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## Current Positions

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Associate Professor	Department of Internal Medicine Pontificia Universidad Católica de Chile
Affiliate	Department of Biomedical Informatics and Health Education University of Washington, Seattle
Associate-Director	Chilean National Center for Health Information Systems

## Education

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PhD	Biomedical & Health Informatics University of Washington
Internal Medicine	Internal Medicine Residency, approved with distinction. April 2006. P. Universidad Católica de Chile.
MD	Medical Doctor. Approved with maximum distinction. December 2002. P. Universidad Católica de Chile.
Baccalaureate	(Licentiate in) Medicine. Approved with max. distinction. December 2000. P. Universidad Católica de Chile.

## Refereed Publications

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### *Peer-reviewed Journal Articles*

1. Soto M, Martinez-Gutierrez J, Momany M, Capurro D, Ciampi F, Cea E, Mergudich T, Puschel K. It's Still Personal: Preferences of Underserved Chilean Women on a Mobile Technology Intervention for Cervical Cancer Screening. JMIR Mhealth Uhealth 2018 (forthcoming). doi: 10.2196/mhealth.9494.
2. Conca T, Saint-Pierre C, Herskovic V, Sepulveda M, Capurro D, Prieto F, Fernandez-Llatas C. Analysis of Multidisciplinary Collaboration in the Treatment of Patients with Type 2 Diabetes in Primary Care using Process Mining. Journal of Medical Internet Research 2018;20(4):e127. DOI: 10.2196/jmir.8884
3. Momany MC, Martinez-Gutierrez J, Soto M, Capurro D, Ciampi F, Thompson B, Puschel K. Development of mobile technologies for the prevention of cervical cancer in Santiago, Chile study protocol: a randomized controlled trial. BMC Cancer 2017; 17 (1): 847.

4. Alvarez C, Rojas E, Arias M, Munoz-Gama J, Sepúlveda M, Herskovic V, Capurro D. Discovering role interaction models in the Emergency Room using Process Mining. Journal of Biomedical informatics 2017. <https://doi.org/10.1016/j.jbi.2017.12.015>
5. Rojas E, Sepulveda M, Munoz-Gama J, Capurro D, Traver V, Fernandez-Llatas C. Question-Driven Methodology for Analyzing Emergency Room Processes Using Process Mining. Applied Science 2017,7(3), 302; doi:10.3390/app7030302
6. Rojas E, Munoz-Gama J, Sepúlveda M, Capurro D. Process Mining in Healthcare: A Literature Review. Journal of Biomedical Informatics 2016; DOI doi:10.1016/j.jbi.2016.04.007.
7. Capurro D, Yetisgen M, van Eaton E, Black R, Tarczy-Hornoch P and the CERTAIN collaborative. Availability of Structured and Unstructured Clinical Data for Comparative Effectiveness Research and Quality Improvement: A Multi-Site Assessment. eGEMs (Generating Evidence & Methods to improve patient outcomes) 2014; 2(1): article 11.
8. Capurro D, Ganzinger M, Perez-Lu J, Knaup P. Effectiveness of eHealth Interventions and Information Needs in Palliative Care: A Systematic Literature Review. Journal of Medical Internet Research 2014;16(3):e72.
9. Capurro D, Cole K, Echavarría M, Joe J, Neogi T, Turner AM. The use of social networking sites for public health practice and research: a systematic review. Journal of Medical Internet Research 2014;16(3):e79.
10. Devine EB, Capurro D, van Eaton, E, Alfonso-Cristancho R, Devlin A, Yanez, ND, Yetisgen-Yildiz M, Flum DR, Tarczy-Hornoch P and the CERTAIN Collaborative. Preparing Electronic Clinical Data for Quality Improvement and Comparative Effectiveness Research: The SCOAP CERTAIN Automation and Validation Project. eGEMs (Generating Evidence & Methods to improve patient outcomes) 2013; 1(1) Article 16.
11. Rada G, Perez D, Capurro D. Epistemonikos: a free, relational, collaborative, multilingual database of health evidence. Stud Health Technol Inform 2013; 192: 486-490.
12. Olsen R, Dunsmoor-Su R, Capurro D, McMahon K, Gravett M. Correlation between spontaneous preterm birth and midtrimester maternal serum estriol. The Journal of Maternal-Fetal & Neonatal Medicine 2013. Online First DOI 10.3109/14767058.2013.815719.
13. Kirchhoff K, Capurro D, Turner AM. A Conjoint Analysis Framework for Evaluating User Preferences in Machine Translation. Machine Translation 2013; Online First DOI 10.1007/s10590-013-9140-x
14. Demiris, George; Parker Oliver, Debra; Capurro, Daniel; Wittenberg-Lyles, Elaine. Implementation Science: Implications for Intervention Research in Hospice and Palliative Care. The Gerontologist 2013; Online First DOI: doi:10.1093/geront/gnt022
15. Turner AM, Kirchhoff K, Capurro D. Using Crowdsourcing Technology for Testing Multilingual Public Health Promotion Materials. Journal of Medical Internet Research 2012; 14(3):e79
16. Capurro D, Soto M, Vivent M, Lopetegui M, Herskovic JR. Biomedical Informatics. Rev Med Chile 2011; 139: 1611-1616
17. Medford R, Dunsmoor-Su R, Capurro D, McMahon K, Gravett M. Analysis of correlation between preterm labor and estriol levels early in pregnancy. Am J Obstet Gyn 2011; Supp1: S207.

