

Helena Ramalhinho Dias Lourenço

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Academic Positions

Since June, - Full Professor, Department of Economics and Business, Universitat Pompeu Fabra, Barcelona, Spain. 2016

2014-2016 - Associate Professor (*Professora Agregada with Tenure*), Department of Economics and Business, Universitat Pompeu Fabra, Barcelona, Spain.

1997-2004 - Assistant Professor, Department of Economics and Business, Universitat Pompeu Fabra, Barcelona,

1994-1996 - Assistant Professor, Department of Statistics and Operations Research, Faculdade de Ciências, University of Lisbon, Portugal.

Education

Ph.D. in Operations Research, Cornell University, USA. "A computational study of the job-shop and flow-shop scheduling problems", Ph.D. dissertation, Advisor: David Shmoys.

1993 - Master of Science in Operations Research, Cornell University, USA.

- Master of Science in Statistics and Operations Research, University of Lisbon, Portugal.

- Licenciatura in Statistics and Operations Research, University of Lisbon, Portugal.

Scientific Merits

1987

10/2012

- Acreditació de Recerca Avanzada (Accreditation in Advanced Research/Full Professor). Catalan University Quality Assurance Agency, AQU Catalunya, Generalitat de Catalunya.

- Mèrits de Recerca (Three Merits in Research) (01/01/2007 to 31/12/2012); (01/01/2001 to 31/12/2006); (01/01/1995 to 31/12/2000). Catalan University Quality Assurance Agency, AQU Catalunya, Generalitat de Catalunya.

 Acreditación de Profesores Titulares. Consejo de Universidades, Ministerio de Educación, Cultura y Deporte, Gobierno de España.

Research

ResearcherID: C-5738-2008 Scopus Author ID: 14063510200 ORCID 0000-0003-3174-3432

Google Scholar: h-index 20, citations: 2528 (may 2nd, 2015)

<u>Areas of Research:</u> Operations Research, Metaheuristics, Scheduling, Combinatorial Optimization, Iterated Local Search, Vehicle Routing, Scheduling, Supply Chain Management, Logistics, Operations Management.

Publications

Refereed Publications indexed in ISI Web of Science and Scopus

- Ferrer A., Guimarans D., Ramalhinho H.R. and Juan A.A. (2016), <u>A BRILS Metaheuristic For Non-Smooth Flow-Shop Problems with Failure-Risk Costs</u>, Expert Systems with Applications 4:177-186. doi:10.1016/j.eswa.2015.09.011. WoS 2014 JCR 2.240 Q1.
- Coelho V.N., Grasas A., Ramalhinho H., Coelho I.M., Souza M.J.F. (2015), An ILS-based Algorithm to Solve a
 Large-scale Real Heterogeneous Fleet VRP with Multi-trips and Docking Constraints, European Journal of
 Operational Research (accepted for publication September 2015) doi:10.1016/j.ejor.2015.09.047. WoS 2014 JCR
 2.358 Q1.
- 3. Martins P., Ladrón A. and Lourenço H.R. (2015), Maximum Cut-Clique Problem: ILS Heuristics and a Data Analysis Application, International Transactions in Operational Research 22(5):775-809. doi: 10.1111/itor.12120. WoS 2012 JCR 0.977 Q3.
- 4. Grasas, A. and **Ramalhinho, H.** (2015), Teaching Distribution Planning: A Problem-based Learning Approach. International Journal of Logistics Management (accepted March 20, 2015). WoS 2014 JCR 0.841 Q3.
- Ramalhinho H. (2015), A Polynomial Algorithm for a Special Case of the One-Machine Scheduling Problem with Time-Lags, Engineering Optimization 2014, E.C. Rodrigues, J. Herskovits, C.M. Mota Soares, J.M. Guedes, A.L. Araújo, J.O. Folgado, F. Moleiro & J.F.A. Madeira (eds). Taylor & Francis Group (London). Chapter 67: 397–401. ISBN: 978-1-138-02725-1. doi: 10.1201/b17488-70. (Scopus).
- 6. Grasas A., Juan, A.A. and **Lourenço H.R.** (2014), <u>SimILS: A Simulation-based extension of the Iterated Local Search metaheuristic for Stochastic Combinatorial Optimization, Journal of Simulation</u> (advance online publication 3 October 2014) doi: 10.1057/jos.2014.25. WoS 2014 JCR 0.58 Q4; Scopus.
- Grasas A., Ramalhinho H., Pessoa L.S., Resende M.G.C., Caballé I. and Barba N. (2014), On the Improvement of <u>Blood Sample Collection at Clinical Laboratories</u>, <u>BMC Health Services Research</u> 14:12. doi:10.1186/1472-6963-14-12. WoS 2012 JCR 1.77, Q2.

