

RAMIRO MONTEALEGRE

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Education

- 1990 – 1994 **Harvard University, Graduate School of Business** Boston, MA
Doctor of Business Administration (D.B.A.). Field of specialization: Management Information Systems. Received W.K. Kellogg Foundation scholarship, 1990-1993, William T. Grant Foundation scholarship 1993-1994, and Harvard University scholarship, 1993-1994. **Dissertation:** *Management's Role in the Introduction and Assimilation of Information Technology in an Agroindustrial Organization in a Less Developed Country*. Thesis committee: James L. McKenney, Lynda M. Applegate, James E. Austin, F. Warren McFarlan and Wanda J. Orlikowski.
- 1982 - 1984 **Carleton University, Graduate School of Engineering** Ottawa, Canada
Master of Computer Science (M.C.S.). Special field of study: *Telecommunications*. Received Carleton University scholarship, 1982-1984. Thesis: *Workload Modeling of an ISO Transport Protocol*, project sponsored by the Natural Science and Engineering Research Council of Canada.
- 1978 - 1982 **Universidad Francisco Marroquin** Guatemala, Guatemala
Bachelor of Science, Computer Systems Engineering, Magna Cum Laude. Received Universidad Francisco Marroquin scholarship 1980-82. Thesis: *Implementation of MIX at the Universidad Francisco Marroquin*, awarded *Best Thesis of Guatemala 1982-84* by the Guatemalan Information Association.

Academic Experience

- 2008-Present **University of Colorado at Boulder, Leeds School of Business** Boulder, CO
Academic Director—International Management Program.
- 1994-Present **University of Colorado at Boulder, Leeds School of Business** Boulder, CO
Associate Professor—*Systems Division*. Areas of Research: the interplay between information technology and organization transformation, especially in highly uncertain environments; and transfer of technology. Courses taught include: *Competing with Information Technology and the Internet*, *Management of Information Systems*, and *Systems Analysis and Conceptual Design*. The first two courses have been taught at the master and undergraduate levels. The third one has been taught at the undergraduate level.
- 2004-2007 **University of Colorado at Boulder, Leeds School of Business** Boulder, CO
Chair of Systems Division.
- 2002-Present **Instituto de Empresa** Madrid, Spain
Visiting Professor. Courses taught: *Technology and Business Strategy*, *Becoming a Digital Business*, and *Competitive Strategies in the Internet Age*. These courses were taught in the M.B.A. program.
First Academic Director—Information Management Research Center (IMRC), a joint research center of Accenture and Instituto de Empresa. Worked on the development of the center proposal, its funding, and launching. The funding received by IMRC became the largest grant ever received by Instituto de Empresa, €540,000.00 annually.
- 1999-Present **Univesidad Torcuato DiTella** Buenos Aires, Argentina
Visiting Professor. MBA course taught: *Competing with Information Technology*.
- Summers **Instituto de Altos Estudios (IAE) de la Universidad Austral** Buenos Aires, Argentina
2000-2001 Visiting Professor. Course taught in the M.B.A. and Executive M.B.A. programs: *E-Businesses*.

- 1996 – 1998 **Case Western Reserve University** Cleveland, Ohio
Invited Lecturer—*Management of Technology Executive Program*, a joint program of the Weatherhead School of Management and the Case School of Engineering. Modules taught include: "Project Management" and "Business Implications of the Internet."
- Summers **Instituto de Centro America de Administracion de Empresas (INCAE)** Alajuela, Costa Rica
1995-1996 Visiting Professor—*Executive Information Systems Program*. Executive courses taught include: *The Revolution in Information Technology*, and *Competing with Information Technology*.
- 1990 - 1994 **Harvard University, Graduate School of Business** Boston, MA
Research Associate—*Information, Organization and Control*. Worked with four professors developing new case material in *Business Process Redesign* (Frito Lay, with Lynda Applegate and Richard Nolan), *Information Services Outsourcing* (Eastman Kodak, with Lynda M. Applegate), and *Information Technology and Organization Change in Less-Developed Countries* (Azucar, S.A., with Lynda M. Applegate, James E. Austin and James L. McKenney).
- 1986 -1990 **Institute of Nutrition of Central America and Panama** El Salvador/Guatemala/Costa Rica
(A research center of the World Health Organization)
Information Systems Researcher in the *Technical Cooperation for Food Aid Programs in Central America* Project. A \$6,000,000 project sponsored by the World Health Organization and the U.S. Agency for International Development, to seek managerial practices to improve the impact of programs of this nature. Member of an interdisciplinary work-team of eight researchers.
- 1984 - 1986 **Universidad Francisco Marroquin** Guatemala, Guatemala
Lecturer—Worked with group of four professors developing and teaching graduate and undergraduate courses in computer engineering. Courses taught include: *Telecommunications, Information Systems Design, Introduction to Computers, Operating Systems, and Office Automation*.
- 1982 - 1984 **Carleton University, Graduate School of Engineering** Ottawa, Canada
Research Assistant—Research focus: *Efficiency models for the development of computer communication protocols*, under the supervision of C. Murray Woodside.
Teaching Assistant—Worked with three professors and graduate students as tutor and study group leader for required master courses in computer engineering. Courses assisted include: *Real Time Computing Systems, Computer Methods in Engineering, and Dynamics of Linear Systems*.
- 1979 - 1982 **Universidad Francisco Marroquin** Guatemala, Guatemala
Teaching Assistant. Worked with undergraduate students as tutor of the following courses: *Data Base Design I and II, Computer Architecture, and Data Structure*.

Management Information Systems Experience

- 1987 - 1990 **MINISTRY OF THE INTERIOR** El Salvador
Project leader on the development of the information system at the Community Development Division. This effort included the identification of information requirements of more than 2,000 information users, the design of the information systems, coordination of the implementation of a micro computer distributed system, and user training. Awarded an "Honorary" Diploma for role as technical leader by the Minister of the Interior.
- 1987 - 1989 **NATIONAL RECONSTRUCTION COMMITTEE** Guatemala
Project Leader on the development of the information system at the National Reconstruction Committee in Guatemala. This effort included the identification of information requirements of more than 500 information users, the design of the information systems, coordination of the implementation of a mini-computer based system (IBM S/36), and user training.

