

PERSONAL INFORMATION

LUÍS MIGUEL VELEZ LAPÃO



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Sex Male | Date of birth 23/07/1968 | Nationality Portuguese

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CURRENT POSITION

- Senior Researcher and Lecturer, with Habilitation (like the German system) in International Public Health: Health Information Systems (July 2016) at the International Public Health and Biostatistics Unit, also a WHO Collaborating Center for Health Workforce Policy and Planning. Instituto de Higiene e Medicina Tropical (IHMT), Universidade Nova de Lisboa (UNL): So far 4 of my students have finished the PhD (plus 6 ongoing, 2 to finish in 2018) and 20 have finished MSc (plus 2 ongoing).
- Invited Professor at School of Science and Technology (UNL), since 2015.
- Coordination and lecturing: Health Information Systems' unit (at IHMT, in both Master in Public Health and PhD in International Health), Hospital Management's unit (at School of Science and Technology, Master in Biomedicine Engineering).
- Member of the Scientific Committee of the Doctoral Program on International Health
- Population Health, Policies and Services Group Leader at Global Health and Tropical Medicine Research Center (evaluated as "excellent"), since 2016.
- Associate Editor of BMC Medical Informatics and Decision-Making
- President of the Garcia de Orta Association for Cooperation and Development, a NGDO focused on healthcare interventions in PALOP countries (since 2013).

WORK EXPERIENCE

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| 2014 | Visiting Professor of Healthcare Management at the Medical Management Center at Karolinska Institutet, Sweden. |
| 2009 – 2013 | Invited Assistant Professor of International Public Health and Management, at the Instituto de Higiene e Medicina Tropical, Univ. Nova de Lisboa (Portugal). |
| 2009 | Visiting Professor of Healthcare Management (Executive Level) at the Hamdan Bin Mohammed University. Master in Public Health. Dubai (United Arab Emirates). |
| 2008 – 2010 | PACES Healthcare Management Training Programme Scientific Coordinator (Executive level). National Primary Healthcare Task Force. Ministry of Health. (Portugal). |
| 2007-2011 | Affiliated Professor of Project Management at the Biostatistics and Medical Informatics |

- 2006-2014 Department –School Medicine of the Porto University. Porto (Portugal).
CINTESIS Research member, Oporto University. Oporto (Portugal).
- 2002-2008 Health Sector Coordinator. Instituto Nacional de Administração (National Institute for Public Administration). Oeiras (Portugal).
- 2000-2002 Consultant (Information Technologies and Telecommunications, Healthcare). The Boston Consulting Group. Lisbon (Portugal) and Madrid (Spain).
- 1998-2000 Marketing Manager (IT and Telecommunications). COMPTA. Lisbon (Portugal).
- 1996-1998 Research Fellow (Non linear Optics). Max-Planck Institutet. Mainz (Germany).
- 1992 Researcher (Plasma Physics Engineering). Joint European Torus. Oxford (UK).
- 1990-1999 Researcher Assistant. Electrodynamics Center. Instituto Superior Técnico. Lisboa.

EDUCATION AND TRAINING

- **Habilitation in International Health. Theme:** Digital Transformation of Healthcare (Healthcare Information Systems, 5 ECTS Course) - Universidade Nova de Lisboa (July 2016).
- **PhD in Systems Engineering (Health Management),**
Technical University of Lisbon, with a Thesis on “Smart Healthcare - Hospital Systems Management in Complex Environments” (2004-2007).
- **Harvard’s Driving Governance Performance Executive Course,**
John F. Kennedy School of Government, Harvard University/Instituto Nacional de Administração, (June-July, 2005).
- **Post-graduation in Business and Industrial Management**
Thesis: “*Information Systems Investments’ Scenarios in the context of the Learning Organization*”
New University of Lisbon (1997-1998).
- **A Master Degree in Physisc (Nuclear Fusion Engineering),**
Thesis on “*Non-Linear Electromagnetic Waves Instabilities’ Control*” (*Plasma Physics*)
Technical University of Lisbon (1992-1995).
- **Degree in Physics Engineering**
Instituto Superior Técnico, Technical University of Lisbon
1987/1992 (five year course).