- 8. Juan, A.; Lourenço, H.R.; Mateo, M.; Luo, R.; Castella, Q. (2014), <u>Using Iterated Local Search for solving the Flow-Shop Problem: parametrization, randomization and parallelization issues. International Transactions in Operational Research</u> 21(1): 103-126. doi: 10.1111/itor.12028. WoS 2012 JCR 0.977 Q3; Scopus.
- Grasas, A., Juan, A.A., Ramalhinho, H. (2013), <u>Operations Research and Simulation in Master's Degrees: A Case Study Regarding Different Universities in Spain</u>, Proceedings of the 2013 Winter Simulation Conference Simulation: Making Decisions in a Complex World, WSC 2013 pp. 3609 3619 doi: 10.1109/WSC.2013.6721722 (indexed in ISI Web of Science and Scopus, 2011 SJR = 0.372, Q2). ISSN: 08917736.
- Juan, A. A., Faulin, J., Ferrer, A., Lourenço, H.R., and Barros, B. (2013), MIRHA: Multi-start biased randomization of heuristics with adaptive local search for solving non-smooth routing problem. TOP 21(1): 109-132. doi: 10.1007/s11750-011-0245-1. WoS 2013 JCR 0.766, Q3 42/77; Scopus.
- 11. Lourenço, H.R., Paixão, J.P. and Portugal, R. (2009), <u>Driver Scheduling Problem Modelling</u>. <u>Public Transport:</u> Planning and Operations. 1(2):103-120. doi: 10.1007/s12469-008-0007-0. Scopus 2011 SJR 1.208.
- 12. Giménez, C. and Lourenço, H.R. (2008), e-SCM: Internet's impact on Supply Chain Processes. International Journal of Logistics Management 19(3):309-343. doi:10.1108/09574090810919189. WoS JCR 0.841 Q3.
- Fernandes, S. and Lourenço, H.R. (2008). Optimised Search Heuristic Combining Valid Inequalities and Tabu Search. In Hybrid Metaheuristics, M.J. Blesa, C. Blum, C. Cotta, A.J. Fernández, J.E. Gallardo, A. Roli, M.Sampels (Eds.), Lecture Notes in Computer Science 5296:87-101. doi: 10.1007/978-3-540-88439-2-7. WoS JCR 0.402 O4.
- Fernandes, S. and Lourenço, H.R. (2008), A Simple Optimized Search Heuristics for the Job-Shop Scheduling. In Recent Advances in Evolutionary Computation for Combinatorial Optimization, Studies in Computational Intelligence, C. Cotta and J. van Hemert (Eds.) Springer, 153:203-218. doi: 10.1007/978-3-540-70807-0_13. Scopus 2011 SJR 0.192.
- 15. Fernandes, S. and Lourenço, H.R. (2007). A GRASP and branch-and-bound metaheuristic for the job-shop scheduling. Evolutionary Computation in Combinatorial Optimization, C. Cotta and J. Van Hemert (Eds.), Lecture Notes in Computer Science 4446: 60-71. doi: 10.1007/978-3-540-71615-0 6. WoS JCR 0.402 Q4.
- Pérez-Vázquez, M.E., Gento-Municio, A.G. and Lourenço, H.R. (2007), Solving a Concrete Sleepers Production <u>Scheduling by Genetic Algorithms</u>. <u>European Journal of Operational Research</u> 179(3): 605-620. doi: 10.1016/j.ejor.2005.03.070. WoS JCR 1.815 Q1.
- 17. Lourenço, H.R. (2005), Logistics Management: an opportunity for Metaheuristics. In Metaheuristics Optimization via Memory and Evolution, C. Rego and B. Alidaee (eds.), Kluwer Academic Publishers, pp. 329-356. Scopus SJR: 0.13. ISBN 978-1-4020-8134-7. (Web of Science CCC:000229209300015)
- 18. Colomé, R., Serra, D. and Lourenço, H.R. (2003), A new chance-constrained maximum capture location problem. Annals of Operations Research 122 (1-4):121-139. doi: 10.1023/A:1026194423072. WoS JCR 0.840 Q3.
- Lourenço, H.R., Martin, O. and Stützle, T. (2003), <u>Iterated Local Search</u>. In *Handbook of Metaheuristics*, F. Glover and G. Kochenberger, (eds.), Kluwer Academic Publishers, International Series in Operations Research & Management Science, pp. 321-353. ISBN 978-1-4020-7263-5. (Web of Science CCC:000184441600011). (1190 citations in Google Scholar)
- 20. Finger, M., Stützle, T. and **Lourenço, H.R.** (2002), <u>Exploiting fitness distance correlation of set covering problems</u>. In *Applications of Evolutionary Computing*, S. Cagnoni, J. Gottlieb, E. Hart, M. Middendorf, and G.R. Raidl (Eds.) <u>Lecture Notes in Computer Science</u>, 2279:61-71. doi: 10.1007/3-540-46004-7_7. WoS JCR 0.515 Q3; Scopus.
- Lourenço, H.R., Paixão, J.P. and Portugal, R. (2001), <u>Multiobjective metaheuristics for the bus-driver scheduling problem</u>. <u>Transportation Science</u> 35(3):331-343. doi: 10.1287/trsc.35.3.331.10147. WoS JCR 1.507 Q1.
- 22. Lourenço, H.R. (1996), Sevast'yanov algorithm for the flow-shop scheduling problem. European Journal of Operational Research 91(1):176-189. doi: 10.1016/0377-2217(94)00356-4. WoS JCR 1.815 Q1.
- Lourenço, H.R. (1995), <u>Job-Shop Scheduling: computational study of local search and large-step optimization methods</u>. <u>European Journal of Operational Research</u> 83(2):347-364. doi: 10.1016/0377-2217(95)00012-F. WoS JCR IF: 1.815, Q1.
- Bjorndal, M.H., Caprara, A., Cowling, P.I., Della-Croce, F., Lourenço, H.R., Malucelli, F., Orman, A.J., Pisinger, D., Rego, C. and Salazar, J.J. (1995), Some thoughts on combinatorial optimization. European Journal of Operational Research 83(2):253-270. doi: 10.1016/0377-2217(95)00005-B. WoS JCR 1.815 Q1.