18. Rada G, Capurro D, Pantoja T, Corbalán J, Moreno G, Letelier LM, Vera C. Non-hormonal interventions for hot flushes in women with a history of breast cancer. *Cochrane Database of Systematic Reviews* 2010, Issue 9. Art. No.: CD004923. DOI: 10.1002/14651858.CD004923.pub2.
19. Capurro D. Health Informatics in Chile: Responding to Health Reforms. *Health Information and Libraries Journal* 2007; Vol. 24 Issue 4: 287.
20. Capurro D, Rada G. The Diagnostic Process. *Rev Med Chil* 2007; 135:534-538.
21. Capurro D, Gabrielli L y Letelier LM, Intention to treat and follow up are important in assessing validity of a randomized clinical trial. *Rev Med Chil*. 2004 Dec;132(12):1557-60.
22. Capurro D y Caiozzi G. Critical Appraisal of an article: Use of antioxidant vitamins for the prevention of cardiovascular disease: meta-analysis of randomized trials. *Rev. Med Chile*. Feb. 2004, vol.132, no.2, p.253-259.
23. Capurro D and Huidobro-Toro J.P. The involvement of neuropeptide Y Y1 receptors in the blood pressure baroreflex: studies with BIBP 3226 and BIBO 3304. *European Journal of Pharmacology* 376 (1999) 251-255.
24. Mezzano V, Donoso V, Capurro D and Huidobro-Toro JP. Increased neuropeptide Y Pressor Activity in Goldblatt hypertensive Rats: in Vivo Studies with BIBP 3226. *Peptides*, Vol 19, No 7, 1227-1232. 1998.

*Peer-reviewed Full Conference Papers*

1. Capurro D, Echeverry A, Figueroa R, Guiñez S, Taramasco C, Galindo C, Avendaño, García A, Härtel S. Chile's National Center for Health Information Systems: A Public-Private Partnership to Foster Health Care Information Interoperability. *MEDINFO 2017*, Hangzhou, China
2. Demiris G, Turner A, Capurro D. Informatics Tools as Facilitators for Patient Engagement. *MEDINFO 2017*, Hangzhou, China.
3. Capurro D, Chauduri S, Turner AM. The Online Availability of Multilingual Health Promotion Materials Produced by Local Health Departments: An information assessment. *International Medical Informatics Association bi-annual meeting. MEDINFO 2015*, Sao Paulo, Brazil.
4. Capurro D, Barbe M, Daza CA; Santa Maria JA, Trincado J, Gomez I. ClinicalTime: Identification of Patients with Acute Kidney Injury using Temporal Abstractions and Temporal Pattern Matching. *American Medical Informatics Association Joint Summit on Translational Science*. San Francisco, CA. March 2015
5. AM, Mandel H, Capurro D. Local Health Department Translation Processes: Potential of Automated Technologies to Help Meet Needs. *American Medical Informatics Association Annual Symposium*. Washington DC. October 2013.
6. Kirchhoff K, Capurro D, Turner AM. Eliciting User Preferences in Machine Translation Using Conjoint Analysis. *16<sup>th</sup> Annual Conference of the European Association of Machine Translation*. Trento, Italy. May 2012.

7. M. Tepper, D. Capurro, F. Xia, L. Vanderwende, M. Yetisgen-Yildiz. Statistical Section Segmentation in Free-Text Clinical Records. Proceedings of the International Conference on Language Resources and Evaluation (LREC), Istanbul. May, 2012.