- 1987 - 1989 **MINISTRY OF EDUCATION** Costa Rica
 Consultant in the development of the information system at the School Feeding Division. This included training information system users and professionals for the analysis and design of their own information system, revising information systems specifications, designs, and implementation plans.
- 1984 - 1986 **GUATEMALAN MINISTRY OF FINANCE** Guatemala
 Information System Consultant on the "Guatemalan Tax Administration Project (RTU/CC). Worked with a group of six consultants of the Inter American Development Bank (IADB) in the analysis and implementation of the Guatemalan Tax Information System.
- 1984 - 1986 **GUATEMALA DEPARTMENT OF DEFENSE** Guatemala
 Telecommunication System Consultant. Responsibilities included training information technology professionals within the Department of Defense, organizing the analysis and design processes, assistance in the telecommunication hardware and software acquisition, and technical support.
- 1984 - 1985 **PEAT, MARWICK, MITCHELL & CO.** Guatemala
 Information System Consultant on the "Guatemalan Model of Index Prices for the Consumer 1984-85." Responsibilities included analysis, design, and implementation of the project's information systems.
- 1984 - 1985 **General Director of the Guatemalan Computer and Information Conference.**
 A yearly technical conference and trade show organized by the Management and the Information Technology associations of Guatemala. This included the coordination of 120 exhibitors, 36 technical meetings, and 5,000 assistants.
- 1981 - 1983 **Founder and Director of the Information Systems Newspaper *On-Line*.**
 Guatemala
On-Line received an *Outstanding Achievement* Award from the Special Interest Group on University Computer Centers (SIGUCC) of the Association of Computing Machinery (ACM), 1982.

Publications: Refereed Journals

- Chun, M.W.S. and Montealegre, R. "The Problems of Embedded Information Systems and Embedded Knowledge: Implications for Systems Integration and Knowledge Management," *Journal of Information Technology Management*, Vol. 12, No. 2, 2007, pp. 38-64.
- Chun, M., Montealegre, R., & Griffy-Brown, C., "Leveraging the Sales Force with Portal Technology at The American Subsidiary of A Japanese Motor Company." *Communications of the Association of Information Systems Journal*, 20(26), 2007, 393-408.
- Montealegre, R. "Learning from the Implementation of the Internet Strategy at the Guayaquil Stock Exchange," *Thunderbird International Business Review*, Vol. 46, No. 3, 2004.
- Mähring, M., Holmström, J, Keil, M., and Montealegre, R., "Trojan Actor-Networks and Swift Translation: Bringing Actor-Network Theory to IT Project Escalation Studies," *Information Technology and People*, Vol. 17, No. 2, 2004, pp. 210-238.
- Tan, B.C.Y., Smith, J., Keil, M., and Montealegre, R. "Reporting Bad News about Software Projects: Impact of Organizational Climate and Information Asymmetry in an Individualistic and a Collectivistic Culture," *IEEE Transactions on Engineering Management*, Vol. 50, No. 1, February 2003, pp. 64-77. Voted Honorable Mention for the Best Paper of 2003 in the journal poll of the department editors.
- Montealegre, R. "A Process Model of Capability Development: Lessons from the E-Commerce Strategy at Bolsa de Valores de Guayaquil," *Organization Science*, Vol. 13, No. 5, 2002, pp. 514-531.

- Montealegre, R. "Four Vision of E-Commerce in Latin America in the Year 2010," *Thunderbird International Management Review*, Vol. 43, No. 6, November-December 2001, pp. 717-735.
- Montealegre, R. "Escenarios Potenciales del Comercio Electronico en Iberoamerica" (Potential Scenarios of E-Business in Ibero-America), *Economia Industrial* (An academic journal published by the Ministry of Science and Technology of Spain), No. 340, 2001, pp. 139-148.
- Montealegre, R. and Keil, M. "De-escalating Information Technology Projects: Lessons from the Denver International Airport," *MIS Quarterly*, Vol. 24, No. 3, September 2000, pp. 417-447.
- Montealegre, R. "Extending Chakravarthy's Strategy Framework to Cope with Constrained and Unstable Environments: Imitative Catching-Up at *Patagon.com*," *IEEE Transactions on Systems, Man, and Cybernetics*, Part A, Vol. 30, No. 4, July 2000, pp. 472-489.
- Keil, M. and Montealegre, R. "Cutting your Losses: How Executives can Extricate Their Organizations When Big Projects Go Awry," *Sloan Management Review*, Vol. 41, No. 3, Spring 2000, pp. 55-68. Made the best seller list for *Sloan Management Review* reprints.
- Reprinted in: *Harvard Business Manager*, June 2000, pp. 74-92.
- Montealegre, R. "A Temporal Model of Institutional Interventions for Information Technology Adoption in Less-Developed Countries," *Journal of Management Information Systems*, Vol. 16, No. 1, 1999, pp. 207-232.
- Montealegre, R. "A Case for More Case Study Research in the Implementation of Information Technology in Less-Developed Countries," *Information Technology for Development*, Vol. 8, No. 4, 1999, pp. 199-207.
- Montealegre, R. "Managing Information Technology in Modernizing "Against the Odds": Lessons from an Organization in a Less-Developed Country," *Information & Management*, Vol. 34, No. 2, 1998, pp. 103-106.
- Reprinted in: *International Sugar Review*, March 2003, pp. 112-127.
- Montealegre, R. "Waves of Change in Adopting the Internet: Lessons from Four Latin American Countries," *Information Technology & People*, Vol. 11, No. 3, 1998, pp. 235-260.
- Montealegre, R. "The Interplay of Information Technology & The Social Milieu," *Information Technology and People*, Vol. 10, No. 2, 1997, pp. 106-131. Selected by MCB University Press as the "Most Outstanding" paper published in *Information Technology & People* in 1977.
- Montealegre, R. "Implications of Electronic Commerce for Managers in Less-Developed Countries," *Information Technology for Development*, Vol. 7, No. 3, 1996, pp. 145-152.
- Montealegre, R. "Aprendizaje Organizacional y la Revolución Tecnológica: Retos para el Empresario Latinoamerica," (Organizational Learning and Technological Revolution: Challenges for Latin American Managers), *Revista INCAE* (the Latin American version of the Harvard Business Review), Vol. 9, No. 2, 1996, pp. 6-15.
- Montealegre, R. "Information Systems Design for Development Projects in Central America," *Archivos Latinoamericanos de Nutricion*, Vol. 41, No. 2, June 1991, pp. 247-272.
- Woodside, C.M. and Montealegre, R. "The Effect of Buffering Strategies on Protocol Execution Performance," *IEEE Transactions on Communications*, Vol. 37, No. 6, June 1989, pp. 545-554.
- Montealegre, R., Fuentes, F., Mata, A., and Cuevas, R. "Investigacion de Operaciones en Programas de Alimentacion a Grupos: Tecnicas para la Identificacion y Analisis de Problemas en Gestion" (Operations

Research in Group Food Aid Programs: Techniques for Managerial Problems Identification and Analysis), *Archivos Latinoamericanos de Nutricion*, Vol. 39, No. 3, September 1989, pp. 522-540.

