Gabriel Y. Weintraub

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Professional Experience

COLUMBIA BUSINESS SCHOOL
> Sidney Taurel Associate Professor of Business (untenured)
> Decision, Risk, & Operations Division
> January 2013 – present

> Associate Professor (untenured)
> Decision, Risk, & Operations Division
> July 2010 – December 2012

> Assistant Professor.
> Decision, Risk, & Operations Division.
> July 2006 – June 2010

HARVARD KENNEDY SCHOOL OF GOVERNMENT
> Visiting Scholar
> Mossavar-Rahmani Center for Business and Government
> July 2006 – June 2007

UNIVERSITY OF CHILE
> Full time Instructor.
> Industrial Engineering Department.
> November 1999 – August 2001.

Education

STANFORD UNIVERSITY, Stanford, CA
> Ph.D. in Management Science and Engineering, 2001-2006.
> M.A. in Economics, 2005.

UNIVERSITY OF CHILE, Santiago, Chile
> Industrial Engineering Degree, 1993-1999 (graduated with Highest Honors).
> Bachelor Degree in Industrial Engineering, 1993-1997 (graduated with Highest Honors).

Research Interests

Economic analysis of problems in operations and management science, industrial organization, auction design, and computational economics.

Working Papers and Work in Progress

Balseiro, S., O. Besbes, and G.Y. Weintraub (2012), Auctions for Online Display Advertising Exchanges: Approximations and Design, being revised for resubmission to *Management Science* (major revision requested).

Ifrach, B. and G.Y. Weintraub (2012), A Dynamic Oligopoly Model for Concentrated Industries, submitted for publication, being revised for resubmission to *The Review of Economic Studies* (major revision requested).

Gur, Y., L. Lu, and G.Y. Weintraub (2012), Framework Agreements in Procurement: An Auction Model and Design Recommendations, submitted for publication.

Njoroge, P., A. Ozdaglar, N. Stier, and G.Y. Weintraub (2012), Investment in Two Sided Markets and the Network Neutrality Debate, being revised for resubmission to *Review of Network Economics* (major revision requested).

Adlakha, S. and G.Y. Weintraub (2012), Promoting Competition in Repeated Procurement Auctions, paper in preparation.

Weintraub, G.Y., C.L. Benkard, P. Jeziorski, and B. Van Roy (2008), Nonstationary Oblivious Equilibrium, working paper.

Benkard, C.L., P. Jeziorski, and G.Y. Weintraub (2013), Oblivious Equilibrium for Concentrated Industries, working paper.

Published and Forthcoming Papers

Kim, S. W., M. Olivares and G.Y. Weintraub (2013), Structural Estimation of a Large-Scale Combinatorial Auction, forthcoming at *Management Science*. *[Finalist paper 2012 MSOM Student Paper Competition]*

Adlakha, S., R. Johari, and G.Y. Weintraub (2012), Equilibria of Dynamic Games with Many Players: Existence, Approximation, and Market Structure, forthcoming at *Journal of Economic Theory* (Special Issue on Computer Science and Economics).

Farias, V,. D. Saure, and G.Y. Weintraub (2012), An Approximate Dynamic Programming Approach to Solving Dynamic Oligopoly Models, *The RAND Journal of Economics*, Vol. 43, No.2 (Summer), 253-282. *[A previous version of this paper received the second place in the 2009 Informs JFIG paper competition.]*

Olivares, M., G.Y. Weintraub, R. Epstein, and D. Yung (2012), Combinatorial Auctions for Procurement: An Empirical Study of the Chilean School Meals Auction, *Management Science*, Vol. 58, No. 8 (August),1458-1481.

DiPalantino, D., R. Johari, and G.Y. Weintraub (2011), Competition and Contracting in Service Industries, *Operations Research Letters*, Vol. 39, 390-396.

Weintraub, G.Y., C.L. Benkard and B. Van Roy (2011), Industry Dynamics: Foundations for Models with an Infinite Number of Firms, *Journal of Economic Theory*, Vol. 146, 1965-1994.