*Peer-reviewed Conference Presentations/Abstracts*

1. Gutierrez S, Erazo C, Guiñez S, Taramasco C, Galindo C, Figueroa R, Capurro D, Garcia A, Härtel S. CENS: Towards a Latin American Proposal for Core Competencies in Health Information Systems. AMIA Informatics Education Forum. New Orleans, LA. USA. June 2018.
2. Daza C, Santa María J, Gomez I, Trincado J, Barbe M, Capurro D. [Automatic Detection of Sepsis Patients, a Big Data Approximation] in Spanish. 35th Chilean Critical Care Conference, 2017 Pucón, Chile.
3. C, Santa María J, Gomez I, Trincado J, Barbe M, Capurro D. Phenotyping Intensive Care Unit Patients Using Temporal Abstractions and Temporal Pattern Matching. 7th ACM Conference on Bioinformatics, Computational Biology, and Health Informatics (ACM-BCB). October 2016, Seattle, WA.
4. Rojas E, Sepulveda M, Munoz-Gama J, Capurro D, Seret A. Calculating Emergency Room Metrics through Process Mining. 38th Annual International Conference of the IEEE Engineering in Medicine and Biology Society. August 2016, Orlando, USA.
5. Daza C, Gomez I, Santa María J, Trincado J, Barbe M, Capurro D. Identification of Sepsis patients using Temporal Abstractions and Temporal Pattern Matching. Medical Informatics Europe-MIE 2016. Munich, Germany.
6. Santa María J, Gomez I, Daza C, Trincado J, Barbe M, Capurro D. Identification of Patients with Ventilator Associated Pneumonia Using ClinicalTime, a Temporal Abstraction and Temporal Pattern Matching System. Medical Informatics Europe-MIE 2016. Munich, Germany.
7. Martinez-Gutiérrez J, Soto M, Momany M, Ciampi F, Capurro D, Cea E, Puschel K. "Messages for Your Health": Mobile use and cancer prevention for underserved Latinas in Santiago Chile. Eighth AACR Conference on The Science of Health Disparities in Racial/ Ethnic Minorities and the Medically Underserved; November 13-16, 2015; Atlanta, Georgia
8. Capurro D, Soto M, Catalan S. Characterization of Help Desk issues After the Implementation of an Emergency Department Electronic Health Record. International Medical Informatics Association bi-annual meeting. MEDINFO 2015, Sao Paulo, Brazil.
9. Leon T, Gutierrez L, Garrido I, Grez M, Gomez S, Morales MI, Scheel F, Farías MA, Riquelme A, Perez E, Alvarez L, Capurro D, Ruiz S. Violencia de Pareja en Consultantes a Medicina Interna y su Asociación a Sintomatología Depresiva. Congreso Chileno de Medicina Interna 2015, Viña del Mar, Chile.
10. Soto M, Capurro D, Catalan S. Evaluating the data completeness in the Electronic Health Record after the Implementation of an Outpatient Electronic Health Record. International Medical Informatics Association bi-annual meeting. MEDINFO 2015, Sao Paulo, Brazil.
11. Devine EB, van Eaton E, Devlin A, Yanez, ND, Yetisgen-Yildiz M, Capurro D, Alfonso-Cristancho R, Flum DR, Tarczy-Hornoch P. Preparing electronic clinical data for quality improvement and research: The CERTAIN validation project. 4th Annual EDM Forum Symposium. San Diego, CA. June 2014.

