

Miquel Serra-Burriel

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EDUCATION

PhD in Economics, University of Barcelona	2016-2019
MSc in Health Economics, Barcelona Graduate School of Economics	2013-2014
BSc in Economics, Pompeu Fabra University	2009-2013

RESEARCH FIELDS

Health Data Science.

EMPLOYMENT

Postdoctoral Researcher, EBPI-UZH	2020-Pres.
Researcher, CRES-UPF	2015-2020

RESEARCH GRANTS

LiverScreen EU H2020: GAN 847989 .	2020-2024
Fisplat EU EiT: Innovation project .	2020-2023
LiverScreen EU EiT: Innovation project .	2018-2019
LiverHope EU H2020: GAN 731875 .	2017-2020
Adult Spinal Deformity ISCI: PI16/01283 .	2017-2019

PEER-REVIEWED PUBLICATIONS

[Google Scholar](#); [Researchgate](#); [Orcid](#)

- [1] Christopher P Ames, Justin S Smith, Jeffrey L Gum, Michael Kelly, Alba Vila-Casademunt, Douglas C Burton, Richard Hostin, Samrat Yeramaneeni, Virginie Lafage, and Frank J Schwab. Utilization of predictive modeling to determine episode of care costs and to accurately identify catastrophic cost nonwarranty outlier patients in adult spinal deformity surgery: a step toward bundled payments and risk sharing. *Spine*, 45(5):E252–E265, 2020.
- [2] Mev Dominguez-Valentin, Julian R Sampson, Pål Møller, Toni T Seppälä, PLSD Collaborators, John-Paul Plazzer, Sigve Nakken, Christoph Engel, Stefan Aretz, and Mark A Jenkins. Analysis in the Prospective Lynch Syndrome Database identifies sarcoma as part of the Lynch syndrome tumor spectrum. *International Journal of Cancer*, 2020.
- [3] Saray Duran-Sanchon, Lorena Moreno, Josep M Augé, Miquel Serra-Burriel, Míriam Cuatrecasas, Leticia Moreira, Agatha Martín, Anna Serradesanferm, Àngels Pozo, and Rosa Costa. Identification and validation of microRNA profiles in fecal samples for detection of colorectal cancer. *Gastroenterology*, 158(4):947–957, 2020.
- [4] Saray Duran-Sanchon, Lorena Moreno, Javier Gómez-Matas, Josep M Augé, Miquel Serra-Burriel, Míriam Cuatrecasas, Leticia Moreira, Anna Serradesanferm, Àngels Pozo, and Jaume Grau. Fecal MicroRNA-Based Algorithm Increases Effectiveness of Fecal Immunochemical Test-based Screening for Colorectal Cancer. *Clinical Gastroenterology and Hepatology*, 2020.