Other Refereed Journals

- 25. Cáceres-Cruz, J., Grasas, A., **Ramalhinho, H.**, Juan, A.A. and Roca, M. (2014), <u>A savings-based randomized heuristic for the heterogenous fixed fleet vehicle routing problem with multi-trips</u>, Journal of Applied Operational Research, 6(2):69-81.
- Grasas, A., Cáceres-Cruz, J., Lourenço, H.R., Juan, A.A. and Roca, M. (2013) <u>Vehicle routing in a Spanish distribution company: Saving using a savings-based heuristic, OR Insight</u>, 26 (3):191–202 doi:10.1057/ori.2013.2. <u>Indexed at ABS</u>.
- 27. **Lourenço, H.R.** and Serra, D. (2002), <u>Adaptive search heuristics for the generalized assignment problem.</u>
 <u>Mathware and Soft Computing</u> 9(2-3): 209-234. (144 citations in Google Scholar)
- 28. **Lourenço, H.R.** and Bruno, P. (1998). New ramification rules in a branch-and-bound method to solve the job-shop scheduling problem. Investigação Operacional (Journal of the Portuguese Operations Research Society) 18:3-16.

Refereed Book Chapters

- 29. Ramalhinho H. and Ravetti M.G. (2016), Supply Chain Management in <u>Handbook of Heuristics</u>, Martí R., Pardalos P. and Resende M. (Eds.), Springer. ISBN 978-3-319-07123-7.
- Lourenço, H.R. and Ribeiro, R. (2012), Strategies for an Integrated Distribution Problem, in <u>Hybrid Algorithms for Service, Computing and Manufacturing Systems: Routing, Scheduling and Availability Solutions</u>, Montoya-Torres J.R., Juan A.A., Huaccho L., Faulin J. and Rodriguez-Verjan G.(eds) IGI Global Books, Hershey, PA. pp. 98-121. ISBN: 978-1-61350-086-6.
- 31. **Lourenço, H.R.**, Martin, O. and Stützle, T. (2010), Iterated Local Search: Framework and Applications. In *Handbook of Metaheuristics*, 2nd. Edition. Vol.146. M. Gendreau and J.Y. Potvin (eds.), Springer New York, International Series in Operations Research & Management Science, pp. 363-397. ISBN: 978-1-4419-1663-1. doi: 10.1007/978-1-4419-1665-5 12. (138 citations in Google Scholar)
- 32. **Lourenço, H.R.** (2005), e-logística. In *La logística empresarial en el nuevo milenio* (Business Logistics for the new millennium), Daniel Serra (editor), Gestión 2000, Barcelona. (in Spanish) pp. 88-116. ISBN 84-8088-981-0.
- 33. Soto, J.P. and **Lourenço**, **H.R.** (2004), Caso: La logística inversa en el sector editorial. In *Logística Inversa y Medioambiente*, Díaz Fernández, B.A.; Alvarez, M.J. & Gonzalez, P., McGraw-Hill, 2004. (in Spanish) pp. 311-322. ISBN 84-481-4180-6.
- Martí, R., Lourenço, H.R. and Laguna, M. (2000), Assigning Proctors to Exams with Scatter Search. In <u>Computing Tools for Modeling</u>, <u>Optimization and Simulation</u>, M. Laguna and J.L. González Velarde (Eds.), Kluwer Academic Publishers, pp. 215-228. doi: 10.1007/978-1-4615-4567-5. ISBN: 978-0-7923-7718-4.
- 35. **Lourenço, H.R.**, Paixão, J.P. and Portugal, R. (2000), Geração de Serviços de Motoristas através de Metaheurística- Sistema GIST (The GIST system for public transportation: the bus-driver scheduling module). In *Casos de Aplicação da Investigação Operacional (Industrial Applications of Operations Research), L. Valadares* Tavares and C. Henggeler Antunes (Eds.), McGraw-Hill, pp. 168-184. (in Portuguese) ISBN 972-773-075-2.
- 36. **Lourenço, HR.** and Zwijnenburg, M. (1996), Combining the large-step optimization with tabu-search: application to the job-shop scheduling problem. In *Meta-Heuristics: Theory and Applications*, Osman I.H. and Kelly J.P. (Eds.), Kluwer Academic Publishers, pp. 219-236. doi:10.1007/978-1-4613-1361-8. ISBN: 978-0-7923-9700-7.