Woodside, C.M., Montealegre, R. and Buhr, R.J.A. "A Performance Model for Hardware/Software Issues in Computer-Aided Design of Protocol Systems," *ACM Computer Communication Review*, Vol. 14, No. 2, May 1984, pp. 132-139.

Publications: Book

Korpela, M., Montealegre, R., and Poulymenakou, A. (editors) *Organizational Information Systems in the Context of Globalization*, Kluger Academic Publishers, Boston, 2003.

Publications: Book Chapters

Montealegre, R. and Truex, D. "Focus on the Supervisor" in *Research in Information Systems: A handbook for research supervisors and their students*, Avison, D. and Pries-Heje, J. (editors), 2005, pp. 75-92.

Truex, D., Montealegre, R., Avison, D. and Long, C. "Focus on the Student" in *Research in Information Systems: A handbook for research supervisors and their students*, Avison, D. and Pries-Heje, J. (editors), 2005, pp. 93-105.

Publications: Refereed Proceedings

Montealegre, R., Hovorka, D. and Germonprez, M. "Toward an Information Service View of an Enterprise," International Conference of Information Systems (ICIS) 2008, Paris, December 2008.

Chun, M. and Montealegre R., "A Dynamic View of Knowledge Organization During A Corporate Merger," *Proceedings of the 2004 Strategic Management Society Conference*, San Juan, Puerto Rico, October 2004.

Montealegre, R. "The Context of Resource Decisions in the Diffusion of Internet Strategies in Less-Developed Countries: Lessons from Bolsa de Valores de Guayaquil," *Proceedings of the 1999 International Conference of Information Systems (ICIS)*, 1999, pp. 502-511.

Montealegre, R. and Keil, M. "Denver International Airport's Automated Baggage Handling System: A Case Study of De-escalation of Commitment," *1998 Academy of Management's Best Papers Proceeding*, August 1998. Winner of the Organizational Communications and Information Systems Division "Top Paper" award.

Montealegre, R. "A Case for More Case Study Research in the Implementation of Information Technology in Less-Developed Countries," *Proceedings of the Seventh International Conference on Management of Technology*, Orlando, Fla., February 1998.

Montealegre, R. "Managing Information Technology in Modernizing an Organization in a Less-Developed Country," in Nunamaker, J.F. and R. Sprague (eds.) *Proceedings of the Thirty Annual Hawaii International Conference on System Science*, Vol. 3, 1997, pp. 485-94. Selected as the "Best Paper on the Technology Management" track and nominated for the conference "Best Paper" Award.

Montealegre, R. "What Can We Learn from the Implementation of the Automated Baggage-Handling System at the Denver International Airport," *Proceedings of the Americas Conference on Information Systems (AIS-1996)*, Phoenix, Arizona, August 1996.

Montealegre, R. "Beyond the Technology... The Implications of the Internet and the World-Wide-Web for Latin American Managers," *Proceedings of the Fifth Permanent Forum on Latin American and Caribbean Networks*, Lima, Peru, April 14-19, 1996.

Montealegre, R. and Applegate L. "Information Technology & Organization Change: Lessons from a Less-Developed Country" in *Diffusion, Transfer and Implementation of Information Technology* (Ed. L. Levine), Elsevier Publishing, Amsterdam, 1994, pp. 99-131.

Montealegre, R., Fuentes, F., Paz, F., and Roma, M. "User Oriented Information Systems Development, Case Study: The Ministry of The Interior in El Salvador," *Proceedings of the Third International Workshop on Computer-aided Software Engineering (CASE'89)*, London, England, July, 1989.

Montealegre, R. "Operation Research Techniques for the Identification of Managerial Problems in Food Aid Programs," *Proceedings of the IV Latin-Iberian-American Congress on Operation Research and Systems Engineering*, Rio de Janeiro, Brazil, October, 1987.

Woodside, C.M. and Montealegre, R. "On Packet Buffering and Protocol Performance," co-authored with C.M. Woodside, in *Protocol Specification, Testing and Verification* (Ed. M. Diaz), Elsevier Science, Amsterdam, 1985, pp. 375-386.

Publications: Refereed Case Studies

McFarlan, F.W., R. Montealegre, and Andersen, E. "Entrepreneurial Leadership in Forming High Tech Enclaves: Lessons from the Government of Andhra Pradesh," Harvard Business School Case, 308-079, 2007.

Montealegre, R., Berasategui, L., Applegate, L., and Rodriguez, P. "Ford Argentina: Transforming a Global Industry in a Local Market," Harvard Business School Case, 803-093, 2003.

Dale, J., Montealegre, R., and Sull, D. "BEA Systems, Inc.: Constant Reinvention to Cope with Market Waves," Harvard Business School Case 803-118, 2003.

Montealegre, R. and Ballve, A. "Patagon.com: Expanding Globally and Penetrating Locally while Constantly Reinventing Itself," Ivey Publications, Case No. 9B012, 2001.

Montealegre, R., "Patagon.com: Expanding Globally and Penetrating Locally while Constantly Reinventing Itself," Ivey Publications, Teaching Note No. 8B01E12, 2001.

Elegant, A. T. and Montealegre, R. "E*Trade Securities, Inc., Pioneer On-Line Trader, Struggles to Stay on Top," *Annals of Cases on Information Technology in Applications and Management in Organizations*, Volume III, Idea Group Publishing 2001, pp. 89-114.

Reprinted in: Raisinghani, M. *Cases on Worldwide E-Commerce: Theory in Action*, Idea Group, Hershey, PA, 2002, pp. 221-249.

Montealegre, R., Pereiro, L., and Sahlman, W. "Patagon.com: Building (and Defending) the First Financial Destination in Latin America," Harvard Business School Case 800-185, 1999.

Montealegre, R., Vera, D., Applegate, L., and Barone K.J. "Bolsa de Valores de Guayaquil (BVG): Reaching Worldwide Investors Through the Internet," Harvard Business School Case 399-070, 1998.

