



Antonio R. Hurtado

ABOUT ME

I am a business, science, and technology graduate with extensive international experience in industry, government, and the academic sector. My professional experience and personal drive are linked to sustainable economic development and company growth through the development of new markets and partnerships, financing, foreign investment attraction, and strategic management of technology and innovation.

WORK EXPERIENCE

Research Fellow – Water, Environmental and Agricultural Resources Economics (WEARE) Research Group

University of Córdoba [07/2023 – Current]

City: Córdoba

Country: Spain

- Support to the scientific coordination of the project Boosting Nexus Framework Implementation in the Mediterranean (BONEX) funded by the Partnership for Research and Innovation in the Mediterranean Area (PRIMA) / Horizon 2020.
- Preparation of proposals and execution of R&D&I projects funded by the European Commission (Horizon 2020, Horizon Europe, Interreg, etc.).

Consultant, Business Development and Innovation

Technological Corporation of Andalusia (CTA) [06/2021 – 06/2023]

City: Seville

Country: Spain

- Provided consulting services to universities, technology parks, large companies, and technology SMEs on topics related to the valorisation and transfer of knowledge and technology, development of technology and innovation partnerships, innovation auditing, development of technology and innovation management strategies, technology surveillance and foresight, and financing of R&D&I activities.
- Prepared proposals and implemented R&D&I projects funded by the European Commission (Horizon 2020, Horizon Europe, Interreg, etc.).
- Prepared proposals and provided consulting services funded by multilateral organizations (World Bank Group, United Nations, Inter-American Development Bank, etc.).

Business and Innovation Management Consultant

Independent Consultant [04/2020 – 06/2021]

City: Seville

Country: Spain

- Provided consulting services to companies, governments, economic development agencies and industry associations, identifying and developing opportunities for funding, foreign investment attraction, international business development, and technology partnerships in Portugal, Canada, Spain, and South America.

Managing Partner and Founder

FirstAscent International Lda [06/2017 – 12/2019]

City: Oporto



Country: Portugal

- Provided consulting services to companies, governments, economic development agencies and industry associations, identifying and developing opportunities for funding, foreign investment attraction, international business development, and technology partnerships in Portugal, Canada, Spain, and South America.

Director, Industry Engagement

Ministry of Economic Development and Trade, Government of Alberta [03/2016 – 05/2017]

City: Calgary (Alberta)

Country: Canada

- Provided leadership and direction to foster the development of Alberta's clean technology sector while ensuring close alignment with the province's innovation system.
- Led the design and implementation of strategies and action plans to increase the global competitiveness of Alberta's clean technology companies through the improvement of management skills and the adoption of best practices in innovation management.
- Prepared briefing notes, reports, speeches, and other support material for senior management (Assistant Deputy Minister, Deputy Minister, Minister of Economic Development and Trade, and the Premier of Alberta), advising on strategies, policies, and priorities to foster international technology partnerships and the development of emerging clean technology industries in Alberta.

Director, Business Innovation Capacity / Energy Innovation Solutions

Ministry of Innovation and Advanced Education, Government of Alberta [11/2014 – 03/2016]

City: Calgary (Alberta)

Country: Canada

- Coordinated efforts to increase collaboration and the establishment of local and international partnerships between industry, government, post-secondary institutions, and other innovation system stakeholders in the fields of coaching, mentoring and clean technology industry development.
- Conducted research and analysis to identify barriers and opportunities for the improvement of management skills and the adoption of best innovation management practices in Alberta.
- Coordinated efforts to accelerate the adoption and diffusion of innovations in Alberta's oil and gas industry to reduce costs, increase competitiveness and improve environmental performance.
- Conducted research and analysis of the local and global competitive environment to identify potential barriers and opportunities for the adoption and diffusion of innovations in Alberta's oil and gas industry.
- Coordinated efforts to increase collaboration and the establishment of partnerships between the energy industry and Alberta's innovation system.
- Prepared briefing notes, reports, speeches, and other support material for senior management (Assistant Deputy Minister, Deputy Minister, Minister of Innovation and Advanced Education, and the Premier of Alberta), advising on objectives, strategies, policies and priorities to accelerate the adoption and diffusion of innovations in Alberta's oil and gas sector.