Refereed Conference Proceedings

- 37. Pagés, A., Juan A.A., **Ramalhinho H.** (2015), Considering Risk Issues in the Uncapacitated Facility Location Problem with Stochastic Components, in <u>Current Topics on Risk Analysis: ICRA& and RISK 2015 Conference</u>, Barcelona, Barcelona, Guillem M., Juan A.A., Ramalhinho H., Serra I., Serrat C. (editors), Fundación Mapfre, pp. 587-595, ISBN: 978-84-9844-496-4.
- Ramalhinho, H., Juan, Angel A., M.G. Ravetti (2015). Simheuristics for Supply Chain Management. In <u>Proceedings of the 11th edition of the Metaheuristics International Conference (MIC2015)</u>. June 7-10, 2015 Agadir, <u>Morocco.</u>
- 39. Coelho, V.N., **Lourenço H.R.**, Grasas A., Coelho, I.M., Jamilson M., Souza F. & Cruz, R.C. (2013) "Um estudo de caso aplicado ao problema real de larga escala de Roteamento de Veículos com Frota Heterogênea e Múltiplas Viagens", XLV Brazilian Symposium of Operational Research (SBPO), 16-19, september, 2013 Natal, Brasil.)
- 40. Cruz, R.C., **Lourenço H.R.**, Coelho, V.N., Jamilson M., Souza F. & Grasas A. (2013) "TWTJSSP-ILS: Um Algoritmo Heurístico para Resolver o Problema Job-Shop Scheduling com Penalidade pelo Tempo de Atraso", XLV Brazilian Symposium of Operational Research (SBPO), 16-19, september, 2013 Natal, Brasil.
- 41. Cáceres, J., Grasas, A., **Lourenço, H.R.,** Juan, A.A., Roca, M. and Colomé, R. (2012), Aplicación de un algoritmo randomizado a un problema real de enrutamiento de vehículos heterogéneos. In <u>Proceeding of the VIII Congreso Español sobre Metaheurísticas, Algoritmos Evolutivos y Bioinspirados, MAEB'2012</u> F. Rodriguez, B. Mélian, J.A. Moreno, J.M. Moreno (Eds.) Albacete, Spain, February 8-10, pp. 767-773. ISBN 978-84-615-6931-1.
- 42. Juan, A.A., **Lourenço, H.R.,** Mateo, M., Grasas, A. and Agustín, A. (2012), Combinando Randomización Sesgada y Búsqueda Local Iterativa para Resolver Problemas de Flow-Shop. In <u>Proceeding of the VIII Congreso Español sobre Metaheurísticas, Algoritmos Evolutivos y Bioinspirados, MAEB'2012</u> F. Rodriguez, B. Mélian, J.A. Moreno, J.M. Moreno (Eds.) Albacete, Spain, February 8-10, pp. 779-784. ISBN 978-84-615-6931-1.
- 43. Juan, A.; Ruiz, R.; **Lourenço, H.R.,** Mateo, M., Ionescu, D. (2010), A Simulation-based Approach for Solving the Flowshop Problem. In <u>Proceedings of the 2010 Winter Simulation Conference</u>. Baltimore, Maryland, USA. December 5-8 (CD).
- 44. Fernandes, S. and Lourenço, H.R. (2007), Hybrids Combining Local Search Heuristics with Exact Algorithms. In Proceeding of the V Congreso Español sobre Metaheurísticas, Algoritmos Evolutivos y Bioinspirados, MAEB'2007, F. Rodriguez, B. Mélian, J.A. Moreno, J.M. Moreno (Eds.) Tenerife, Spain, February 14-16, pp. 269-274. ISBN 978-84-690-3470-5.
- 45. Fernandes, S. and Lourenço, H.R. (2007), A Simple Optimized Search Heuristic for the Job-Shop Scheduling Problem. In Proceeding of the V Congreso Español sobre Metaheuristicas, Algoritmos Evolutivos y Bioinspirados, MAEB'2007 F. Rodriguez, B. Mélian, J.A. Moreno, J.M. Moreno (Eds.) Tenerife, Spain, February 14-16, pp. 763-770. ISBN 978-84-690-3470-5.
- 46. Lourenço, H.R. (2005), Multiobjective metaheuristics for integrated logistics problems. In <u>Proceeding of the CEDI'2005</u> (I Congreso Español de Informática), <u>IV Congreso Español sobre Metaheurísticas</u>, Algoritmos <u>Evolutivos y Bioinspirados</u>, <u>MAEB'2005</u>, G. Arenas, F. Herrera, M. Lozano, J.J. Merelo, G. Romero, A.M. Sánchez (Eds.) Granada, Spain, September 13-16, pp. 263-270. ISBN 84-9732-440-4.