Johari, R., G.Y. Weintraub, and B. Van Roy (2010), Investment and Market Structure in Industries with Congestion, *Operations Research,* Vol. 58, No. 5, 1303-1317.

Weintraub, G.Y., C.L. Benkard and B. Van Roy (2010), Computational Methods for Oblivious Equilibrium, *Operations Research (Special Issue in Computational Economics)*, Vol. 58, No. 4, 1247-1265.

Weintraub, G.Y., C.L. Benkard and B. Van Roy (2008), Markov Perfect Industry Dynamics with Many Firms, *Econometrica,* Vol. 76, No. 6 (November), 1375–1411.

Epstein, R., L. Henríquez, J. Catalán, G.Y. Weintraub, C. Martínez and F. Espejo (2004), A Combinatorial Auction Improves School Meals in Chile: a Case of Operations Research in Developing Countries, *International Transactions in Operational Research*, Vol. 11, No. 6, 593-612 [*Special issue, IFORS "Operations Research for Development" Prize 2002, winner paper*].

Mondschein, S. and G.Y. Weintraub (2003), Appointment Policies in Service Operations: A Critical Analysis of the Economic Framework, *Production and Operations Management,* Vol. 12, No. 2, 266-286.

Epstein, R., L. Henríquez, J. Catalán, G.Y. Weintraub, and C. Martínez (2002), A Combinational Auction Improves School Meals in Chile, *Interfaces,* Vol. 32, No. 6, 1-14.

Refereed Conference Proceedings

Balseiro, S., O. Besbes, and G.Y. Weintraub (2013), Auctions for Online Display Advertising Exchanges: Approximations and Design, *ACM Conference on Electronic Commerce*.

Kim, S. W., M. Olivares and G.Y. Weintraub (2013), Structural Estimation of a Large-Scale Combinatorial Auction, *ACM Conference on Electronic Commerce.*

Adlakha, S., R. Johari, G.Y. Weintraub, and A. Goldsmith (2010), On Oblivious Equilibrium for Large Population Stochastic Games, *IEEE Conference on Decision and Control.*

Njoroge, P., A. Ozdaglar, N. Stier, and G.Y. Weintraub (2009), Competition, Market Coverage, and Quality Choice in Interconnected Platforms, *NetEcon Workshop.*

Adlakha, S., R. Johari, G.Y. Weintraub, and A. Goldsmith (2008), Oblivious Equilibrium for Large-Scale Stochastic Games with Unbounded Costs, *IEEE Conference on Decision and Control.*

Adlakha, S., R. Johari, G.Y. Weintraub, and A. Goldsmith (2008), Oblivious Equilibrium for Stochastic Games with Concave Utility, *Allerton Conference on Communications, Control and Computing.*

Abhishek, V., S. Adlakha, R. Johari, and G.Y. Weintraub (2007), Oblivious Equilibrium for General Stochastic Games with Many Players, *Allerton Conference on Communications, Control and Computing.*

Weintraub, G.Y., C.L. Benkard and B. Van Roy (2005), Oblivious Equilibrium: A Mean Field Approximation for Large-Scale Dynamic Games, *Advances in Neural Information Processing Systems*, MIT Press.

Other Publications

Co-authored MBA teaching case and teaching note, "Beleza Natural" (2012).

Catalán, J., R. Epstein, M. Guajardo, L. Henríquez, C. Martínez, G.Y. Weintraub, and D. Yung (2009), No Such Thing as a Free Lunch?, *OR/MS Today*, April 2009.

Epstein, R., L. Henríquez, F. Espejo, J. Catalán, G.Y. Weintraub, and C. Martínez (2003), An Example of Optimization, *Perspectivas en Política, Economía y Gestión*, Vol. 6, No. 2, 181-202.

Mondschein, S. and G.Y. Weintraub (2001), Is it Convenient to Make Appointments in a Service Company?, *Revista de Ingeniería de Sistemas*, Vol. 16, No. 1, 21-48.