Director, Financial Services Industry Development

Ministry of Innovation and Advanced Education, Government of Alberta [06/2012 – 10/2014]

City: Calgary (Alberta)

Country: Canada

- Led the development and implementation of strategies and action plans for the development of the financial services industry in the province of Alberta.
- Conducted research and analysis of the local and global competitive environment to identify potential barriers and opportunities for the development of Alberta's financial services industry.
- Coordinated the design and implementation of international marketing strategies and action plans, the development of marketing collaterals, and the organization of industry-related events.
- Prepared briefing notes, reports, speeches, and other support material for senior management (Assistant Deputy Minister, Deputy Minister, Minister of Innovation and Advanced Education, and the Premier of Alberta), advising on objectives, strategies, policies and priorities to foster the competitiveness of Alberta's financial services industry.
- Led efforts to increase collaboration between the financial industry and the academic sector, including the development of the Alberta Financial Industry Internship Program.



Manager, Industry Development

Ministry of Finance and Enterprise, Government of Alberta [07/2010 – 07/2012]

City: Edmonton (Alberta)

Country: Canada

- Reporting to the Executive Director of the Industry Development Branch, coordinated the preparation and review of briefing notes, reports, speeches, and other support material for senior management (Assistant Deputy Minister, Deputy Minister, Minister of Finance and Enterprise, and the Premier of Alberta), advising on objectives, strategies, policies, and priorities within mandated guidelines of the Ministry's overall economic development plans.
- Provided support to industry development initiatives in Alberta, including strategy development, market opportunity identification, and the organization and execution of industry-related events.
- Conducted research, analysis, and made recommendations on policies and programs to foster the competitiveness of Alberta's industry and economy.
- Coordinated the evaluation of Alberta's business and regulatory environment to identify potential barriers and opportunities for economic and industrial development in the province.
- Provided comprehensive cover-off for industry sector directors during routine and longer absences, as required. Sectors included: Aerospace and Defence; Building Products; Environmental Products and Services; Financial Services; Logistics and Transportation; Architecture, Engineering and Construction; Metal Manufacturing; Energy Commodities; Chemicals and Petrochemicals; and Oil and Gas Equipment and Services.

Industry Development Officer

Ministry of Finance and Enterprise, Government of Alberta [09/2008 – 06/2010]

- Reporting to the Executive Director of the Industry Development Branch, coordinated the preparation of briefing and support materials for senior management, Deputy Minister, and Minister of Finance and Enterprise.
- Coordinated the completion of action requests by the Industry Development Branch and the comprehensive review of documents according to the Ministry's mandate and standards.
- Conducted research on programs the Government of Alberta could undertake to assist firms in taking advantage of opportunities or improving competitiveness of Alberta's industry.
- Assisted in the development and execution of projects, events, and information products to promote opportunities for the Alberta industry.
- Provided support to the activities of the Industry Development Branch through the collection, analysis, and dissemination of economic, industry, and business climate information to internal and external clients. Sectors covered included: Financial Services, Aerospace & Defence, Emerging Industries, Building Products, Forest Products, and Environmental Products & Services.

Project Executive – Innovation

Department of Business, Government of New Brunswick [01/2006 – 09/2008]

City: Fredericton (New Brunswick)

Country: Canada

- Assisted companies, universities and research organizations with business counselling and strategic funding for research and development, proof of concept, intellectual property protection, technology licensing and commercialization, acquisition of specialized knowledge, acquisition of strategic assets, and adoption of technologies resulting in increased competitiveness.
- Facilitated information sharing and the establishment of joint projects between biosciences-related private companies, academic institutions and government research organizations.
- Reviewed research, business and marketing plans of public and private sector organizations to determine feasibility and strategic economic impact of government funding.
- Prepared briefing notes and provided recommendations on biosciences and related technologies for senior management and Minister of Business.

Director of Business Development

BioMedica Diagnostics Inc. [06/2005 – 11/2005]

City: Windsor (Nova Scotia)

Country: Canada

- Prepared and launched the company's marketing plan for Latin America and Eastern Europe.
- Identified target markets through the analysis of national health care systems, assessment of local regulations and international trade barriers, characterization of local distribution channels, identification and categorization of local and international competitors, analysis of risks and opportunities presented by the target countries, identification of unmet user needs, and direct communication with potential clients and partners.