- 47. Soto, J.P. and Lourenço, H.R. (2005), An heuristic for the collaborative production planning model with returns. In Proceeding of the CEDI'2005 (I Congreso Español de Informática), IV Congreso Español sobre Metaheurísticas, Algoritmos Evolutivos y Bioinspirados, MAEB'2005, G. Arenas, F. Herrera, M. Lozano, J.J. Merelo, G. Romero, A.M. Sánchez (Eds.) Granada, Spain, September 13-16, pp. 297-304. ISBN 84-9732-440-4.
- 48. Giménez, C. and **Lourenço, H.R.** (2005), A review on e-SCM topics. In <u>Proceeding of the Decision Sciences</u> Institute International Conference, IESE, Barcelona, Spain, July 3-6, pp. 805-815. ISBN 0-9667118-2-3.
- 49. Ribeiro, R. and **Lourenço, H.R.** (2005), A new model and heuristic for a multi-period inventory-routing problem. In <u>Proceeding of the Decision Sciences Institute International Conference</u>, IESE, Barcelona, Spain, July 3-6, pp. 403-414. ISBN 0-9667118-2-3.
- Soto, J.P., Giménez, C. and Lourenço, H.R. (2005), Reverse Logistics in the editorial sector: an exploratory study. In <u>Proceeding of the 10th International Symposium on Logistics</u>, Lisbon, Portugal, July 3-5, pp. 590-595. ISBN 0-85358-216-5.
- 51. Giménez, C. and **Lourenço, H.R.** (2004), e-Supply Chain Management: review, implications and directions for future research. In <u>Proceeding of the EUROMA conference</u>, INSEAD, Fontainebleau, 27-29 June, pp. 1021-1031. ISBN 2-9522210-0-6.
- 52. **Lourenço, H.R.** (2004), Enseñar metaheurísticas en Facultades o Departamentos de Economía y Empresa (Teaching Metaheuristics at Business and Economic Schools). In <u>Proceedings of The Third Spanish Congress in Metaheuristics</u>, Evolutive and Bioinspired Algorithms, MAEB'2004, C. Hervás, N. García, F.J.Martínez, D. Ortiz & S. Ventura (Eds) Córdoba, Spain, February 4-6, pp. 322-328. ISBN 84-688-4224-9.
- 53. Soto, J.P. and **Lourenço, H.R.** (2003), A recoverable Production Planning Model. In <u>Proceedings of XXVII</u> Congreso SEIO de Estadística e Investigación Operativa. pp. 2731-2766, May. ISBN: 84-8409-955-5.
- 54. Ribeiro, R. and **Lourenço, H.R.** (2003), Inventory-Routing Problem, for a multi-period problem with stochastic and deterministic demand. In <u>Proceedings of The Second Spanish Congress in Metaheuristics, Evolutive and Bioinspired Algorithms</u>, MAEB'2003, Gijón, Spain, February 5-7, pp. 257-265. ISBN 84-607-65-26-1.
- 55. **Lourenço, H.R.** and Serra, D. (2002), Heurísticas adaptativas para el problema de asignación generalizada (Adaptive heuristics for the generalized assignment problem). In <u>Proceedings of The First Spanish Congress in Evolutive</u> and Bioinspired Algorithms, Merida, Spain, February 6-7, pp. 267-275. ISBN 84-607-3913-9.
- 56. Ribeiro, R. and **Lourenço, H.R.** (2001), A multi-objective model for a Multi-period Distribution Management Problem. In Proceeding of the First International Conference on Integrated Logistics, Singapore, pp. 463-471, August. ISBN: 981-04-4562-8.
- 57. **Lourenço, H.R.**, Martin, O. and Stützle, T. (2001), A beginner's introduction to Iterated Local Search. In Proceeding of the 4th Metaheuristics International Conference, Porto, Portugal, pp. 1-11.

Books

1. <u>Current Topics on Risk Analysis: ICRA& and RISK 2015 Conference</u> (2015), Guillem M., Juan A.A., Ramalhinho H., Serra I., Serrat C. (editors), Fundación Mapfre, Barcelona, Spain, ISBN: 978-84-9844-496-4.

Main Research Projects

2016 - 2019	Solving Optimization Problems for e-commerce in INDITEX. Funding: OESIA and INDITEX (Spain). IP: Helena Ramalhinho and Daniel Serra.
2016 - 2019	Mathematical Models and Algorithm to solve Logistics Optimization Problems in SEAT-Volkswagen. Funding: Seat (Spain) and AutoUni Volkswagen (Germany). Industrial PhD Funding: SEAT. IP: Helena Ramalhinho.
2016 - 2019	Cost Action "European Network of Collaboration on Kidney Exchange Programmes", (ENCKEP) CA15210. COST (EU Framework Programme Horizon 2020). IP: Prof. Joris van de Klundert.
2015 - 2018	"Red Iberoamericana de Logística Inteligente en la Gestión Sostenible del Transporte en Núcleos Urbanos". CYTED P514RT0013. Research director (IP): Javier Faulin (Universidad Pública de Navarra, Spain).
2015 - 2017	SmartTransPro – Intelligent Transport, Logistics and Production (Redes de Excelencia). TRA2015-71883-REDT. Ministerio de Economía y Competitividad, Programa Estatal de Fomento de la Investigación Científica y Técnica de Excelencia, Spain. Research director (IP): Angél Juan. Coordinator of node UPF: Helena Ramalhinho.
2014 - 2016	Business Analytics Models for Horizontal Cooperation in Transportation and Logistics. Research Project: TRA2013-48180-C3-2-P, Ministerio de Economía y Competitividad, Programa Estatal de Fomento de la Investigación Científica y Técnica de Excelencia, Spain. Research director (IP): Helena Ramalhinho Lourenço. 40,000 €. Team: 6.5 Researchers.
2014 - 2016	Grup de Recerca d'estadística i investigació operativa (Research group in Statistics and Operations Research). Research Project: 2014 SGR 849, AGAUR, Catalonia Government. Research director: Gabor Lugosi. 43,000€.

2011 - 2014	"HAROSA@IB: Red Iberoamericana de Algoritmos, Software Libre y Computación Distribuida para la resolución de problemas de Routing, Scheduling y Disponibilidad de Sistemas". CYTED2010-511RT0419. Main researcher: Angel A. Juan & Daniel Riera (IN3-Open University of Catalonia, Spain). 32,992 €/year.
2010 - 2012	"Quantitative decision methods for logistics and operations management" (Métodos cuantitativos de decisión en entornos logísticos y productivos). Research Project: ECO2009-11307, Ministerio de Ciencia e Innovación, Spain. Research director: Daniel Serra. Funding 54,000 €.
2010 - 2013	Grup de Recerca en Estratègies Empresarials (Research group in Business Strategy). Research Project: 2009 SGR 1431, AGAUR, Catalonia Government. Research director: Robin Hogarth. Funding 38,400€.
2007 - 2009	"Quantitative decision methods for logistics and operations management" (Métodos cuantitativos de decisión en entornos logísticos y productivos). Research Project: SEJ2006-12291/ECON, Ministerio de Educación y Ciencia, Spain. Research director: Daniel Serra. Funding 126,469.20€.
2004 - 2006	"Quantitative decision methods for logistics and operations management" (Métodos cuantitativos de decisión en entornos logísticos y productivos). Research Project, SEC2003-01991/ECO, Spain. Research director: Daniel Serra. Funding 126,160.00€.
2005 - 2008	Research Group: Grup d'Estadística i Investigació Operativa. 2005 SGR 00665. AGAUR Research project, Generalitat de Catalunya. Research director: Gabor Lugosi. Funding 42,200€.
2002 - 2005	Research Group: Grup d'Estadística i Investigació Operativa. 2002SGR 00134. AGAUR Research project, Generalitat de Catalunya. Research director: Albert Satorra. Funding 42,408€.
2001 - 2003	"Optimization Models for Resource Assignment in Logistics and Production Systems", Research Project, BEC2000-1027, Spain, Research director: Daniel Serra. Funding 48,080.97€.