12. Rada G, [Capurro D](#), Rivera S. Risk of bias assessment of studies included in multiple Cochrane reviews: agreement between different reviews. 2013 Cochrane Colloquium. Quebec City, Canada. September 2013
13. Rada G, [Capurro D](#), Rivera S, Peña J, Claro JC, Soto M, Neumann I, Perez D. Epistemonikos: a comprehensive, systematic, collaborative and multilingual database for evidence-based health care. 2013 Cochrane Colloquium. Quebec City, Canada. September 2013
14. [Capurro D](#), Ganzinger M, Perez J. Palliative Care from a Medical Informatics Perspective in Chile, Germany and Peru. MEDINFO 2013. International Medical Informatics Association bi-annual meeting. Copenhagen, Denmark. August 2013.
15. Van Eaton E, Yetisgen-Yildiz M, Rhodes AD, [Capurro D](#), Devine EB, Alfonso R, Flum DR, Tarczy-Hornoch P. Automating Clinical Data Extraction to Support Comparative Effectiveness Research. 34<sup>th</sup> Annual Meeting of the Society for Medical Decision Making, 2012. Phoenix, AZ.
16. Turner AM, [Capurro D](#), Krichoff K. The availability of translated public health materials for limited English proficiency populations in Washington State. 3<sup>rd</sup> Annual Health Literacy Conference, 2011. Chicago, IL.
17. Brownstein M, [Capurro D](#), Cole K, Karasz H, Turner AM. Improving Access to Health Materials through Machine Translation. Washington State Joint Conference on Health, 2011. Vancouver, WA.
18. [Capurro D](#), Chaudhuri S, Brownstein M, Turner AM. Assessment of Translated Public Health Materials in Washington State. University of Washington Health Services Annual Research Meeting, 2011. Seattle, WA.
19. [Capurro D](#), Tarczy-Hornoch P. Assessing the complexity of clinical data requests. AMIA Translational Bioinformatics Summit. 2011. San Francisco, CA.
20. Yetisgen-Yildiz M, Saleem S, [Capurro D](#). A Hybrid System for Named-Entity Extraction from Clinical Discharge Summaries. Fourth i2b2/VA Shared-Task and Workshop Challenges in Natural Language Processing for Clinical Data. 2010. Washington D.C.
21. Rada G, Claro JC, Neumann I, [Capurro D](#), Soto M, et al (The Epistemonikos Project). A Collaborative, Multilingual, Question-Based Database: An Easy way of retrieving Evidence and a Framework to Collaboration in Health Research. Epistemonikos Project. Evidence 2010. London, UK.
22. [Capurro D](#), Kalet I. Representation of a Simple and Unambiguous Clinical Guideline in a Computer Interpretable Language. AMIA 2009 Annual Symposium. San Francisco.
23. [Capurro D](#), Rada G, Pantoja T, Letelier LM, Moreno G. Do Cochrane systematic reviews help decision makers from middle income countries? Update of the Chilean experience. XVI Cochrane Colloquium, Freiburg, Germany 2008.
24. Letelier LM, [Capurro D](#), Rada G., Zavala C., Moreno G., Pantoja T. Do current Cochrane Systematic Reviews (CSR) help decision makers from middle income countries? The Chilean experience. XIV Cochrane Colloquium, Dublin, Ireland 2006.

25. Capurro D, Rivera S, Larrondo F. Use of the Cochrane Database of Systematic Reviews by Chilean residents: impact and barriers. XIII Cochrane Colloquium, Melbourne, Australia 2005.
26. Huidobro-Toro JP, and Capurro D. Involvement of NPY in vascular sympathetic reflexes: in vivo studies with BIBP 3226 and BIBO 3304. 5th International NPY meeting, Grand Cayman 1999.
27. Capurro D. y Huidobro-Toro, J.P. Antagonistas de NPY (BIBP y BIBO) bloquean el aumento de la presión arterial sistémica inducida por oclusión carotídea bilateral. XXth Annual Meeting of the Chilean Society of Pharmacology. Acacias Hotel, Vitacura, Santiago, Chile. 1998

### Book Chapters

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Luz María Letelier, Daniel Capurro, Jaime Cerda, Lorena Cifuentes, Juan Carlos Claro, Gabriel Rada, Solange Rivera, Victor Montori. Chapter 19.2 Examples of Likelihood Ratios in: Users' Guide to the Medical Literature 3rd Edition. 2014 American Medical Association.

Luz Maria Letelier, Gabriel Rada, Daniel Capurro, Solange Rivera, Victor Montori. Chapter 17.2 Examples of Likelihood Ratios in: User's Guide to the Medical Literature 2<sup>nd</sup> Edition. 2008 American Medical Association

### Research Experience and Grants

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2017-2022	Co-Director National Center for Health Information Systems National Development Agency (CORFO) - 5 Mill USD
2014-2016	Co-Principal Investigator Factores moduladores e impacto de la violencia de género en la salud física y mental. Interdepartmental Research Fund School of Medicine Pontificia Universidad Católica de Chile
2014-2016	Co-Investigator (PI: Martínez-Gutiérrez) Development of mobile technologies for cervical-cancer prevention in Santiago, Chile: a randomized controlled trial. FONIS N° SA14ID0072. National Commission for Research, Science and Technology (CONICYT - Chile).
2013-2017	Principal Investigator "Identification of patient cohorts in large clinical databases using temporal abstractions and temporal patterns of clinical events" FONDECYT N° 11130577. National Commission for Research, Science and Technology (CONICYT - Chile). USD\$ 220.000
2013-2014	Co-Investigator (PI: Herskovic) "Mobile and Tangible Computing for the remote monitoring of emotional states in palliative care" Latin American and Caribbean Collaborative ICT Research (LACCIR) RFP