Montealegre, R., Knoop, C., Nelson, J. and Applegate, L. "BAE Automated Systems (A): Implementing the Denver International Airport Baggage-Handling System," Harvard Business School Case 396-311, 1996. It has been in the Harvard Business School Press' *Best Selling Teaching Materials Catalog*.

Reprinted in: Applegate L.M., R.D. Austin, and F.W. McFarlan, *Creating Business Advantage in the Information Age*, McGraw-Hill, Boston, 2002, pp. 331-344.

Reprinted in: Applegate L.M., W.F. McFarlan, and J.L. McKenney, *Corporate Information Systems Management: Text and Cases*, fifth edition, Irwin, Boston, 1999, pp. 546-561.

Reprinted in: Glass, R.L. (ed.), *Software Runaways*, Prentice-Hall, 1998.

Montealegre, R., Knoop, C., Nelson, J. and Applegate, L. "BAE Automated Systems (B): Implementing the Denver International Airport Baggage-Handling System," Harvard Business School Case 396-312, 1996.

Montealegre, R. and Applegate, L. "AZUCAR, S.A.:(1973-1977)," Harvard Business School Case 195-008, 1994.
Reprinted in: Applegate L.M., W.F. McFarlan, and J.L. McKenney, *Corporate Information Systems Management: Text and Cases*, fourth edition, Irwin, Chicago, 1996, pp. 722-737.

Montealegre, R. and Applegate, L. "AZUCAR, S.A.:(1978-1979)," Harvard Business School Case 195-009, 1994.

Applegate, L. and Montealegre, R. "Eastman Kodak: Managing Information Services through Strategic Alliances," Harvard Business School Case 192-030, 1991. It has been in the Harvard Business School Press' *Best Selling Teaching Materials Catalog* since 1995.

Reprinted in: Cash, J.I., W.F. McFarlan, J.L. McKenney, and L.M. Applegate, *Corporate Information Systems Management: Text and Cases*, Third edition, Irwin, Chicago, 1992, pp. 515-537.

Montealegre, R., Applegate, L., and Nolan, R. "FRITO-LAY: The Early Years," Harvard Business School Case No. 192-004, 1991.

Research Proposals Funded

Selto, F., Montealegre, R. and Groot, T.L. *Management Control of Foreign Sourcing Relationships*. Proposal submitted to the American Institute of Certified Public Accountants (AICPA). The proposal received a \$40,000 grant for 2007-8.

Montealegre, R. *Implementing and Using Information Systems in the Transfer of Knowledge across Social Settings: Lessons from a Japanese Multinational Automobile Firm*. Proposal submitted to Leeds School of Business Research Committee. The proposal received a Summer Support Grant for 2004.

Aragon, S., Cabrera, A., Dans, E., Montealegre, Peterson, R. *Information Management Research Center: A research Center at the Instituto de Empresa in Madrid*. Proposal submitted to Accenture. The proposal received a Support Grant for 2003-2004.

Montealegre, R. *Supply Relationship Management: The Experience of Spanish companies*. Proposal submitted to the Leeds School of Business Research Committee. The proposal received a Summer Support Grant for 2003.

Montealegre, R. *BEA Systems, Inc.: Constant Reinvention to Cope with Market Waves*. Proposal submitted to the Robert and Beverly A. Deming Center for Entrepreneurship at the University of Colorado, Boulder. The proposal received a Summer Support Grant for 2002.

Montealegre, R. *Developing E-Commerce Strategies in Constrained and Unstable Environments: The Experience at Patagon.com*. Proposal submitted to the College of Business Research Committee at the University of Colorado, Boulder. The proposal received a Summer Support Grant for 2000.

Montealegre, R. *Extending the Resource-Based View of the Firm: Lessons from the Adoption of the Internet in Bolsa de Valores de Guayaquil*. Proposal submitted to the College of Business Research Committee at the University of Colorado, Boulder. The proposal received a Summer Support Grant for 1999.

Montealegre, R. *Institutional Interventions for Information Technology Adoption in Less-Developed Countries*. Proposal submitted to the College of Business Research Committee at the University of Colorado, Boulder. The proposal received a Summer Support Grant for 1998.

Montealegre, R. *Electronic Commerce Strategy Formation and its Implementation*. Proposal submitted to the College of Business Research Committee at the University of Colorado, Boulder. The proposal received a Summer Support Grant for 1997.

Publications: Non-refereed Research Papers

Clavero, C., Ruiz, F. and Montealegre, R. "Implementacion de un ERP o lucha contra el destino" (ERP implementation or a fight against destiny), *Revista de Empresa*, Jul-Sep 2007, pp. 24-35.

Chun, M., Montealegre, R., and Mooney, J. "Synchronizing Firm Strategy and IT Resource Utilization," Americas Conference on Information Systems MIS Quarterly Executive Workshop, August 2006, Acapulco, Mexico.

Keil, M. and Montealegre, R. "Breaking the Cycle," *Strategic Direction*, Vol. 16, No. 10, October 2000, pp. 19-21.

Elegant, A. and Montealegre, R. "The Emergence and Growth of Online Trading," *Colorado Business Review*, Vol. LXVI, No. 4, July 2000, p.3.

Montealegre, R. Mata, A., Cuevas, R. and Fuentes, F. *La Investigación de Operaciones a Nivel Estratégico* (Operations Research at the Strategic Level), Guatemala: Institute of Nutrition of Central America and Panama, 1990.

Montealegre, R. "APODIS: A User Oriented Information Systems Development Methodology," *Data For Development News*, No. 27, December 1989, pp. 18-20.

Montealegre, R., Mata, A., Cuevas, R. and Fuentes, F. *Guías Metodológicas de Investigación de Operaciones en Programas de Alimentación a Grupos* (Methodological Guidelines for Operations Research in Food Aid Programs), Guatemala: Institute of Nutrition of Central America and Panama, 1989.

Mata, A., Cuevas, R., Montealegre, R. and Fuentes, F. *Desarrollo del Sistema de Información para los Programas de Alimentación a Grupos del Ministerio del Interior* (Development of the Information System for the Food Aid Programs in the Ministry of Interior), San Salvador, El Salvador: Ministry of Interior, 1988.

Montealegre, R. *Sistemas de Información en los Programas de Alimentación a Grupos en Centro América y Panamá: Enfoques* (Information Systems of the Food Aid Programs in Central America and Panama), Guatemala: The Institute of Nutrition of Central America and Panama, 1987.