Research Centers

Since 2015	IPT/IBM Research Center in Business Analytics, Portugal
Since 2012	Business Analytics Research Group (BARG), Universitat Pompeu Fabra, Spain. Director since 2015.
Since 1994	Centro de Investigação Operacional (Operations Research Center) University of Lisbon, Portugal.

Conferences and Seminars

Presentations in Conferences, workshops and invited seminars (the last 5 years, more than 60 in total)

2016	Ramalhinho, H., "From ILS to Hybrid ILS and other extensions" in 10 th International Workshop on Hybrid Metaheuristics, June 8-10, 2016, Plymouth, UK. (HM 2016). (Plenary Invited Speaker)
2015	Ramalhinho, H., Juan, A. and Gomez-Ravetti, M. "Simheuristics for Supply Chain Management", XVII Congresso da Apdio "IO & Big Data", September 6-10, 2015, Portalegre, Portugal. (IO 2015).
	Ramalhinho, H., Juan, A. and Gomez-Ravetti, M. "Simheuristics for Supply Chain Management", GreenCoop-CYTED Workshop, September 3-4, 2015, Madrid, Spain. (CYTED Workshop). Invited.
	Ramalhinho, H., Juan, A. and Gomez-Ravetti, M. "Simheuristics for Supply Chain Management", 11 th Metaheuristics International Conference, June 7-10, 2015, Agadir, Marocco. (MIC'15). Invited.
	Ramalhinho, H., Pagés, A. and Juan, A. "Considering risk issues in the Uncapacitated Facility Location Problem with stochastic components", International Conference on Risk Analysis, May 26-29, 2015, Barcelona, Spain. (ICRA6/RISK2015).
2014	Ramalhinho H. (2014), "A Polynomial Algorithm for a Special Case of the One-Machine Scheduling Problem with Time-Lags", The 4 th of the International Conference on Engineering Optimization (EngOpt 2014), September 8-11, 2014 Lisbon, Portugal.
	Ramalhinho Lourenço, H., Juan, A. and Grasas, A. "SimILS: Solving Stochastic Combinatorial Optimization Problems by Combining Iterated Local Search with Simulation", 20th Conference of the International Federation of Operational Research Societies, July 13-18, 2014, Barcelona, Spain. (IFORS 2014).
2013	Lourenço, H.R., Juan, A.A., Grasas, "SIMILS: Simulation + ILS", IN3-HAROSA Workshop (Harosa), UOC, Barcelona, Spain, November 21-22, 2013.
	Lourenço, H.R., Grasas, A., " <i>Teaching VRP in Business Schools</i> ", 26 th EURO European Conference on Operational Research (EURO), Roma, Italy, July 1-4, 2013.
2012	Lourenço, H.R. , Grasas, A., Pessoa, L., Resende, M. "Solving a real application of the Time-Constraint Open Vehicle Routing Problem", 25 th EURO European Conference on Operational Research (EURO),

	Vilnius, Lithuania, July 8-11, 2012.	
	Lourenço, H.R., Grasas, A., Cáceres-Cruz, J., Juan, A.A., Roca, M. "A Randomized Hybrid Algorithm based on Saving and Vehicle Assignment Policies for the Heterogeneous Vehicle Routing Problem", 1st EURO Working Group on Vehicle Routing and Logistics Optimization - VeRoLog (Verolog), Bologna, Italy, June 18-29, 2012.	
	Lourenço, H.R. , Juan, A.A., Grasas, A., Cáceres-Cruz, J., Roca, M. "A Randomized Savings Metaheuristic for the Heterogeneous Fleet Multitrip VRP", <u>IN3-HAROSA Workshop</u> (<u>Harosa</u>), IN3, UOC, Barcelona, Spain, June 13-15, 2012.	
2011	Lourenço, H.R., "Aplicaciones Empresariales de Nuevas Técnicas de Análisis Logística", <u>Jornada de Business Analytics</u> , Fundación Ramón Areces, Madrid, Spain, January 24, 2011. http://www.fundacionareces.tv/watch/4f0d6e9194a05f2523140000	
	Lourenço, H.R. , Juan, A. A., Faulin, J., Ferrer, A., and Barros, B. "MIRHA: <i>Multi-Start Biased Randomization Heuristics for Solving Non-Smooth Routing Problems</i> ", 2011 IN3-HAROSA Workshop (HAROSA), Barcelona, Spain, July 18-19, 2011.	
	Lourenço, H.R. , Juan, A. A., Faulin, J., Ferrer, A., and Barros, B. "Multi-Start Biased Randomization Heuristics for Solving Non-Smooth Routing Problems" in Optimization, Universidade Nova de Lisboa, Caparica, Portugal, July 24-27, 2011. (Program Committee)	
2010	Lourenço, H.R. "An ILS to solve a Multiobjective Integrated Distribution Problem", 2010 IN3-HAROSA Workshop (HAROSA), Barcelona, Spain, November 22-23, 2010.	
	Lourenço, H.R. "Matheuristics. Optimized Search Heuristics", Numerical Optimization and Applications in Engineering, Centre de Recerca Matemática (CRM), Bellaterra, Spain, October 13-15, 2010.	
	Lourenço, H.R. "An Iterated Local Search to solve a Multiobjective Integrated Distribution Problem", 24 th EURO European Conference on Operational Research (EURO 2010), Lisbon, Portugal, July 11-14, 2010.	