- [5] Liseth Rivero-Sánchez, Coral Arnau-Collell, Jesús Herrero, David Remedios, Joaquín Cubiella, Marta García-Cougil, Victoria Alvarez, Eduardo Albéniz, Patricia Calvo, and Jordi Gordillo. White-light endoscopy is adequate for Lynch syndrome surveillance in a randomized and non-inferiority study. *Gastroenterology*, 158(4):895–904, 2020.
- [6] Miquel Serra-Burriel, Matthew Keys, Carlos Campillo-Artero, Antonella Agodi, Martina Barchitta, Achilleas Gikas, Carlos Palos, and Guillem López-Casasnovas. Impact of multi-drug resistant bacteria on economic and clinical outcomes of healthcare-associated infections in adults: Systematic review and meta-analysis. *PloS one*, 15(1):e0227139, 2020.
- [7] E Solà, E Pose, D Champion, S Piano, O Roux, M Simon-Talero, F Uschner, K de Wit, G Zacherini, and C Alessandria. Endpoints and design of clinical trials in patients with decompensated cirrhosis: position paper of the LIVERHOPE consortium. *Journal of Hepatology*, 1(<https://doi.org/10.1016/j.jhep.2020.08.0>), 2020.
- [8] Viktor von Wyl, Marc Hoeglenger, Chloe Sieber, Marco Kaufmann, Andre Moser, Miquel Serra-Burriel, Tala Ballouz, Dominik Menges, Anja Frei, and Milo Puhan. Are COVID-19 proximity tracing apps working under real-world conditions? Indicator development and assessment of drivers for app (non-) use. *medRxiv*, 2020.
- [9] C.P. Ames, J.S. Smith, F. Pellisé, M. Kelly, A. Alanay, E. Acaroğlu, F.J.S. Pérez-Grueso, F. Kleinstück, I. Obeid, A. Vila-Casademunt, S. Bess, and M. Serra-Burriel. Artificial Intelligence Based Hierarchical Clustering of Patient Types and Intervention Categories in Adult Spinal Deformity Surgery: Towards a New Classification Scheme that Predicts Quality and Value. *Spine*, 44(13):915–926, 2019.
- [10] C.P. Ames, J.S. Smith, F. Pellisé, M.P. Kelly, J.L. Gum, A. Alanay, E. Acaroğlu, F.J.S. Pérez-Grueso, F.S. Kleinstück, I. Obeid, S. Bess, and M. Serra-Burriel. Development of Deployable Predictive Models for Minimal Clinically Important Difference Achievement Across the Commonly Used Health-related Quality of Life Instruments in Adult Spinal Deformity Surgery. *Spine*, 44(16):1144–1153, 2019.
- [11] Christopher P Ames, Justin S Smith, Ferran Pellisé, Michael Kelly, Jeffrey L Gum, Ahmet Alanay, Emre Acaroğlu, Francisco Javier Sánchez Pérez-Grueso, Frank S Kleinstück, and Ibrahim Obeid. Development of predictive models for all individual questions of SRS-22R after adult spinal deformity surgery: a step toward individualized medicine. *European Spine Journal*, pages 1–14, 2019.
- [12] Mev Dominguez-Valentin, Julian R Sampson, Toni T Seppälä, Sanne W ten Broeke, John-Paul Plazzer, Sigve Nakken, Christoph Engel, Stefan Aretz, Mark A Jenkins, Lone Sunde, Inge Bernstein, Gabriel Capella, Francesc Balaguer, Huw Thomas, D Gareth Evans, John Burn, Marc Greenblatt, Eivind Hovig, Wouter H de Vos tot Nederveen Cappel, Rolf H Sijmons, Lucio Bertario, Maria Grazia Tibiletti, Giulia Martina Cavestro, Annika Lindblom, Adriana Della Valle, Francisco Lopez-Köstner, Nathan Gluck, Lior H Katz, Karl Heinimann, Carlos A Vaccaro, Reinhard Büttner, Heike Görgens, Elke Holinski-Feder, Monika Morak, Stefanie Holzapfel, Robert Hüneburg, Magnus von Knebel Doeberitz, Markus Loeffler, Nils Rahner, Hans K Schackert, Verena Steinke-Lange, Wolff Schmiegel, Deepak Vangala, Kirsi Pylvänäinen, Laura Renkonen-Sinisalo, John L Hopper, Aung Ko Win, Robert W Haile, Noralane M Lindor, Steven Gallinger, Loïc Le Marchand, Polly A Newcomb, Jane C Figueiredo, Stephen N Thibodeau, Karin Wadt, Christina Therkildsen, Henrik Okkels, Zohreh Ketabi, Leticia Moreira, Ariadna Sánchez, Miquel Serra-Burriel, Marta Pineda, Matilde Navarro, Ignacio Blanco, Kate Green, Fiona Laloo, Emma J Crosbie, James Hill, Oliver G Denton, Ian M Frayling, Einar Andreas Rødland, Hans Vasen, Miriam Mints, Florencia Neffa, Patricia Esperon, Karin Alvarez, Revital Kariv, Guy Rosner, Tamara Alejandra Pinero, María Laura Gonzalez, Pablo Kalfayan, Douglas Tjandra, Ingrid M Winship, Finlay Macrae, Gabriela Möslein, Jukka-Pekka Mecklin, Maartje Nielsen, and Pål Møller. Cancer risks by gene, age, and gender

in 6350 carriers of pathogenic mismatch repair variants: findings from the Prospective Lynch Syndrome Database. *Genetics in Medicine*, 2019.