Montealegre, R. *Diseño de Sistemas de Monitoreo y Evaluación de Programas de Alimentación a Grupos: El Método de Factores Críticos* (Design of Systems for Monitoring and Evaluating Food Aid Programs: The Critical Factors Method), Guatemala: The Institute of Nutrition of Central America and Panama, 1987.

Mata, A., Montealegre, R. Cuevas, R. and Fuentes, F. *Investigación de Operaciones de los Programas de Alimentación a Grupos en Costa Rica* (Operations Research of the Food Aid Programs in Costa Rica), San Jose, Costa Rica: Institute of Nutrition of Central America and Panama, 1987.

Woodside, C.M. and Montealegre, R. "The Effect of Buffering Strategies on Protocol Execution Performance," *ISEM Research Report No. 33*. ISEM Universidad de Paris-Sud, May, 1985.

Presentations

- 2008 Invited panelist: "How IT and mentoring can help in developing your business strategy," Women, Enterprise and Technology Program at IE Business School. Other panelists included Rafael Puyol, President of IE University, and Helena Herrero, Vice-president of Hewlett-Packard Spain. Madrid, Spain, June 5.
- 2008 Keynote Speaker: "Information Technology and Corporate Strategy, Innovation 2008, Guatemala, Feb. 25-28.
- 2008 Invited to present my research on "The role of IT and Strategy" to the Management Team at the City of Brighton, Colorado, February 11.
- 2007 Invited Guest Speaker: "Technology Clusters: Lessons from India," CONVERCIENCIA, Guatemala, August.
- 2006 Invited Guest Speaker: "Technology Clusters in Latin America: Opportunities and Challenges," II International Colloquium on the Information Society in Comparative Perspectives: The Americas and Europe. Colloquium sponsored by Northwestern University, University of Southern California, and Universidad de San Andres, Argentina, July 31.
- 2006 Invited as Guest Speaker to the Launching of the National Technology Cluster of Guatemala. Participants included the Vice President of the Nation, Minister of Education, Minister of Finance, and President of the Congress, March 9.
- 2005 Seminar on "Becoming a Digital Business," Instituto de Empresa, Spain, October 11-21.
- 2005 Seminar: "Business Strategies in the Digital Age," Escuela de Alta Direccion y Administración (ESAN), Lima, Peru, August 11-15.
- 2005 Seminar: "Becoming a Digital Business," Universidad Torcuato DiTella, Argentina, January 24-28.
- 2004 Panel chair "IS and inter-organizational relationship and ubiquitous computing," Organizations and Society in Information Systems 2004 Workshop, Washington, D.C., December 12.
- 2004 Panel: "Marketing on the Internet: What's new and What Isn't," INFORMS Annual Meeting, Denver, October 24. Other panelists were: Dipankar Chakravarti, John Anderson, Steve Harris, Paul Imbierowicz, and Rick Robinson.
- 2004 Seminar on "Becoming a Digital Business," Instituto de Empresa, Spain, July 5-23.
- 2004 Panel "Behavioral Research in Management Information Systems" Big XII MIS Symposium, Iowa State University, Ames, April 4.
- 2004 Seminar: "Becoming a Digital Business," Universidad Torcuato DiTella, Argentina, January 26-31.
- 2003 Keynote speech "Trends in the IT Market" at the IBM Software Applications Annual Conference. Madrid, October 23. The session was attended by over 500 people, including the President of IBM Spain and Portugal.
- 2003 Opening session of the conference: "IS Challenges in the Rise of Globalization," the first joint conference between the IFIP working groups 8.2 (Information Systems in Organizations), and 9.4 (Information Technology in Developing Countries), Athens, Greece, June 15-17.

- 2003 Seminar: "The use of technologies for competitive advantage of small and medium size companies," NETI Project (a project of innovative technology entrepreneurial companies), Madrid, May 27.
- 2003 Seminar on "Becoming a Digital Business," Instituto de Empresa, Spain, May 5-23.
- 2003 Seminar on "Business Strategies in the Digital Age," Escuela de Alta Direccion y Administracion (EADA), Barcelona, Spain, April 7-11.
- 2003 Panel: "Managing Information Technology: The New World Vision," event sponsored by Microsoft and the Harvard Business Review Latin America. Co-presenters included: Tom Davenport, Director of Accenture Institute for Strategic Change, Jane Linder, former professor at Harvard Business School Professor, and Fernando Quezada, professor at MIT. The event was attended by over 400 business managers of Mexican companies, Mexico City, April 1.
- 2003 Seminar: "Pointers in Doing Case Research." A seminar presented to university professors of the Spanish Andalusia Region. Sponsored by CENTRA (A research center of Andalusia), Universidad Pablo de Olavide, Seville, March 21.
- 2003 Seminar: "BEA Systems Inc.: Constant Reinvention to Cope with Market Waves," Norwegian School of Management, Oslo, Norway, February 21, 2003.
- 2003 Seminar: "The Impact of New Digital Technologies on Business Schools," San Telmo, Seville, Spain, February 17, 2003.
- 2002 Seminar on "The Impact of Information Technology on the Organization," Universidad de Cadiz, Spain, November 28.
- 2002 Seminar on "A Process Model of Capability Development: Lessons from the Electronic Commerce Strategy at Bolsa de Valores de Guayaquil," University of Bath, England, November 13.
- 2002 Seminar on "Competitive Strategies in the Internet Age," Instituto de Empresa, Spain, October 14-25.
- 2002 Seminar on "E-Business in Developing Countries," Norwegian School of Management, Norway, April 4.
- 2001 Seminar on "Competitive Strategies in the Internet Age," Instituto de Empresa, Spain, October 15-26.
- 2001 Keynote speaker, "Mobile Internet: Present Situation and Trend," *I Mobile Internet Meeting and its Application in Tourism*, Palma de Mallorca, Spain, May 29-30. A meeting attended by 64 general managers of European companies related to telecommunications and tourism industries.
- 2001 Panel: "Electronic Commerce in Iberoamerica: The Coming Markets and their Coming Battles." Chair: Ramiro Montealegre. Participants: Alejandro Carrera, IAE Business School (Argentina); Carlos Scheel, Instituto Tecnologico de Monterrey; David Montesion, INCAE Business School (Costa Rica); and Josep Valor, IESE Business School (Spain), *Academy of Management 2001*, Washington D.C.
- 2000 Seminar on "Business Strategy in the Internet Age," Escuela de Negocios de la Universidad de Navarra (IESE), Spain, October 2-4.
- 2001 "Up E-Commerce Strategy for Constrained and Unstable Environments: The Experience at *Patagon.com*," *Academy of Management 2000*, Toronto, August 7.
- 2000 Keynote speaker, "Surviving in the Web Economy: Moving Forward, Constant Reinvention," *Latin Venture 2000*, Miami, March 3. More than 700 entrepreneurs, venture capitalists, and corporate executives from over 20 countries in Europe and North, Central, and South America came to analyze the emergence of the Latin American Internet industry.