	2012
2012-2013	Coordinating Faculty Course creation: "Introduction to Biomedical Informatics: developing transdisciplinary abilities to enhance biomedical research." FONDEDOC - Teaching Development Fund
2011- 2012	Co-PI Interactive Voice Response System for symptom monitoring in patients in palliative care - Family Medicine Departmental Research Grant.
2010 - 2012	Collaborator TransPHorm - Machine translation of public health promotion documents for low English proficiency communities.
2010	Collaborator SCOAP - CERTAIN Informatics Infrastructure for Comparative Effectiveness Research.
2009	Collaborator ITHS - Biomedical Informatics Core.
2008	Co-investigator Intensified versus standard insulin therapy in the General Internal Medicine ward. National Health Research Fund Chilean Ministry of Health
2007	Co-investigator Selection of interventions for AUGE health conditions. Chilean Ministry of Health
2006	Co-investigator Disease burden and effectiveness of interventions for the AUGE plan. Chilean Ministry of Health

### **Academic Experience**

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2017 to date	Associate Professor Department of Internal Medicine – School of Medicine P. Universidad Católica de Chile
2013 to 2017	Assistant Professor Department of Internal Medicine – School of Medicine P. Universidad Católica de Chile
2006 to 2013	Instructor Department of Internal Medicine – School of Medicine P. Universidad Católica de Chile

### **Teaching Experience**

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## Lead Instructor

2015 to date	Medical Sciences Integration I - P. Universidad Católica de Chile
2016 to date	Medical Sciences Integration II - P. Universidad Católica de Chile
2016 to date	Medical Sciences Integration III - P. Universidad Católica de Chile
2016 to date	Medical Sciences Integration IV - P. Universidad Católica de Chile
2013	Tutor - Semiology. P. Universidad Católica de Chile
2010-2012	Tutor - Medical Information and Decision Making. University of Washington

## Clinical Experience

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2012 -	Attending Internal Medicine Outpatient Center School of Medicine - Pontificia Universidad Católica de Chile
2006 to 2008	Attending General Internal Medicine Ward Hospital Clínico P. Universidad Católica de Chile
2007 to 2008	Attending Medical Intermediate Care Unit Hospital Clínico P. Universidad Católica de Chile
2006 to 2007	Resident Medical Intensive Care Unit Clínica San Carlos de Apoquindo P. Universidad Católica de Chile
2003 to 2006	Resident General Internal Medicine Ward Hospital Clínico & Hospital Dr. Sótero del Río P. Universidad Católica de Chile
2001 to 2002	Intern Hospital Clínico & Hospital Dr. Sótero del Río P. Universidad Católica de Chile
2000	Intern Emergency Medicine Unit Chilean Air Force Hospital

## Academic Service

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- Chilean National Health Research Fund (FONIS) - Advisory Board - 2015-2017
- Board of Directors Chilean Association of Health Informatics. 2011-2013, 2013-2015
- Journal of the American Medical Informatics Association Student Editorial Board. 2010-2012.
- Ad-hoc reviewer for the Journal of Biomedical Informatics, Journal of Medical Internet Research, Revista Médica de Chile, Revista Peruana de Medicina Experimental y Salud Publica, BMC Research Notes.
- Reviewer for the Chilean National Health Research Fund.

- Biomedical and Health Informatics. University of Washington. Admission Committee 2011 & 2012.
- School of Medicine. Pontificia Universidad Católica de Chile. Graduate Medical Education Admission committee. 2006.

## Memberships

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American Medical Informatics Association (AMIA)  
Chilean Association of Health Informatics (ACHISA)

## Awards

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| 2017       | Best Teacher - Third Year Medical Students<br>School of Medicine - Pontificia Universidad Católica de Chile      |
| 2016       | Academic Clinical Management Award<br>School of Medicine<br>Pontificia Universidad Católica de Chile             |
| 2009, 2011 | Graduate School's Fund for Excellence and Innovation – Graduate Student Travel Award<br>University of Washington |
| 2008       | Fulbright Faculty Development Program.<br>US Department of State.  |
| 2008       | MECESUP2 – Faculty Development Scholarship<br>Ministry of Education<br>Chile                                     |
| 2006       | Best Internal Medicine Graduate.<br>P. Universidad Católica de Chile.  |
| 2003       | Dr. Gabriel Letelier Award – Best Internal Medicine Intern.<br>P. Universidad Católica de Chile.                 |
| 1998       | Third Year Medical School Students – Best Fellow.<br>P. Universidad Católica de Chile.                           |
| 1996       | Honor Scholarship – Best Admission Score to Medical School.<br>P. Universidad Católica de Chile.                 |