- Built market positioning through the customization of the company's marketing tools and collaterals, design of pricing strategies, and adaptation of credit policies to the target markets.
- Prepared technical dossiers for the registration of the company's products in the target countries.

Medical Lab Manager & Pharmacy Director

Clinic of Specialties of Pedreiras [09/1991 – 06/1993]

City: Pedreiras (Maranhão)

Country: Brazil

- Trained, evaluated, and directly supervised a total of 9 laboratory and pharmacy technicians.
- Coordinated clinical activities with a total of 10 physicians, 2 nurses, and over 50 nursing technicians and other support personnel.

EDUCATION AND TRAINING

PhD in Social and Legal Sciences

University of Cordoba [2021 – Current]

City: Córdoba

Country: Spain

Website: <https://www.uco.es/>

Concentration: Business and Economics; System Dynamics.

Master of Business Administration

HEC Montréal [2003 – 2005]

City: Montreal (Quebec)

Country: Canada

Website: <https://www.hec.ca/>

Concentration: International Business Management and Development Economics.

PhD in Cell Biology

University of Alberta [1998 – 2002]

City: Edmonton (Alberta)

Country: Canada

Website: <https://www.ualberta.ca>

Concentration: Molecular and Cell Biology of Yeasts.

Thesis: "Identification and characterization of genes involved in the regulation of filamentous growth of the dimorphic yeast *Yarrowia lipolytica*".

Pharmacy and Biochemistry

Federal University of Maranhão [1986 – 1991]

City: São Luis (Maranhão)

Country: Brazil

Website: <https://portalpadrao.ufma.br/>

Specialization: Pharmacy and Clinical Laboratory Science.

Dissertation: "Evaluation of the microbiological quality of the crabmeat commercialized in markets of São Luís - MA" [in Portuguese].

Master of Biotechnology

University of Sao Paulo [1994 – 1997]

City: São Paulo (São Paulo)

Country: Brazil

Website: <https://www.usp.br>



Concentration: Genetic Engineering of Microorganisms and Fermentation Technology.

Dissertation: "Cloning and expression of the *Saccharomyces cerevisiae* SUC2 gene in *Pichia pastoris*: Its use as a dominant marker for the transformation of this yeast and evaluation of biomass production from sucrose" [in Portuguese].

LANGUAGE SKILLS

Mother tongue(s): **Spanish**

Other language(s):

English

LISTENING C2 READING C2 WRITING C2

SPOKEN PRODUCTION C2 SPOKEN INTERACTION C2

Portuguese

LISTENING C2 READING C2 WRITING C2

SPOKEN PRODUCTION C2 SPOKEN INTERACTION C2

French

LISTENING B2 READING B2 WRITING A2

SPOKEN PRODUCTION B1 SPOKEN INTERACTION B1

Italian

LISTENING B2 READING B2 WRITING A2

SPOKEN PRODUCTION B1 SPOKEN INTERACTION B1

Russian

LISTENING A2 READING A1 WRITING A1

SPOKEN PRODUCTION A1 SPOKEN INTERACTION A2

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

DIGITAL SKILLS

Excellent command of Microsoft Office (Word, Excel, Outlook) / Adobe (Adobe Photoshop, Adobe Illustrator, Adobe

DRIVING LICENCE

Driving Licence: B 05/2023 – 05/2028

COMMUNICATION AND INTERPERSONAL SKILLS

Communication Skills

- Fully fluent in English, Spanish and Portuguese.
- Intermediate/working knowledge of the French and Italian languages. Basic Russian.
- Ten years of experience in the preparation and review of speeches, briefings, reports and recommendations for Premiers, Ministers, Deputy Ministers and other senior government management.
- Experience in the preparation and review of articles for publication in international journals, non-refereed contributions for meetings and congresses, and government reports and publications.
- Extensive experience in the organization of industry, government, academic, and multi-stakeholder events.
- Extensive experience in oral presentations to groups of experts and multidisciplinary audiences.

