs and steering committees and she has also **conducted R&D with many companies** (VidaCaixa, Catalana Occidente, MAPFRE, Zurich). She is Academician and Vice-secretary of the Board of the Real Academia de Ciencias Económicas y Financieras at the Instituto de España

She is ranked #12 top cited, **best researchers in economics and finance in Spain** (#1 woman): https://research.com/scientists-rankings/economics-and-finance/es

Part C. RELEVANT MERITS *(sorted by typology)*

C.1. Publications (10 selected publications since 2015)

[1] Salas-Molina, F., Rodriguez Aguilar, J.A. and Guillen, M. (2023) "A multidimensional review of the cash management problem" **Financial Innovation**, 9(1), 67. https://doi.org/10.1186/s40854-023-00473-7

[2] Masello, L., Castignani, G., Sheehan, B., Guillen, M. and Murphy, F. (2023) "Using contextual data to predict risky driving events: A novel methodology from explainable artificial intelligence" **Accident Analysis & Prevention**, 184, 106997. https://doi.org/10.1016/j.aap.2023.106997

[3] Guillen, M., Nielsen, J. P. and Pérez-Marín, A. M. (2021) "Near-miss telematics in motor insurance" **Journal of Risk and Insurance** 88 (3), 569-589

[4] Guillen, M., Pérez-Marín, A.M. and Alcañiz, M. (2021) "Percentile charts for speeding based on telematics information" **Accident Analysis & Prevention**, 150 ,105865

[5] Golden, L.L., Brockett, P.L., Guillen. M. and Manika, D. (2020) "aPRIDIT unsupervised classification with asymmetric valuation of variable discriminatory worth" **Multivariate Behavioral Research,** 55(5), 685-703

[6] Guillen, M., Nielsen, J.P., Ayuso, M. and Pérez-Marin, A.M. (2019) "The use of telematics devices to improve automobile insurance rates" **Risk Analysis**, 39(3), 662-672.

[7] Bermúdez, Ll., Guillen, M. and Karlis, D. (2018) "Allowing for time and cross dependence assumptions between claim counts in ratemaking models" **Insurance: Mathematics and Economics**, 83, 161-169.

[8] Torra, V., Guillen, M. and Santolino, M. (2018) "Continuous m-dimensional distorted probabilities" **Information Fusion**, 44, 97-102.

[9] Bel, G., Bolancé, C., Guillen, M. and Rosell, J. (2015) "The environmental effects of changing speed limits: A quantile regression approach", **Transportation Research Part D: Transport and Environment**, 36, 76-85.

[10] Guelman, L. Guillen, M. and Pérez-Marín, A.M. (2015) "A decision support framework to implement optimal personalized marketing interventions", **Decision Support Systems**, 72, 24-32.

C.2. Congresses

Guillen, M. (2023) "Motor insurance with telematics driving data" **ARC Actuarial Research Conference**, Drake University, Des Moines, USA (July 31-August 2)

Guillen, M. (2023) "Pricing motor insurance with telematics data" **Chaire PARI**, Paris France (November 15).

Guillen, M. (2022) "Motor insurance with telematics driving data" **Riskday ETH Zurich**, (September 16)

Guillen, M., Nielsen, J.P. & Pérez-Marin; A.M. (2021) "Number of claims and number of near-misses for telematics pricing in automobile insurance**" American Risk and Insurance Association Annual Meeting** (August 4).

Guillen, M. (2021) "Will telematics change ratemaking models in automobile insurance?" Insurance, Mathematics and Economics. **Invited session on Insurance Technology: Telematics Data** Analysis (July 8)

Guillen, M. (2021) "Number of claims and number of near-misses for telematics pricing in automobile insurance" **3rd Insurance Data Science Conference. London/online**, (June, 18)

Guillen, M. (2021) "Near-misses for telematics pricing in automobile insurance" **Heriot-Watt University seminar** (Decembre 1)

Guillen, M. (2020) "Conditional tail expectation regression models for vehicle excess speed in driving data" **OICA, Lyon-online** https://oica.univ-lyon1.fr/program/ (April 28)

Guillen, M. (2020) "Can telematics data identify risky drivers?" **Data Science Seminar XEurope**. (September 16). https://www.youtube.com/watch?v=DmBEdsoT7Go

Guillen, M. (2018) "The transition towards semi-autonomous vehicle insurance: the contribution of usage-based data" **International Congress of Actuaries**, Berlin (Germany), June 4-8, 2018. (co-author A.M. Pérez-Marín) **Best paper award in Non-Life Section**.