- [13] Ferran Pellisé, Miquel Serra-Burriel, Justin S Smith, Sleiman Haddad, Michael P Kelly, Alba Vila-Casademunt, Francisco Javier Sánchez Pérez-Grueso, Shay Bess, Jeffrey L Gum, Douglas C Burton, Emre Acaroğlu, Frank Kleinstück, Virginie Lafage, Ibrahim Obeid, Frank Schwab, Christopher I Shaffrey, Ahmet Alanay, and Christopher Ames. Development and validation of risk stratification models for adult spinal deformity surgery. *Journal of Neurosurgery: Spine SPI*, pages 1–13, 2019.
- [14] Javier Pizones, Montserrat Baldan Martin, Francisco Javier Sánchez Perez-Grueso, Caglar Yilgor, Alba Vila-Casademunt, Miquel Serra-Burriel, Ibrahim Obeid, Ahmet Alanay, Emre R Acaroglu, Ferran Pellisé, and ESSG European Spine Study Group‡. Impact of Adult Scoliosis on Rousouly Sagittal Shape Classification. *Spine*, 44(4), 2019.
- [15] Ignasi Puig, María López-Cerón, Anna Arnau, Òria Rosiñol, Miriam Cuatrecasas, Alberto Herreros-de Tejada, Ángel Ferrández, Miquel Serra-Burriel, Óscar Nogales, Francesc Vida, Luisa de Castro, Jorge López-Vicente, Pablo Vega, Marco A Álvarez-González, Jesús González-Santiago, Marta Hernández-Conde, Pilar Díez-Redondo, Liseth Rivero-Sánchez, Antonio Z Gimeno-García, Aurora Burgos, Francisco Javier García-Alonso, Marco Bustamante-Balén, Eva Martínez-Bauer, Beatriz Peñas, Maria Pellise, Guillermo Muñoz, Isabel Peligros, Antoni Tardio Baiges, Liliam Elbouayadl, Nuria Carames, Mar Iglesias, Sofía del Carmen, Carmen González-Lois, Henar Núñez, Sonia García Hernández, Laura Guerra Pastroán, Montserrat López Carreira, Álex Casalots, Alejandra Caminoa, Marina Solano, María López-Ibáñez, Jordina Llaó, Pamela Estévez, Daniel Rodríguez-Alcalde, Santiago Soto, Miguel Pantaleón, Alberto Álvarez, Tomás Zamora Martínez, Juan Manuel Pascual, Julio Ducóns, Javier García-Lledó, Francesc Porta, Vicent Hernández, Joaquin Cubiella, Faust Riu, Miguel Ángel Simón, David Martínez, Agustín Seoane, Fernando Gomollón, Lucía Cid, Carlos Sostres, Fulgencio Domínguez, Ramiro Manuel Macenlle, Juan de la Revilla, Álvaro Isava, Rafael Campo, Gema de la Poza, Alfonso Martínez, Paola Quintas, Eloy Sánchez, Jose Ramón Foruny, Eva Marín, José Luis Martínez, Maria Inés Castro, Juan Ángel González, Elba Llop, Eduardo Martín, Rafael Rey, Pau Sort, Jesús Montesinos, Marta Fornells, and Nadia Ascon. Accuracy of the Narrow-Band Imaging International Colorectal Endoscopic Classification System in Identification of Deep Invasion in Colorectal Polyps. *Gastroenterology*, 156(1):75–87, jan 2019.
- [16] S Richner-Wunderlin, A F Mannion, A Vila-Casademunt, F Pellise, M Serra-Burriel, B Seifert, E Aghayev, E Acaroglu, A Alanay, F J S Pérez-Grueso, I Obeid, F Kleinstück, and European Spine Study Group (ESSG). Factors associated with having an indication for surgery in adult spinal deformity: an international european multicentre study. *European Spine Journal*, 28(1):127–137, 2019.
- [17] Miquel Serra-Burriel, Isabel Graupera, Pere Torán, Maja Thiele, Dominique Roulot, Vincent Wai-Sun Wong, Indra Neil Guha, Núria Fabrellas, Anita Arslanow, Carmen Expósito, Rosario Hernández, Grace Lai-Hung Wong, David Harman, Sarwa Darwish Murad, Aleksander Krag, Guillem Pera, Paolo Angeli, Peter Galle, Aithal Guruprasad, Llorenç Caballeria, Laurent Castera, Pere Ginès, and Frank Lammert. Transient elastography for screening of liver fibrosis: cost-effectiveness analysis from six prospective cohorts in Europe and Asia. *Journal of Hepatology*, aug 2019.
- [18] L. Caballería, G. Pera, I. Arteaga, L. Rodríguez, A. Alumà, R.M. Morillas, N. de la Ossa, A. Díaz, C. Expósito, D. Miranda, J. Caballería, and P. Ginès. High Prevalence of Liver Fibrosis Among European Adults With Unknown Liver Disease: A Population-Based Study. *Clinical Gastroenterology and Hepatology*, 16(7):1138–1145.e5, 2018.
- [19] C. Campillo-Artero, M. Serra-Burriel, and A. Calvo-Pérez. Predictive modeling of emergency cesarean delivery. *PLoS ONE*, 13(1), 2018.