ORGANISATIONAL / MANAGERIAL SKILLS

Organisational / Managerial Skills

- Provided leadership and direction for the development, expansion, and competitiveness of emerging clean technology industries in Alberta while ensuring close alignment with the province's innovation system programs.
- Led the design and implementation of strategies and action plans to increase the global competitiveness of Alberta's companies through the improvement of management skills and the adoption of best practices in innovation management.
- Previously responsible for the development and implementation of policies, strategies, and action plans to develop the financial services industry and the bioeconomy in the Canadian provinces of Alberta and New Brunswick, respectively.
- Broad experience in the coordination of complex projects involving industry, government, economic development agencies, and academic sector stakeholders.
- Over ten years of experience interacting with high level government officials, senior managers from the academic sector, and chief executives from economic development agencies and the private sector.
- Over ten years of experience in international business development, investment attraction, and trade development.
- Led the coordination of senior government official missions to China, England, and the United States.



PUBLICATIONS

Publications

- **Hurtado, A. R.**, Berbel, J. (2023) Learning, knowledge, and the role of government: a qualitative system dynamics analysis of Andalusia's circular bioeconomy. *Bio-based and Applied Economics* 12(2): 141-164. <https://doi.org/10.36253/bae-13504>
- **Hurtado, C. A. R.**, Rachubinski, R.A. (2002) *YIBM1* encodes a 14-3-3 protein that promotes filamentous growth in the dimorphic yeast *Yarrowia lipolytica*. *Microbiology* 148(11): 3725-3735. <https://doi.org/10.1099/00221287-148-11-3725>
- **Hurtado, C. A. R.**, Rachubinski, R.A. (2002) Isolation and characterization of *YIBEM1*, a gene required for cell polarization and differentiation in the dimorphic yeast *Yarrowia lipolytica*. *Eukaryot. Cell* 1(4): 526-537. <https://doi.org/10.1128/ec.1.4.526-537.2002>
- **Hurtado, C. A. R.**, Beckerich, J.-M., Gaillardin, C., Rachubinski, R.A. (2000) A Rac homolog is required for induction of hyphal growth in the dimorphic yeast *Yarrowia lipolytica*. *J. Bacteriol.* 182(9): 2376-2386. <https://doi.org/10.1128/jb.182.9.2376-2386.2000>
- **Hurtado, C. A. R.**, Rachubinski, R.A. (1999) *MHY1* encodes a C2H2-type zinc-finger protein that promotes dimorphic transition in the yeast *Yarrowia lipolytica*. *J. Bacteriol.* 181(10): 3051-3057. <https://doi.org/10.1128/jb.181.10.3051-3057.1999>
- **Hurtado, C. A. R.**, Vicente, E.J. (1997) Cloning and expression of the *Saccharomyces cerevisiae* *SUC2* gene in *Pichia pastoris*: Its use as a dominant transformation marker and evaluation of the biomass production from sucrose. *Rev. Bras. Genet.* 20: S195. [in Portuguese]
- Vicente, E.J., Sartori, D.M., **Hurtado, C. A. R.**, Schenberg, A.C.G. (1994) *Alcaligenes eutrophus* is a beta-lactamase-secreting bacterium. *Rev. Bras. Genet.* 17: S211. [in Portuguese]