PERSONAL SKILLS

Mother tongue(s) Portuguese

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	Fluent	Fluent	Fluent	Fluent	Fluent
French	Good	Independent user	Good	intermediate	intermediate
Spanish	Proficient	Proficient	Proficient	Proficient	Independent user

Research Projects

Coordination (PI, INFAC, WP 6 – Public Health Information Course) European Union Joint Action on Health Information InfAct (Lead by Belgium Institute of Public Health, in collaboration with Portuguese Directorate of Health and Finland Institute of Public Health. (2018-2020).

Coordination (PI) project **Elemental_Diabetics (ROCHE)**: Evaluation of the eHealth service supporting diabetics patients, in collaboration with the two hospitals and one primary care center (2017-2018).

Coordination (PI) project **iFADO (National Institute for Blood and Transplants)**: Designing online services supporting the identification of potential donor patients combining design science with gamification (2016-2018).

Coordination (PI) European Economic Area Grants Project HAITool: Hospital Antibiotic Stewardship Intervention including the development of an information system. Collaboration with University of the Northern Norway and University Hospital of Geneva. (2015-2016) [230 000 €]

Member of the World Bank project **TECH-4: Telemedicine services in Angola** (supporting the municipalisation of care services), led by University Hospital Geneva, in collaboration with the Ministry of Health of Angola. [200 000€]

Coordination (PI) FCT Project OSYRISH: “Organizational Intervention to support the Management and the reduction of hospital-acquired infections – Hand hygiene and Antibiotic Stewardship” (PTDC- IVC-COM-5016-2012). 2013-2015 (Portugal and Cape Verde). Collaboration with Karolinska Institutet. [65 000 €]

Member of the **MOMENTUM Team (European Commission)** Blueprint for telemedicine in Europe. 2012-2015.

Member of the **STEM project Team (European Commission)** Cost-Benefit Analysis of Capacity Strengthening Intervention in Mozambique 2014-2015. Collaboration with University Eduardo Mondlane. [120 000€]

Coordination (PI) INSA Project AVALACES: Identifying the Primary-care management models in Portugal, after Primary-care reform. (2012-2014) [20 000€]

Coordination (PI) FCT Project e-PharmaCare: eHealth combining Primary-care and Pharmacy Services (PTDC/CCI-CIN/122690/2010). Collaboration with University Hospital of Geneva. (2012-2014) [43 000€]

Coordination Work Package 4: Process Mining and Process Re-Engineering Support. **OPTIM** (2010-2013) Optimizing Information Systems for healthcare: improving Graphical User Interface and Storage Management through Machine Learning techniques on user logs data, (Fundação para a Ciência e Tecnologia). 2009-2012

Coordination (PI) Project LACES/AGO. Agrupamentos de Centros de Saúde (ACES) management Models (2010-2012). Collaboration with AGO and the Ministry of Health. [40 000€]

Scientific Coordination (PI) FORGEST (May 2010- October 2011) Human Resources Management Training Program (Angola, Cape Verde, Guinea-Bissau, Mozambique, São Tomé e Príncipe, East Timor). European Commission (PADRHSS_PALOP (2007/020-847) PAMA) in collaboration with WHO. 2009-2012. [400 000€]

Coordination (PI) Centro Hospitalar de Lisboa Central Organizational Integration: Complexity systems, processes modelling and decision making. Results: the integration of 4 hospitals into one organization and a couple of papers (2004-2005). [82 000€]

Coordination (PI): Centro Hospitalar do Baixo Alentejo Internet Decision Support System: patient interaction systems integration. Results: the development of a set of management projects, a MSc degree and three papers (INA and CHBA/ARS Alentejo) 2006-2008; [100 000€]

Coordination (PI): ULSNA Systems Integration: Decision making systems integration. (2007-2008) Results: the development of a set of management projects, one conference paper; [110 000€]

Member of the team: Hospital São Sebastião Cardiology Unit: clinical systems and systems integration security, cardiology informatics and mobile services (INA/IST/Ericsson) 2005-2006;

Coordination (PI): Information Systems Strategy & Strategic Balanced Score Card. Portuguese Institute of Oncology Lisbon (INA/ IPO-FG Lisbon) 2004-2005;

Recent Publications

Lapão, LV, Mira da Silva, M and Gregório, J. (2017) **Implementing an online pharmaceutical service using design science research**. BMC Medical Informatics and Decision Making 17, 1: 31.