- 2000 "The Context of Resource Decision in the Diffusion of Internet Strategies in Less-Developed Countries: Lessons from Bolsa de Valores de Guayaquil," University College Dublin, Ireland, February 16.
- 1999 "Mastering the Case Method of Teaching," with M. Keil, D. Stoddard, J. Smith, and R. DeFillippi, *Academy of Management 1999*, Chicago, August 8.
- 1999 Keynote speaker, "Free-Trade: Can Technology Close the Competitive Gap?" *XXIII Miami Business Conference on Latin America and the Caribbean: The Hemisphere's readiness for the 21st Century*, Miami, December 10. Co-presenters included the president of Sprint International, planning director of Telecordia Technologies, president of Embratel, vice-president of Teleglobe, and ASAP feature editor at Forbes. Audience: 1,200 leaders of the Americas (including presidents from the Dominican Republic, El Salvador, Haiti, and Guyana, and prime ministers from Barbados, Trinidad and Tobago, and Grenada).
- 1999 "BAE Automated Systems: Implementing the Denver International Airport Baggage-Handling System," *1999 Andersen Consulting Leadership Seminar*, University of Colorado, July 22.
- 1999 "Falling with Style: How Executives can Extricate Themselves from Failing Course of Action," *Business School Research Seminar*, Universidad Torcuato diTella, May 20.
- 1998 "Administración de la Tecnología Informática a través de Alianzas Estratégicas" (Managing Information Technology through Strategic Alliances), *1998 Information Technology Workshop*. Invited as a keynote speaker by the government of the state of Mendoza, Argentina. The presentation was broadcasted from the University of Colorado, November 17.
- 1998 "Comercio Electronico: Oportunidades y Retos para el Gerente Latino Americano" (Electronic Commerce: Opportunities and Challenges for Latin American Managers). Keynote speaker at the *Consejo Latinoamericano de Escuelas de Administracion* (Latin America Business Schools Council, an association formed by the deans of various Latin American Business Schools), Santo Domingo, Dominican Republic, October 13.
- 1998 "Qualitative Research and Analysis in Information System." Invited to present my field research approach at four different universities in Spain: Universidad Carlos III in Madrid (June 15), Universidad de Sevilla (June 24), Universidad de Cadiz (June 30), and Universidad Pablo de Olavide in Seville (July 2).
- 1998 "De-escalation of Information Technology Projects: Lessons from the Denver International Airport," *Computer IS Research Colloquium Series*, Georgia State University, May 29.
- 1997 "Electronic Commerce Around the World: The Coming Electronic Commerce Markets and Their Coming Battles," member of a panel, *1997 ICIS Research Workshop*, Atlanta, December 13.
- 1997 "Connecting Less-Developed Countries to the Internet: Lessons from Four Latin American Countries," co-authored with P. Bartholomew, *Academy of Management 1997*, Boston, August 11
- 1997 "Electronic Commerce and Its Implications for Latin America" *Escuela Latino Americana de Redes* (ESLARED), Universidad de los Andes en Mérida, Venezuela, November 19. Invited by the INTERNET Society, the Organization of Americas States (OAS) and the International Center for Theoretical Physics.
- 1997 "US West Communications: The 'Life's Better Here' Strategy," *1997 Andersen Consulting Leadership Seminar*, University of Colorado at Boulder, July 26.
- 1996 "The Interplay between information Technology and Individuals," Instituto Tecnológico de Monterrey, November 28. The presentation was televised and broadcasted to 26 universities nationwide in Mexico.

- 1996 "Getting ready for a Ph.D. Program in Management Information Systems," *The PhD Project Conference*, Chicago, November 22.
- 1996 "Information Technology, Human Resources and Organizational Change", Keynote Speaker at the *1996 Guatemalan Conference on Human Resources*, July 20.
- 1996 "Teaching in Different Cultures: A Comparison of Business Education in the Hispanic World and the United States," with J. De Castro, D. Balkin, and M. Laguna, *The Business Association for Latin American Studies (BALAS) 1996*, Monterrey, Mexico, March.
- 1996 "IT Employment and Skill Outlook on the Front Range," Rocky Mountain Information Management Association, Denver, January 9.
- 1995 "IT-Based Process Change—Approaches and Cautions," panelist, *International Federation for Information Processing (IFIP) Working Group 8.2*, Cambridge, England, December 9.
- 1995 "After Business Reengineering... The Impact of Technology in the Structure of the Organization," *1995 Guatemalan Management Association Conference*, August 5.
- 1995 "Organizational Learning: The Challenge for Latin American Managers," Instituto Tecnológico de Monterrey, NL, Mexico, February 24. The presentation was televised and broadcasted to 26 universities nationwide in Mexico.
- 1995 "Organizational Learning: The Challenge for Latin American Managers," *XX International Symposium in Computer Systems*, Instituto Tecnológico de Monterrey, NL, Mexico, February 23.
- 1994 "Firm/Sector Level Perspective on Innovation," panelist, *First Trinational Summer Institute on Innovation, Competitiveness and Sustainability in the Emergent North America Community*, Vancouver, August 15.
- 1994 "Information Technology Revolution: The Challenge for Guatemalan Managers," Keynote Speaker at *1994 Guatemalan Management and Information Technology Conference*, August 4.
- 1986 "Diseño de Sistema de Monitoreo y Evaluación de Programs de Alimentación a Grupos: El Método de Factores Críticos para el Exito" (Design of Monitoring and Evaluating Systems for Food Aid Programs: The Critical Success Factors Method), *First Iberoamerican Congress on Information and Health*, Panama City, Panama, December.
- 1986 "La Importancia del Desarrollo del Sector Informático de Guatemala" (The Development of the Information Technology in Guatemala: The Key to Prosperity), *National Symposium on the Guatemalan Problems*, Universidad Francisco Marroquin, September.
- 1986 "Las Redes Locales versus Sistemas Multiusuarios" (Local Area Networks versus Multiuser Systems), with David Alvarez, *National Information System Congress*, Guatemala, September.
- 1985 "El Uso de Prototipos como una Herramienta en el Diseño de Protocolos Eficiente" (Prototyping: A Design Tool for Efficient Protocol Development), *X International Symposium in Computer Systems*, Instituto Tecnológico de Monterrey, NL, Mexico, March.
- 1985 "Un Estudio de la Carga de Ejecución requerida para el Manejo de Espacio en Memoria por un Protocolo de Transporte" (A Study of Processor Workload Caused by the Buffering Management of a Transport Protocol), *Third National Congress in Information and Teleinformation - USUARIA'85*, Argentina, May.