CONFERENCES AND SEMINARS

Conference Proceedings

- **Hurtado, A. R.**, Berbel, J. (2023) System dynamics analysis of the technology treadmill effect in Spain's agriculture sector. In XIV Congress of Agrifood Economics. Zaragoza, Spain, 6-8 September 2023. Zaragoza: Universidad de Zaragoza, 2023. pp. 193-196. <https://doi.org/10532/6717>
- **Hurtado, A. R.**, Berbel, J. (2023) The technology treadmill effect in the Spanish agricultural sector: a conceptual model of system dynamics. [in Spanish]. In XI Scientific Congress of Research Staff in Training of the University of Cordoba. Cordoba, Spain, 4 May 2023.
- **Hurtado, A. R.**, Berbel, J. (2021) Knowledge, innovation, and the role of government in the circular bioeconomy. In XIII Congress of Agrifood Economics. Cartagena, Spain, 1-3 September 2021. Cartagena: Universidad Politécnica de Cartagena, 2021. pp. 147-150. <http://dx.doi.org/10.31428/10317/10431>
- **Hurtado, A. R.**, Berbel, J. (2021) The dynamics of Andalusia's innovation system and the circular bioeconomy. ISPIM Innovation Conference. Berlin, Germany.
- Rubio, I. G. S., Camargo, M.E., Costa Jr., J. A., Astolfi Filho, S., **Hurtado, C. A. R.**, Vicente, E. J. (1997) Prospection of the Amazonian biodiversity for yeasts with biotechnological potential for biomass production [in Portuguese]. XIX Brazilian Congress of Microbiology. Rio de Janeiro, Brazil.
- Rubio, I. G. S., **Hurtado, C. A. R.**, Costa Jr., J. A., Astolfi Filho, S., Vicente, E. J. (1997) Construction of a promiscuous plasmid for yeast transformation [in Portuguese]. XXI Meeting of Microbial Genetics. Londrina, Paraná, Brazil.
- **Hurtado, C. A. R.**, Higuchi, K., Schenberg, A. C., Vicente, E. J. (1996) Genetic engineering of *Pichia pastoris* for the obtention of single-cell protein from sucrose [in Portuguese]. 42th National Congress of Genetics. Caxambu, Minas Gerais, Brazil.
- **Hurtado, C. A. R.**, Monteiro Neto, V., Reis Filho, S. A. (1995) Brief evaluation of the use of total coliforms, faecal coliforms and *Escherichia coli* as indicators of the presence of *Salmonella* sp. in crabmeat [in Portuguese]. XVIII Brazilian Congress of Microbiology. Santos, Brazil.
- **Hurtado, C. A. R.**, Monteiro Neto, V., Reis Filho, S. A. (1995) Evaluation of the microbiological quality of the crabmeat commercialized in São Luís-MA, Brazil [in Portuguese]. XVIII Brazilian Congress of Microbiology. Santos, Brazil.
- Sartori, D. M., **Hurtado, C. A. R.**, Vicente, E. J. (1995) In vivo construction of a new plasmid for sucrose utilization by bacteria [in Portuguese]. XX Annual Meeting of Microbial Genetics. Piracicaba, Brazil.
- Sartori, D. M., **Hurtado, C. A. R.**, Vicente, E. J. (1994) *Alcaligenes eutrophus* is a beta-lactamase-secreting bacterium [in Portuguese]. 40th National Congress of Genetics. Caxambu, Minas Gerais, Brazil.
- **Hurtado, C. A. R.**, Reis Filho, S. A. (1988) Control of infant diarrheal diseases in the State of Maranhão, Brazil [in Portuguese]. I Scientific Initiation Seminar of the Federal University of Maranhão. São Luís, Maranhão, Brazil.

HONOURS AND AWARDS

Honours and Awards

- 2012 Employee Excellence Award: Collaborative and Strategic Approaches, Ministry of Enterprise and Advanced Education, Government of Alberta, Canada.
- 2009 Alberta Finance and Enterprise Leadership Program, Ministry of Finance and Enterprise, Government of Alberta, Canada.



- HEC Montréal MBA Scholarship, HEC Montréal, Canada, 2003 – 2004
- 2001 Andrew Stewart Memorial Graduate Prize – in direct recognition of excellence in research at the doctoral level, University of Alberta, Canada.
- Teaching Development Training Fellowship, University of São Paulo, Brazil, 1995 – 1996
- CAPES Graduate Studentship Award, National Council for Graduate Studies (CAPES), Brazil, 1994 – 1996
- CNPq Technical Assistance Scholarship, National Council for Scientific and Technological Development (CNPq), Brazil, 1993 – 1994
- CNPq Scientific Initiation Scholarship, National Council for Scientific and Technological Development (CNPq), Brazil, 1988 – 1989.
- Brazil-Peru Undergraduate Student Exchange Program Scholarship Ministry of Foreign Affairs and Ministry of Education and Culture, Brazil, 1986 – 1991.

SPECIAL PROJECTS, COMMITTEES, AND WORKING GROUPS

Special Projects, Committees, and Working Groups (Selected List)