Lapão LV, Dussault G. (2017) **The contribution of eHealth and mHealth to improving the performance of the health workforce: a review**. Public Health Panorama 3 (3), 463-471.

LV Lapão, A S. Simões, M Maia, J Gregório, P Póvoa (2017) HAITool – using innovative design science to collaboratively implement an antibiotic stewardship decision-supporting smart system. Antimicrobial Resistance and Infection Control 6 (Suppl 3), 3-4

Lapão, LV, Arcêncio, R.A, Popolin, MP, & Rodrigues, LBB (2017). The role of Primary Healthcare in the coordination of Health Care Networks in Rio de Janeiro, Brazil, and Lisbon region, Portugal. *Ciência & Saúde Coletiva*, 22(3), 713-724.

Marques, R... Lapão LV (2017) **How Can Information Systems Provide Support to Nurses' Hand Hygiene Performance? Using Gamification and Indoor Location to Improve Hand Hygiene Awareness and Reduce Hospital Infections.** *BMC Medical Informatics and Decision-Making*, 17 (1), 15

J Gregório, AM Cavaco, LV Lapão (2017) How to best manage time interaction with patients? Community pharmacist workload and service provision analysis. *Research in Social and Administrative Pharmacy* 13 (1), 133-147

LV Lapao, JPG Gregório, P Póvoa (2017) The potential and risks of internet-of-things for patient safety – using indoor-location systems to improve nurses' hand hygiene performance. *Antimicrobial Resistance and Infection Control* 6 (Suppl 3), 3-4.

J Gregorio, LV Lapao (2017) e-Health pharmaceutical services challenges: linking patients, pharmacists and physicians: lessons learned from ePharmacare Project. *International Journal of Clinical Pharmacy* 39 (3), 607-608

LV Lapao, A Simoes, M Maia, J Gregorio (2017) HAITool: supporting clinical pharmacist's role on antibiotic stewardship through an innovative information system. *International Journal of Clinical Pharmacy* 39 (3), 608-608

A Correia, V Azevedo, LV Lapão (2017) Implementation of Telemedicine in Cape Verde: Influencing Factors. *Acta Médica Portuguesa* 30 (4), 255-262

D Macaia, LV Lapão (2017) The current situation of human resources for health in the province of Cabinda in Angola: is it a limitation to provide universal access to healthcare? *Human resources for health* 15 (1), 88

MS Paulo, T Loney, LV Lapão (2017) The primary health care in the emirate of Abu Dhabi: are they aligned with the chronic care model elements? *BMC health services research* 17 (1), 725

2016

Lapão, L. V. (2016). Lean in the Health Management: An opportunity to improve focus on the patient, respect for professionals and quality in the health services. *Acta Médica Portuguesa*, 29(4), 237-239. (IF: 0.06)

Simões AS, Couto I, Toscano C, Gonçalves E, Póvoa P, Viveiros M & Lapão LV. (2016) **Prevention and control of antimicrobial resistant healthcare associated infections: the Microbiology Laboratory rocks!** *Frontiers in Microbiology*, 7, 855. (IF: 4.165)

Lapão, L. V. (2016). The Importance of Time in Developing a Boundaryless Hospital: An Example from Northern Portugal. In *Boundaryless Hospital* (pp. 81-101). Springer Berlin Heidelberg.

Lapão, L. V., Marques, R., Gregório, J., Pinheiro, F., Póvoa, P., & Mira, D. S. M. (2016). Using Gamification Combined with Indoor Location to Improve Nurses' Hand Hygiene Compliance in an ICU Ward. *Studies in health technology and informatics*, 221, 3-7.