- [20] A.M. Costa-Ramón, A. Rodríguez-González, M. Serra-Burriel, and C. Campillo-Artero. It's about time: Cesarean sections and neonatal health. *Journal of Health Economics*, 59:46–59, 2018.
- [21] M Serra Burriel, A Manganelli, and G López-Casasnovas. Economic analysis of the efficiency of Valencian hospital concessions. *CRES-UPF Working Paper*, pages 201803–201810, 2018.
- [22] J.F. Guest, J. Esteban, A.G. Manganelli, A. Novelli, G. Rizzardini, and M. Serra. Comparative efficacy and safety of antibiotics used to treat acute bacterial skin and skin structure infections: Results of a network meta-analysis. *PLoS ONE*, 12(11), 2017.
- [23] Ariadna Sanchez, Matilde Navarro, Teresa Ocaña, Marta Pineda, Francisco Rodriguez-Moranta, Antonio Soriano, Teresa Ramon y Cajal, Carme Yagüe, Maria Dolores Picó, and Rodrigo Jover. Colorectal cancer incidence in Lynch syndrome patients: first report of a multicenter nation-wide study. *Gastroenterology*, 152(5):S552, 2017.

BOOK CHAPTERS

- [1] Serra-Burriel, Miquel; Manganelli, Anton-Giulio; López-Casasnovas, Guillem; La investigación en eficiencia hospitalaria en España; Colaboración público-privada en sanidad: el modelo Alzira, ISBN:9788469757956; pags 132-185; 2017; Fundación Gaspar Casal.
- [2] Isabel Graupera; Serra-Burriel, Miquel; Frank Lammert. Should we screen for liver fibrosis and cirrhosis in the general population? Proceedings of the 13th International Meeting on Therapy of Liver Diseases, 2019.

PROFESSIONAL ACTIVITIES

Conference presentations and invited lectures: Schultzness Clinic - Zurich (Sept. 2017), EuroSpine - Dublin (Oct. 2017), Gastroenterology Departament - Hospital Clinic (Oct. 2017), PLSD meeting - Oslo (Nov. 2017), ESSG meeting - Madrid (Nov. 2017), VHIR - Barcelona (Dec. 2017), ISSG meeting - Phoenix (Jan. 2018), SCGS - Girona (Jan. 2018), AEEH - Madrid (Feb. 2018), Gastroenterology Department - Hospital Clinic (Mar. 2018), EASL - Paris (Apr. 2018), VHIR - Barcelona (May 2018), ISSG meeting- Denver (May. 2018), AES - Las Palmas (June 2018), IMAST - Los Angeles (July 2018), EURSP - Barcelona (Sept. 2018), NASS - Los Angeles (Sept. 2018), AMSRS - Bologna (Oct. 2018), EANS - Brussels (Oct. 2018), ISSG meeting - Phoenix (Nov. 2018). SILACO GEER - Barcelona (June 2019), SRS AM - Montreal (September 2019), EuroSpine - Helsinki (October 2019), ISPOR - Copenhagen (November 2019).

HONORS AND AWARDS

2019 Top 10 Best Poster ISPOR
 2018 Best Neurosurgery paper EANS
 2018 Second Prize at EuroSpine conference
 2018 Second Price for the best oral presentation at the GEER

TEACHING

Big data and real-world data in the analysis of effectiveness – UIMP	2019
Microeconometrics – BGSE summer school	2019
Use of real-world data for health services and health policy research – IACS	2018-2019
Hospital performance evaluation – AEETS	2018
Evidence-based surgery: Inference in non-experimental data – VHIR	2018
The economics of antimicrobial resistance – ISGlobal summer school	2017

LANGUAGES

Spanish and Catalan (native), English (fluent), R (fluent).

PROTOCOLS

ISRCTN11768442 Evaluation of colon cancer screening on colon cancer mortality.

CRD42019126288 Economic and health outcomes of multidrug-resistant infections acquired in intensive care units: a systematic review.