- Alberta Climate Change Innovation and Technology Framework, Member of the Framework Development Working Group, December 2015 -- May 2017.
- Alberta-United Kingdom Low Carbon Innovation and Growth Framework, Member of the Implementation Working Group, March 2016 – May 2017.
- Petroleum Technology Alliance of Canada (PTAC)'s Advisory Committee for Small and Medium-Sized Enterprises (SMEs), Representative of Alberta Economic Development and Trade, June 2015 – May 2017.
- Government of Alberta Technology Informing Policy Committee, Representative of Alberta Economic Development and Trade, October 2014 – May 2017.
- Alberta Climate Technology Task Force, Member of the Task Force Secretariat, December 2015 – December 2016.
- Alberta Innovates Technology Futures (AITF) / Working Group for the Review of the AITF's Technology Commercialization Programs, Representative of Alberta Innovation and Advanced Education, February 2015 – May 2015.
- Alberta Unconventional Energy Resources Working Group, Representative of Alberta Economic Development and Trade, June 2013 – March 2016.
- Southern Alberta Small Business Flood Recovery Task Force, Representative of Alberta Enterprise and Advanced Education, June 2013 – August 2013.
- Alberta Financial Services Industry Committee, Coordinator, February 2012 – October 2014.
- Government of Alberta Energy Efficiency and Sustainability Cross-Ministry Working Group, Representative of Alberta Enterprise and Advanced Education, January 2012 – March 2012.
- Standards Council of Canada – Provincial-Territorial Advisory Committee, Representative of the Government of Alberta, January 2011 – October 2011.
- Alberta Competitiveness Council, Financial Services Task Team Coordinator, June 2010 – May 2011.
- Atlantica Bioenergy Task Force, Representative of the Department of Business, Government of New Brunswick, July 2008 – September 2008.
- Canadian Advisory Group on Business Investment in the Responsible Development and Commercialization of Nanotechnology and Related Policy, Representative of the Government of New Brunswick, January 2008 – September 2008.
- Government of New Brunswick Interdepartmental Committee on Renewable Fuels, Representative of the Department of Business of the Government of New Brunswick, August 2006 – September 2008.
- Federal/Provincial/Territorial Life Sciences Working Group, Representative of the Government of New Brunswick, March 2006 – September 2008.
- Steering Committee for the Development of the New Brunswick Community College's Center of Excellence in Agricultural Sciences and Biotechnology, Representative of the Department of Business of the Government of New Brunswick, March 2006 – January 2008.
- Government of New Brunswick Working Group on Access and Benefit Sharing (ABS) of Genetic Resources, Representative of the Department of Business of the Government of New Brunswick, February 2006 – September 2008.

TEACHING ACTIVITIES

Teaching Activities

- Honorary Lecturer, "Regulatory, Political, and Strategic Framework of the Bioeconomy and the Circular Economy". Master's Program in Circular Bioeconomy and Sustainability, University of Cordoba, Spain, October 2021 – present.
- Lecturer, "Emerging Technologies and Innovation Management". MS Program in Technology Management, Lviv Business School, Ukrainian Catholic University, Lviv, Ukraine, December 2014 – December 2016.
- Contract Lecturer, "Strategy for Innovators". Centre for International Business Studies, School of Business, University of Alberta, Canada, October 2015 – December 2015.
- Teaching Development Fellow, "Microbiology". Department of Microbiology, University of São Paulo, Brazil, July 1995 – June 1996.



- Teacher, "Organic and Physical Chemistry". Olindina Freire High School, Pedreiras, Maranhão, Brazil, February 1992 – December 1992.
- Teaching Assistant, "Microbiology and Immunology". Department of Pathology, Federal University of Maranhão, Brazil, August 1990 – January 1991.

OTHER SCIENCE, TECHNOLOGY, AND INNOVATION ACTIVITIES

Other Science, Technology, and Innovation Activities

- High-Level Technical Expert. EUREKA Secretariat, European Commission, 06/2018 – present.
- Peer Reviewer, International Journal of Innovation Science. Emerald Insight, 10/2015 – present.
- Scientific Committee Member. International Society for Professional Innovation Management (ISPIM), July 2015 – present.
- Post-Doctoral Fellow. Faculty of Medicine and Dentistry, University of Alberta, Canada, October 2002 – May 2003.
- Visiting Researcher. School of Pharmaceutical Sciences, Showa University, Tokyo, Japan, July 1997 – October 1997.
- Visiting Researcher. Waksman Institute of Microbiology, Rutgers University, USA, September 1996 – December 1996.

NETWORKS AND MEMBERSHIPS

Memberships

- International Society for Professional Innovation Management (ISPIM)
- System Dynamics Society (SDS)
- Strategic and Competitive Intelligence Professionals (SCIP)

REFERENCES

References

Available upon request.