Courses Taught

Executive Education

- Current Issues in Information Technology Management
- Competing with Information Technology and the Internet
- Business Strategies in the Internet Age
- E-Venturing
- Business Implications fo the Internet
- Project Management

Doctoral Seminars

- Qualitative Research Methods
- Case Research in Information Systems
- Research Foundations in Information Systems

Graduate Courses

- Information Technology and Business Strategy
- Global Issues in Information Technology Management
- Digital Business Strategies
- Management Information Systems
- Competing with Information Technology and the Internet
- Accenture e-Business Graduate Seminar
- Business Strategies in the Internet Age

Undergraduate Courses

- Digital Business Strategies
- Systems Analysis and Conceptual Design
- Competing with Information Technology and the Internet

Students Supervised

Guiding 4 independent studies (A. Elegant, “The Evolution of the On-Line Trading Industry” and “E*Trade Securities, Pioneer On-Line Trader.” D. Render, “Sterling-Rice Group and the Internet: Brand Development in an Online World.” D. Wood, “Management of Emerging Technology Projects.”)

Chairing 1 doctoral dissertation (Mark Chun, “The Interplay between IT and Supply Chain”)

Member of 8 doctoral dissertation committees

Member of 9 doctoral qualifying exam committees

Member of 32 master thesis committees

Member of 12 master exam committees

Teaching Development

Since 1994, I have attended 54 development seminars. These seminars were offered by the Faculty Teaching Excellence Program (22), College of Business (7), Faculty Research Opportunity Program (2), the Office of Faculty Affair (2), and Information Technology Services (1) at the University of Colorado. The remaining seven seminars were offered by Harvard University, Microsoft, Course Technology, Giga Information Group, JD Edwards, Academy of Management EXECUTIVE, and the Organization Communications and Information Systems Division of the Academy of Management. Topics covered: teaching portfolios, proposal writing, stress management, pedagogical approaches, technology & education, trends in business education, and e-learning.

Editorial Activities

Associate Editor of *Information Technology for Development* (since 2002)

Associate Editor of *Information Technology & People* (1999-2005)

Member of the *Information Technology & People* Editorial Board (since 1998)

Member of the *Journal of Management Research* Editorial Board (since 2001)

Member of the *Revista de Empresa* Editorial Board (since 2001)

Member of the *Decision Science Journal of Innovative Education* Editorial Board (2001-2004)
Guest Co-editor of *Information Systems Journal*'s special issue on "Social and Organizational Aspects of Internet-Based Information Systems," Vol. 13, No. 2, April 2003.
Guest Editor of the *Information Technology & People*'s special issue on "Information Technology in Latin America," (1997)
Associate Editor for the special issue on "Information Systems in Developing Countries" of the Journal *MIS Quarterly*
Associate Editor of the "Global Information Technology Issues" track at the International Conference on Information Systems (ICIS), 2007.
Reviewer: *MIS Quarterly*; *Information Systems Research (ISR)*; *Information Technology & People*; *Technology Studies Journal*; *Journal of Management Information Systems (JMIS)*; *Information Systems*; *Information Society*; *Data Base*; *Decision Science Journal of Innovative Education*; *The International Conference on Information Systems (ICIS)*; the *Americas Conference on Information Systems (AIS)*; and the *Academy of Management*.

Service Activities

Profession

Chair, IS Junior Faculty Camp at Americas Conference on Information Systems (AMCIS), August 12, 2010, Lima, Peru.
Program Chair, Conference: "IS Challenges in the Rise of Globalization," the first joint conference between the IFIP working groups 8.2 (Information Systems in Organizations), and 9.4 (Information Technology in Developing Countries), Athens, Greece, June 15-17, 2003.
Member of the Program Committee for conference: "Social Exclusion—Societal and Organizational Implications for Information Systems," IFIP 8.2, August 2006, Limerick, Ireland.
Member of the Program Committee for conference: "Designing Ubiquitous Information Environments," IFIP 8.2, August 2005, Cleveland, Ohio.
Member of the Program Committee, XI European Conference on IT Evaluation, Amsterdam, November 2004.
Member of the Program Committee, X European Conference on IT Evaluation, Spain, September 2003.
Counsellor at the IS Junior Faculty Camp at Americas Conference on Information Systems (AMCIS), August 6, 2009, San Francisco, California.
Counsellor at the IS Junior Faculty Camp at Americas Conference on Information Systems (AMCIS), August 3, 2003, Tampa, Florida.
First Academic Director of the Information Management Research Center, a joint research center of Accenture and Instituto de Empresa, Madrid, 2002-2003.
Member of the Advisory Board of the "Instituto Universitario de Investigacion de Empresa de Madrid" (The University Institute of Enterprise Research of Madrid). This is a scientific entity founded and sponsored by the government of Spain to promote research in the management and economic sciences.
Member of the Board in the IS/IT Research Center at Universidad Pablo de Olavide, Seville, Spain.
Chair of the Futuristic Planning Committee of the Iberoamerican Academy of Management, 1998-1999.
Review panelist of the Computer and Social Systems Research Awards granted by National Science Foundation.
International Liaison Committee for the International Conference on Information Systems (1999 and 2001).
Member of the following Professional Associations: The Association of Information Systems (AIS); the International Federation for Information Processing (IFIP) Working Group 8.2 (Information Systems in Organizations); the Academy of Management's Organizational Communication and Information Systems Division; the Business Association for Latin American Studies (BALAS); Data for Development; the Pan-American Engineering Associations-UPADI-(Former Secretary); and Asociación de Informática de Guatemala-ADIG-(Former Vice-President, Former Secretary).

University of Colorado at Boulder

Business Area Teaching Scholar, a university level assignment given jointly by the Dean of the College of Business and the University of Colorado's Faculty Teaching Excellence Program to provide resources, coordinate events, communicate with the College of Business chairs, and offer guidance and support to facilitate reflection and interaction among faculty (2000-2004).