Gregório, J., Cavaco, A. M., & Lapão, L. V. (2016). How to Best Manage Time Interaction with Patients? Community Pharmacist Workload and Service Provision Analysis. **Research in Social and Administrative Pharmacy.** (IF: 2.403)

Popolin, M. P., Touse, M. M., Yamamura, M., Rodrigues, L. B. B., da Cunha Garcia, M. C., Arroyo, L. H., Lapão LV ... & Arcencio, R. (2016). Integrated health service delivery networks and tuberculosis avoidable hospitalizations: is there a relation between them in Brazil?. **BMC Health Services Research**, 16(1), 1.

2015

LV Lapão (2015) Seriously Implementing Health Capacity Strengthening Programs in Africa: Comment on "Implementation of a Health Management Mentoring Program: Year-1 Evaluation of Its Impact on Health System Strengthening in Zambézia Province, Mozambique". **International Journal of Health Policy and Management** 4 (10), 69.

LV Lapão, A Silva, N Pereira, P Vasconcelos, C Conceição (2015) Ebola impact on african health systems entails a quest for more international and local resilience: the case of african portuguese speaking countries. **The Pan African Medical Journal**. 2015;22 (Supp 1): 15. doi:10.11604/pamj.supp.2015.22.1.6653

L Gonçalves, Z Santos, M Amado, D Alves, R Simões, A P Delgado, A Correia, J Cabral, **L V Lapão**, I Craveiro (2015) Urban Planning and Health Inequities: Looking in a Small-Scale in a City of Cape Verde. *PLoS One*. DOI: 10.1371/journal.pone.0142955.

J Gregório, G Russo, **LV Lapão** (2015) Pharmaceutical services cost analysis using time-driven activity-based costing: A contribution to improve community pharmacies' management. **Research in Social and Administrative Pharmacy**.

LV Lapão (2015) The challenge of benchmarking health systems: is ICT innovation capacity more systemic than organizational dependent? **Israel journal of health policy research** 4 (1), 1.

LBB Rodrigues, ..., **LV Lapão**, ... & R Arcêncio (2015) Assessment of the coordination of integrated health service delivery networks by the primary health care: COPAS questionnaire validation in the Brazilian context. **BMC Family Practice** 16, 87-96

ÂM Pizarro, JP Gregório, **LV Lapão** (2015) The effect of pharmaceutical services-based eHealth intervention on chronic patient health outcomes. **Studies in health technology and informatics** 210, 464-466

J Gregório, Â Pizarro, A Cavaco, R Wipfli, C Lovis, SM Mira, **LV Lapão** (2015) Online Pharmaceutical Care Provision: Full-Implementation of an eHealth Service Using Design Science Research. **Studies in health technology and informatics** 210, 261-265

J Gregório, ..., **L Lapão** (2015). Pharmaceutical services cost analysis using time-driven activity based costing in a sample of Portuguese community pharmacies. **International Journal of Clinical Pharmacy** 37 (2), 403-404

MS Ney, CR Pierantoni, **LV Lapão** (2015) Professional evaluation systems and contracting of the management in Primary Health Care in Portugal. **Saúde em Debate** 39 (104), 43-55

LV Lapão, R Marques, J Gregorio, M Mira-da-Silva (2015) Nurses' self-improvement hand-hygiene compliance in a hospital ward: combining indoor location with gamification data presentation. **Antimicrobial Resistance and Infection Control** 4 (Suppl 1), I11. (IF: 0.49)

J Gregório, I Santos, F Pinheiro, P Póvoa, **L Lapão** (2015) Pursuing nurses' work effectiveness and better hand-hygiene compliance in a intensive care unit (ICU) ward: application of lean methodologies. **Antimicrobial Resistance and Infection Control** 4 (Suppl 1), P281. (IF: 0.49)

2014

Gregório J, Cavaco A and **Lapão LV** (2014) A scenario-planning approach to human resources for health: the case of community pharmacists in Portugal. **Human Resources for Health**, 12:58 (IF: 1,92)

Pereira, R., da Silva, M. M., & **Lapão**, L. V. (2014). Business/IT Alignment through IT Governance Patterns in Portuguese Healthcare. **International Journal of IT/Business Alignment and Governance**, 5(1), 1-15.