Guillen ,M. (2017) "Telematics and the natural evolution of pricing in motor insurance" Workshop on « **Data science in Finance and Insurance** » Louvain-la-Neuve (Belgium), September 15, 2017.

Guelman, L.; Guillen, M.; Pérez-Marín, A.M. (2013) "Enhancing customer loyalty in insurance with advanced uplift models" **APRIA- New York** (USA) (July 28-31).

Ayuso, M.; Pérez-Marín, A.M.; Guillen, M. (2011) "Calculation of scenarios for portfolio lapse, when considering contagion between cancelations in non-life insurance" 4th Workshop on Risk Management and Insurance, Seville, Spain (October, 20-21). Awarded with **Best paper in Insurance Prize.**

C.3. Research projects

2019-2024 **ICREA Academia distinguished award.** Institució Catalana per a la Recerca I Estudis Avançats. Programa d'excel·lència. Nominal.

2023-2025 "**Climate change: Risk management and insurance for a sustainable economy**" 2023 CLIMA00012 Call for projects to finance research projects for mitigation and adaptation to climate change 2023. Director: Helena Chuliá Soler (16 members).

2023-2025 "**PROYECTO ESTRATÉGICO DE CIBERSEGURIDAD EN ESPAÑA SOBRE ANÁLISIS DE RIESGOS**" C090/03. Funded EU Next Generation. INCIBE-UB. Director: Montserrat Guillen Estany & David Moriña Soler (16 members).

2023-2024 **Ministerio de Ciencia e Innovació**n. Agencia Estatal de Investigación. Proyectos estratégicos orientados a la transición ecológica y a la transición digital "Analítica de datos en seguros: métodos e implicaciones para productos basados en el uso" TED2021-130187B-I00. Director: Montserrat Guillen Estany (7 members).

2020-2023 **Ministerio de Ciencia e Innovación**. Agencia Estatal de Investigación. Programas estatales de generación de conocimiento y fortalecimiento científico y tecnológico del sistema de I+D+I "Modelos Predictivos para el riesgo en Seguros y Finanzas" PID2019-105986GB-C21. Director: Montserrat Guillen Estany (16 members).Director: Montserrat Guillen Estany (10 members).

2019-2021 **Fundación BBVA. Ayudas a la investigación en Big Data 201**8. "Risk Analytics: turning extremes into core knowledge" Director: Montserrat Guillen Estany (5 members).

2015 **European Commission** "Network on quality and cost effectiveness in long-term care and dependencyprevention" VS/2015/0276 coordinated by The London School of Economics and Polictical Science. UB team P.I.: Montserrat Guillen Estany total cost Eur: 1200571.32 (grant 950457.15), UB 29.210 FBG code: 401465 (10 members).

2010-2012 **AXA Research** Fund project "How can private long-term care insurance supplement state systems? The UK as a case study" coordinated by Raphael Wittenberg, PSSRU, London School of Economics.

C.4. Contracts, technological or transfer merits

Bob Alting von Geusau **Prize sponsored by the AFIR-ERM Section of the International Actuarial Association** for "Implementing Individual Savings Decisions for Retirement with Bounds on Wealth" published in the ASTIN Bulletin (Volume 48, Issue 1). AFIR-ERM colloquium in Paris from 10 to 14 May 2020.

Director of the funded chair "IKI MEDIA on data engineering and prescriptive modeling" (2023-2025). This is a funded chair to promote research and innovation in marketing and media advertising.

Co-director of the contract "Methodology of the Catalan Health Survey" since 1994. This has been an ongoing technological transfer with Generalitat de Catalunya. Since 2010, the contract is competitive and is awarded in a public call.

Member of the team of several contracts and funded chairs with public entities and private companies (Grupo Catalana Occidente, Fundación Mut Madr, VidaCaixa, Zurich Insurance, Fundació Hospital Sant Joan de Déu, Institut Català d'Oncologia, Mutua Médica, Fundación Mutualidad de la Abogacía).