Faculty Liaison for Teaching with Technology, a university level assignment given jointly by the Dean of the College of Business and the University of Colorado's Faculty Teaching Excellence Program *to improve teaching with technology at the University of Colorado* (2001-2002).

Member of the Study Abroad Committee (2003-2007 and since 2008)

Member of the Curriculum that Links Information/Communication Technology/Society Committee (1997)

Leeds School of Business

Director, International Management Program (Since 2008)

Chair of the Teaching Excellence Committee (2000-2004)

Chair of the 1999 Joseph Frascina Teaching Excellence Award

Member of the Leeds School Executive Committee (2004-2007)

Member of the Entrepreneurship Faculty Steering Committee (since 2007)

Member of the Leeds Research Committee (Since 2007)

Member of the Executive Development Programs Advisory Committee (since 2007)

Member of the Master's Curriculum and Policy Committee (1996-2007)

Member of the Salary Equity Committee (2003-2004)

Member of the College of Business Special Programs Committee (2000-2002)

Member of the MBA International Business Experience Committee (2001-2002)

Member of the International Committee (1996-1997 and 2006-07)

Faculty leader on the Andersen Consulting Leadership Seminar (1996-2001)

Systems Division

Chair of the Systems Division (since 2004)

Member of the Executive Committee (2001-2004)

Member of the Systems Division Research Evaluation Committee (Since 2003)

Member of the Recruiting Committee

Member of the Advisory Board (1994-1999)

Faculty advisor for case study competitions, such as Case Challenge and the Telecommunications Consulting Challenge.

Visiting Scholar

Case Western Reserve University, Cleveland, Ohio, 1996-1998

Escuela de Alta Dirección y Administración (EADA), Barcelona, Spain, since 2003

Escuela Superior de y Administración de Negocios (ESAN), Peru, since 2005

IESE Business School, Universidad de Navarra, Barcelona, Spain, 2000

Indian School of Business (ISB), Hyderabad, India, since 2006

Instituto de Altos Estudios (IAE) de la Universidad Austral, Buenos Aires, Argentina, 2000-2002

Instituto de Centro América de Administración de Empresas (INCAE), Alajuela, Costa Rica 1995-1996

Instituto de Desarrollo Empresarial de Guayaquil, Guayaquil, Ecuador, 1997

Instituto de Empresa, Madrid, Spain, since 2000

Instituto Tecnológico de Monterrey, Monterrey, Mexico, 1995-1996

Norwegian School of Management, Norway, 2000-2002

Universidad Argentina de la Empresa, Argentina, since 2005

Universidad Carlos Tercero, Madrid, Spain, 1998

Universidad de Cadiz, Cadiz, Spain, since 1998

Universidad de los Andes, Merida, Venezuela, 1997

Universidad Francisco Marroquín, Guatemala, 1996

Universidad Pablo de Olavide, Seville, Spain, since 1998

Univesidad Torcuato DiTella, Buenos Aires, Argentina, since 1999

University of Toronto, Canada, since 2006

Professional Honors, Awards, and Recognitions

Member of the Advisory Board of the "Instituto Universitario de Investigacion de Empresa de Madrid" (University Institute of Enterprise Research of Madrid). This a group of selected world wide scholars invited by the government of Madrid to promote research in the management and economic sciences (since 2003).

"Best Paper Published in 2003" Award *from IEEE Transactions on Engineering Management*, 2003.

Second "Best Seller Article for Academic Market" of articles published in MIT's *Sloan Management Review* in 2003. In addition, the article was translated into German and republished in *Harvard Business Manager* in June 2000. In the MIT Sloan website it is now highlighted as a "Classic" article. (Visit <http://www.sloanreview.mit.edu/smr/topic/classics/>).

Accenture Distinguished Professor of Information Management, Instituto de Empresa, Madrid, 2002-2004.

First Academic Director of the Information Management Research Center, a joint research center of Accenture and Instituto de Empresa, Madrid, 2002-2004.

Boulder Faculty Assembly Excellence in Teaching Award (a university-wide award), 2002.

Tony Tisone Teaching Excellence Award for outstanding contributions to the teaching mission of the College of Business at the University of Colorado, 2001.

M.B.A. Professor of the Year Award for outstanding teaching in the College of Business at the University of Colorado. This award *recognizes that professor who has demonstrated exceptional teaching abilities and the highest quality standards in the classroom, and provided an outstanding learning experience for the students, and offered useful, practical information in a comprehensive and understandable manner*, 2000.

Graduate Professor of the Year Award for outstanding teaching in the College of Business at the University of Colorado. The award recipient *is considered to be the best overall graduate professor the student has had during his/her graduate degree program*, 1999.

Joseph Frasca Excellence Award for outstanding teaching in the College of Business, University of Colorado. This award recognizes faculty, *who go beyond the bounds of "textbook teaching" and strive instead to inspire students, to engage students' minds and develop their mental powers, to influence students to take a broad perspective, and to move the students' minds to see what is going on around them*, 1998.

Best Paper Award of the Organizational Communication and Information Systems (OCIS) Division of the Academy of Management, 1998.

MCB University Press' Award for the "Most Outstanding paper published in *Information Technology & People* in 1997."

Summer support grant from the University of Colorado, Boulder, 1997, 1998, 1999, and 2000.

Invited to evaluate the Latin American and Caribbean Networks by the U.S. Agency for International Development and the American Embassy in Peru, 1996).

Keynote Speaker of the "1996 Central American Conference on Human Resources" by the Guatemalan Management Association and the Guatemalan Human Resources Management Association.

Member of an experts group in the "First Trilateral Summer Institute on Innovation, Competitiveness and Sustainability in the Emergent North American Community" by the Canadian National Sciences and Engineering Research Council, the U.S. National Science Foundation, and the Consejo de Ciencia y Tecnología de México, 1994.

Harvard University scholarship, 1993-94.

William T. Grant Foundation scholarship, 1993-94.

W. K. Kellogg Foundation scholarship, 1990-93.

Listed in American Biographical Institute's *Personalities of the World* since 1994.

Listed in Marquis' *Who's Who in the World* since 1992.

"Honorary" Diploma for role as technical leader by the Salvadorian Minister of the Interior, 1990.

Scholarship from the Natural Science and Engineering Research Council of Canada, 1983-84.

Carleton University scholarship 1982-84.

Best Thesis of Guatemala award by the Guatemalan Information Association, 1984.

Universidad Francisco Marroquin scholarship, 1980-82.

American Field Service (AFS) International Fellowship, 1977-78.