Leone C, Dussault G & **Lapão LV** (2014) Reforma na Atenção Primária à Saúde e implicações na cultura organizacional dos Agrupamentos dos Centros de Saúde em Portugal, **Cadernos de Saúde Pública**, Rio de Janeiro, 30(1):149-160. (IF: 0.888)

2013

Cruz-Correia R, Boldt I, Lapão LV, Pereira C., Rodrigues PP, Ferreira AM, Freitas A (2013). **Analysis of the quality of Hospital Information Systems audit trails**. *BMC Medical Informatics and Decision Making*. 13:84. (IF: 1,50)

Jaruseviciene L, Liseckiene I, Valius L, Kontrimiene A, Jarusevicius G & **Lapão LV** (2013). Teamwork in primary care: Perspectives of general practitioners and community nurses in Lithuania. **BMC Family Practice**, 14:118. (IF: 1,74)

LV Lapão & M Lopes (2013) Managing Health Systems in a Globalized World: Telemedicine Service Improves Access to Pediatric Cardiology in Cape Verde. **IST-Africa 2013** Conference Proceedings, 11-18.

Gregório J & **Lapão LV** (2013). Uso de cenários estratégicos para planeamento de Recursos Humanos em Saúde: O caso dos Farmacêuticos Comunitários em Portugal 2010-2020. **Revista Portuguesa de Saúde Pública**. 30 (2): 125-142. (IF: 0,117)

Buchan J, Temido M, Fronteira I, **Lapão LV**, Dussault G. (2013) Nurses in Advanced Roles: A Review of Relevance for Portugal. **Latin American Journal of Nursing**. 21: 38-46. Jan/Fev 2013. (IF: 1,18)

2012

LV Lapão, G Dussault (2012) From policy to reality: clinical managers' views of the organizational challenges of primary care reform in Portugal. **The International Journal of Health Planning and management**. (IF: 0,971)

2011

Lapão LV & Dussault G. (2011) "PACES: a National leadership program in support of Primary-Care Reform in Portugal". **Leadership in Health Services**, 24 (4): 295-307. (IF: 1.13)

2010

Grilo A, **Lapão LV**, Jardim-Gonçalves R & Cruz-Machado V (2010). The Role of the CIO in the Development of Interoperable Information Systems in Healthcare Organizations. **Handbook on Business Information Systems**, 25. (Web of Science)

2009

Gomes P & **Lapão L V** (2009). The role of a nation-wide information system in improving the access to surgery in Portugal. In Medical Informatics in a United and Healthy Europe: Proceedings of MIE 2009, the XXII International Congress of the European Federation for Medical Informatics (Vol. 150, p. 71-75). IOS Press. (Web of Science)

• BOOKS

- **The Engineering and Technology for the Development of Portugal: Prospective and Strategy, 2000-2020**, in Portuguese, Editorial Verbo, 2000. (Author of two Chapters)
- **Technology Commercialization: DEA and Related Analytical Methods for Evaluating the Use and Implementation of Technical Innovation**. (Kluwer 2002); (Chapter co-author)
- **Complexity and Reform of Public Administration: Findings and Case Studies**, INA, 2007; (First author)
- **Health Informatics - Best Practices and New Perspectives**, in Portuguese, UFP 2007; (Chapter author)
- **Handbook of Business Information Systems**, World Publishing, 2010; (Chapter co-author)
- **Advanced Management Program for Primary-healthcare center Managers**, in Portuguese, INA, 2010; (Author)
- **40 Years of Health after April** (1974), in Portuguese, Almedina, 2014. (Chapter co-author)
- The importance of time to develop a Boundaryless Hospital: An example from the North of Portugal in **Boundaryless Hospital**, Center for Advance Studies in Management (Germany), Springer 2016 (Chapter author)