Program Committees

Member of program committees, chair or member of organization committees (for 5 years, more than 45 in total)

2017 Chair of the Organization Committee of 12th Metaheuristics International Conference (MIC 2017),

2017	2017, Barcelona, Spain.
	Member of the Program Committee of Optimization 2017 , September 6-8, 2017, Lisboa, Portugal.
2016	Member of the Program Committee of Workshop on Machine learning , Optimization and big Data (MOD 2016), Volterra, Tuscany, Italy, from August 26 to 29, 2016.
	Member of the Program Committee of 10th International Workshop on Hybrid Metaheuristics (HM 2016), 8-10 June 2016, Plymouth, United Kingdom.
	Member of the International Program Committee of ICORES 2016 (5 th International Conference in Operations Research and Enterprise Systems (<u>ICORES</u> 2015), February 23-35, 2016, Rome, Italy.
2015	Member of the Program Committee of II Jornadas sobre Algoritmos Evolutivos y Metaheuristicas (JAEM 2015), Albacete, Spain, 9-12 November, 2015.
	Member of the Program Committee of International Workshop on Machine learning, Optimization and Big Data (MOD 2015), Taormina - Sicily, Italy, 21-24 July, 2015.
	Member of the Program Committee of 11 th Metaheuristics International Conference (MIC 2015), June 7-11, 2015, Agadir, Morocco.
	Member of the Program Committee of the Simpósio Brasileiro de Pesquisa Operacional (SBPO 2015). Agost 23-28, 2015, Porto de Galinhas, Pernambuco, Brasil
	Member of the Program Committee of the International Symposium on Foundations and Applications of Big Data Analytics (FAB 2015), Paris, France Aug 27-28, 2015.
	Member of the International Program Committee of ICORES 2015 (4 th International Conference in Operations Research and Enterprise Systems (<u>ICORES 2015</u>), January 10-12, 2015, Lisbon, Portugal.
	Member of the Program Committee of X Spanish Congress in Metaheuristics, Evolutive and Bioinspired Algorithms (MAEB'15), February 4-6, 2015, Mérida, Spain.
	Member of the Program, Proceedings and Registration Committee of International Conference on Risk Analysis ICRA6 / RISK 2015, May 26-29, 2015, Barcelona, Spain.

2014	Co-Chair of the Organization Committee of 20th Conference of the International Federation of Operational Research Societies, July 13-18, 2014, Barcelona, Spain. (IFORS 2014)
	Member of the Scientific Program Committee of ICAOR 2014 (6 th International Conference on Applied Operational Research (<u>ICAOR 2014</u>), July 29-30, 2014, Vancouver, Canada.
	Member of the International Program Committee of ICORES 2014 (3 rd International Conference in Operations Research and Enterprise Systems (<u>ICORES</u> 2014), March 6-8, 2014, Angers, France.
	Member of the Program Committee of Optimization 2014 (Optimization 2014), July 28-30, 2014, Guimarães, Portugal.
2013	Member of the Program Committee of 4th International Conference on Computational Logistics , September 25-27, 2013, Copenhagen, Denmark (ICCL 2013)
	Member of the Program Committee of 10 th Metaheuristics International Conference, August 5-8, 2013, Singapore. (MIC 2013)
	Member of the Program Committee of 8th International Workshop on Hybrid Metaheuristics , May 23-25, 2013, Ischia Island (Napoli), Italy. (<u>IWHM</u>)

Advising

(7 PhD thesis advisor)

02/2013	Pedro Portugal de Sousa Nunes
	Modelos Regret aplicado a Problemas de Localização (Regret models applied to Location Problems)
	University of the Azores, Portugal. (co-adviser Prof. Francisco Silva)
01/2009	Susana Isabel de Matos Fernandes
	Optimised Search Heuristics: Combining Metaheuristics and Exact Methods to solve Scheduling
	Problems. University of Algarve, Portugal.
09/2008	José Fernando Alvarez
	Optimization Algorithms for Maritime Terminal and Fleet Management. Universitat Pompeu Fabra, Spain
03/2006	Deolinda Maria Lopes Dias Rasteiro
	Optimização em redes com Parâmetros Aleatórios (Network Optimization with Random Parameters).
	University of Aveiro, Portugal (co-adviser).
02/2006	Rita Portugal
	Novas abordagens para a Geração de Serviços de Pessoal Tripulante em Empresas de Transporte (A new
	approach for the Drivers Scheduling Problem in Transportation Companies). University of Lisbon,
	Portugal. (co-adviser Prof. José Pinto Paixão)
01/2006	Juan Pablo Soto
	Reverse Logistics: Models and Applications. Universitat Pompeu Fabra, Spain.
03/2004	Rita Ribeiro
	Integrated distribution management problems: an optimization approach. Universitat Pompeu Fabra,
	Spain.