Epstein, R., L. Henríquez, J. Catalán, G.Y. Weintraub, and C. Martínez (2001), Integer Programming Improves the Auction Process of School Meals, *Revista de Ingeniería de Sistemas,* Vol. 15, No. 1, 13-30.

Teaching Experience

Operations Management, Core MBA course, Columbia Business School (Summer 2007, Spring 2008, Fall 2008, Spring 2009, Fall, 2009, Fall 2010, Fall 2011, Fall 2012).

Game Theoretic Models in Operations, PhD Seminar, Columbia Business School (Spring 2008, Spring 2010, Spring 2013).

Various short executive education courses, Columbia Business School (2008-present)

Stochastic Models (undergraduate), Department of Industrial Engineering, University of Chile (Fall and Spring, 2000; Fall 2001).

Optimization (undergraduate), Department of Industrial Engineering, University of Chile (Spring, 1999 and Fall, 2000).

Student Advising

Santiago Balseiro, PhD 2013, Decision, Risk and Operations, Columbia Business School, co-advised with Omar Besbes. First position: Assistant Prof. Duke Fuqua Business School.

Sang Won Kim, PhD 2013, Decision, Risk and Operations, Columbia Business School, co-advised with Marcelo Olivares. First position: Assistant Prof. The Chinese Univ. of Hong Kong.

Yonatan Gur, PhD candidate (expected graduation 2014), Decision, Risk and Operations, Columbia Business School, primary advisors Omar Besbes and Assaf Zeevi.

Bar Ifrach, PhD 2012, Decision, Risk and Operations, Columbia Business School, co-advised with Costis Maglaras. First position: Post-doc MS&E Stanford Univ.

Denis Saure, PhD 2010, Decision, Risk and Operations, Columbia Business School, primary advisor Assaf Zeevi. First position: Assistant Prof. IE Pittsburg Univ.

Sachin Adlakha, PhD 2010, Electrical Engineering, Stanford University, primary advisors Andrea Goldsmith and Ramesh Johari. First position: Post-doc Caltech.

Paul Njoroge, PhD 2010, Laboratory for Information and Decision Systems (LIDS), MIT, primary advisor Asu Ozdaglar. First position: Corporate research Liberty Mutual.

Daniel Yung, MSc 2009, Operations Management, University of Chile, co-advised with Marcelo Olivares and Rafael Epstein. First position: Consultant IE Univ. of Chile.

Honors and Awards

Finalist 2012 MSOM Student Paper Competition with the paper "Structural Estimation of a Large-Scale Combinatorial Auction" (co-advising Sang Won Kim).

Chazen/CIBER Columbia Business School research grants, 2010, 2013.

Second Place 2009 Informs JFIG paper competition for the paper "An Approximate Dynamic Programming Approach to Solving Large Scale Dynamic Oligopoly Models" (with V. Farias, and D. Saure).

The Social Enterprise Program research grant, Columbia Business School, 2008-2010.

NET Institute summer grant, 2007, 2012.

Lillie Fund 2004 and 2005 for collaborative projects between the School of Engineering and Graduate School of Business, Stanford University (one quarter assistantship each).

IFORS (International Federation of Operational Research Societies) Prize for "Operations Research in Development 2002," given every three years to the best application of operations research/management science in a developing country.

Stanford School of Engineering Fellowship, 2001-2002.

Chilean "Presidential Fellowship" 2001 for graduate studies abroad (declined).

Co-principal investigator, Fondecyt project, 2001, Chile (NSF equivalent).

Best Student Award of the 1999 class of the School of Engineering, University of Chile.

Best Teaching Assistant Award 1998, Industrial Engineering Department, University of Chile.

Dean's List 1993-1999, School of Engineering, University of Chile.

University of Chile School of Engineering Fellowship, 1993.

Invited Presentations and Conferences

2013: NYU Stern, Harvard Economics, Wharton, ACM Conference on Electronic Commerce, NET Institute Conference, Stanford GSB (scheduled), MIT ORC (scheduled), M&SOM Conference (scheduled), Informs Annual Meeting (scheduled).

2012: Caltech SISL, London School of Economics, Stanford GSB Structural IO Lunch, Stanford MS&E, NBER IO Summer Institute, MSOM SIG Service Conference, MSOM Conference, U. Of Pittsburgh IE, Utah Winter Operations Conference, Society for Economic Dynamics Annual Meeting, University of Chile.

2011: Chicago GSB, Maryland Economics, U. of Virginia Systems Engineering, University of Chile, International Industrial Organization Conference, Workshop for Empirical Research in Operations Management (discussant), Informs Annual Meeting.

2010: CMU Tepper, Michigan Ross, London Business School, Insead, UT Austin Economics, University of Chile, Informs Annual Meeting, MSOM Conference.

2009: Kellogg, GERAD/HEC Montreal, Columbia Business School, NYU/Kansas City Fed Workshop on Computational Economics (invited speaker), M&SOM Conference, M&SOM SIG Conference (discussant), Informs Annual Meeting, Workshop for Empirical Research in Operations Management, Econometric Society Summer Meeting.

2008: MIT Sloan, Stanford MS&E, Stanford GSB, NET Institute Conference (NYU Stern), Informs Annual Meeting, M&SOM Conference, World Congress of the Game Theory Society.

2007: NYU Stern, Cornell Johnson School, Informs Annual Meeting, International Industrial Organization Conference; plenary speaker SKM Congress 2007, Santiago, Chile (conference on Business Intelligence for 500 executives).

2006: Columbia Business School, Duke Fuqua School, Iowa Economics Dept., Rochester Simon School, UCLA Anderson School, UIUC Economics Dept., UIUC Industrial & Enterprise Systems Engineering Dept., UT Austin Economics Dept, Informs Annual Meeting.

2005 and before: Informs Annual Meeting (2005), Institute on Computational Economics 2005 (students' poster presentation), Stanford Institute for Theoretical Economics (SITE 2004), MURI, Decision-Making Under Uncertainty Meeting, Stanford University (2003), X Latin-Ibero-American Conference on Operations Research and Systems (2000).

Professional Service

Associate Editor, *Operations Research* (Area: Games, Information, and Networks), 2013-present.

Co-chair MSOM Student Paper Competition, 2012 and 2013.

Member of the Program and Organizing Committee, MSOM Conference 2012.

Faculty Steering Committee for the Columbia Global Centers Latin America (Santiago and Rio de Janeiro).

Research director, The Deming Center, Columbia Business School, 2010-present.

Ph.D. program coordinator, Decision, Risk, & Operations Division, Columbia Business School, 2008-2012.

Member of the Program Committee, NetEcon Conference 2011.

Member NSF Panel Operations Research 2010.

Co-organizer sessions on Empirical and Experimental Work in Auctions and Contracts, Revenue Management Conference 2011.

Co-organizer session on Large Scale Dynamic Games, IEEE CDC Conference 2009.

Co-chair Game Theory cluster, Latin Ibero-American Congress on Operations Research 2008.

Co-chair several sessions, Informs Annual Meeting 2005-present.

Referee for: American Economic Review, Automatica, Econometrica, European Economic Review, Fondecyt-Chile (NSF equivalent), IEEE JSAC, IEEE TAC, Journal of Economic Theory, NSF, Management Science, M&SOM, M&SOM Student Paper Competition, SIG M&SOM Conference, Operations Research, Production and Operations Management, Quarterly Journal of Economics, Review of Economic Studies, The RAND Journal of Economics, and Transportation Science.

Co-organizer Latin American Operations Research Summer School, Chile, 2001.

Professional society affiliations: Informs, AEA, Econometric Society.

Outside Activities

Aug. 2011-Dec. 2012: led a project to develop a mathematical/economic model to analyze framework agreements for procurement for the Chilean government procurement agency ChileCompra.