Professional activities

- Journal of Metaheuristics: Methods and Applications, Editorial Advisory Board, http://www.degruyter.com/view/j/meta
- Journal of Industrial Engineering and Management, Editorial Board (Production, Logistics, Quality, and Operational Research) (http://www.jiem.org/).
- Journal of Applied Operational Research (JAOR), Editorial Board (http://www.tadbir.ca/jaor.htm).
- Referee for European Journal of Operational Research, Computers & Operations Research, INFORMS Journal on Computing, Annals of Operations Research, Management Science, Operations Research, Computational Optimization and Applications, Journal of Heuristics, Journal of Scheduling, Journal of Metaheuristics, Omega-The International, etc.

Teaching Experience

- Teaching experience for more than 25 years.
- Teaching the following courses: Quantitative Methods for Business, Operations Research, Operations Management, Logistics and Supply Chain Management at Faculty at Economics and Business Sciences, Universitat Pompeu Fabra.
- Teaching in the following programs: Bachelors's Degree, Faculty of Economics and Business Sciences, UPF; Masters of Science, Barcelona School of Management, UPF.
- 10% top rating on overall quality of instructor for the undergraduate degree for several years.
- Mèrits de Docència (Five Merits in Teaching) (04/01/1988 to 03/01/1993), (04/01/1993 to 11/09/1998), (12/09/1998 to 11/09/2003), (12/09/2003 to 11/09/2008), (12/09/2008 to 11/09/2013). Catalan University Quality Assurance Agency, AQU, Generalitat de Catalunya.
- Award to the best Teaching Plan for 2008-2009. (Premi al Millor Pla Docent del curs 2008-2009 de la Facultat de Ciències Econòmiques i Empresarials, pel Pla Docent de l'assignatura Distribució Comercial.)
- UPF funded projects Research Innovation for the creation of new materials for the following course: Business Logistics. Teaching Innovation Project: PlaCQUID 2013-2014; 2011-2012; 2009-2010; 2007-2008; 2003-2004.

Plaquid de Suport a la Innovació i la Qualitat Docent" gestionada por el *Centre per la Qualitat i la Innovació Docent.* IP: Helena Ramalhinho Lourenço.

2016	Politecnico de Milano, Italy Dipartimento di Elettronica, Informazione e Bioingegneria (DEIB) • Integer Linear Programming and Scheduling. PhD course.
1997 - present	 Department of Economics and Business, Universitat Pompeu Fabra Quantitative Methods for Management (undergrad course in European Higher Education Area (Espacio Europeo de Enseñanza Superior) since 2010/2011) Business Logistics (undergrad course in European Higher Education Area (Espacio Europeo de Enseñanza Superior) since 2007/2008) (teach in English and Spanish) Operations Management (Full-time MBA) Supply Chain Management (Full-time MBA) Logistics (Master's and Ph.D. course) Operations Research (undergrad course) Production and Operations Management (undergrad course) Organization and Methods (undergrad course)
1997 - present	Barcelona School of Management (previously Institut de Educació Continua (IDEC)), Universitat Pompeu Fabra, Spain. Collaboration in the following programs: • Master of Science in IC Strategic Mangement (Official Master) • Applied Economic Analysis (Masters) • Business Logistics (Masters) • Economy of Health and Sanitation Management (Masters) • International e-business (Masters) • Logistics Management (Masters) • Marketing (Masters and Executive Masters) • MBA Part-Time (Masters) • MBA Full-Time (Masters)
1988 - 1996 1989 - 1991	Department of Statistics and Operations Research, Faculdade de Ciências, University of Lisbon, Portugal. Combinatorial Models (Masters course) Heuristics Techniques (Masters course) Operations Research Models (Masters course) Combinatorial Optimization (undergrad course) Introduction to Operations Research (undergrad course) School of Operations Research and Industrial Engineering, Cornell University, USA. Teaching Assistant. Graph Theory and Network Flows (Ph.D. course)
	Discrete Optimization (undergrad course) Optimization I (undergrad course) Courses "in-company" in the following companies: Banco Sabadell, Spain Caixa de Manresa, Spain CINESA, Spain DAMM, Spain Danone, Spain EDP, Portugal Navision, Spain

Service Assignments

- Membre assessor de la Comissió específica de Ciències Socials de la Comissió de Professorat Lector i Professorat Col·laborador, Agència per a la Qualitat del Sistema Universitari de Catalunya (AQU) (2015-present) (2006-2009).
- Vice-Dean (*vice-decana*) of Economics and Institutional Relations of the School of Economics and Business, Universitat Pompeu Fabra, Spain (2002-2007).
- Co-Director of the Master in ICT Strategic Management, Barcelona Business School, Universitat Pompeu Fabra (2011-2014).
- Peer Reviewer for the Dutch Social Science Research Council, The Nederland (2003-2004).
- Member of the Grant Review Committee, Ministry for Education, Italy (2002-2003).
- Member of the External Evaluation Committee for the Industrial Engineering and Management Program in Portuguese Universities. Invited by the Ministry of Education of the Portuguese Government (2001-2002).