CHANDLER STOLP, PhD

TEL: 512/471-8951

stolp@austin.utexas.edu

Associate Professor LBJ School of Public Affairs University of Texas at Austin Austin, TX 78713

Academic Appointments:

Lyndon B. Johnson School of Public Affairs, University of Texas at Austin. Associate Professor (1989–); Assistant Professor (1983-89); Instructor (1981-83)

IC2 Fellow, University of Texas (2004–)

Faculty Research Associate, University of Texas Population Research Center (2004–)

Faculty Associate and Member of the GSC, Department of Statistics & Data Sciences, University of Texas (2007–)

Lozano Long Institute of Latin American Studies, University of Texas, Faculty Associate (1981–); Member, Graduate Studies Committee for Latin American Studies (1990–2011)

Instituto Tecnológico y de Estudios Superiores de Monterrey, Mexico: Visiting Associate Professor of Economics (Fall 1987)

Fulbright Scholar. Nine-month fellowship to collect data and conduct research on technology assessment and regional econometric modeling in Monterrey, Mexico (1987)

UT Administrative Appointments:

Associate Dean for Academic Affairs, LBJ School of Public Affairs: 2011-

The Brazil Center, Lozano Long Institute of Latin American Studies, University of Texas at Austin. Director: 2005–2009

LBJ School of Public Affairs. Director & Graduate Adviser, PhD Program in Public Policy, 1997–2009; Assistant Graduate Adviser, 2009–11

LBJ School of Public Affairs. Assistant Graduate Adviser: 2002-11. Graduate Adviser: 1992-96

LBJ School of Public Affairs. Coordinator and Academic Adviser, MPAff/MA dual degree program with the Lozano Long Institute of Latin American Studies

LBJ School of Public Affars. Coordinator and Academic Adviser, MPAff/MBA dual degree program with the McCombs School of Business (1990–2012)

Inter-American Policy Studies Program (formerly the U.S.-Mexican Policy Studies Program). LBJ School of Public Affairs and Lozano Long Institute of Latin American Studies. Director 1996–2005; Co-Director 1990–1996

Hubert H. Humphrey Fellowship Program. United States Information Agency and the Institute of International Education. Coordinator for the University of Texas: 1993–97

Education:

PhD, Social & Decision Sciences Department and the Heinz School of Public Policy & Management (joint degree), Carnegie Mellon University: 1983

BS, Economics and Engineering, Stanford University: 1973 (with distinction; Phi Beta Kappa and Tau Beta Pi)

Additional Study:

University of Michigan, Interuniversity Consortium for Political and Social Research: Coursework in econometrics and applied statistics. Summer 1976

Universität Stuttgart (Germany): Coursework in *Geistesgeschichte* and social theory: 1971 Centro de Estudios Científicos, San Cristóbal de las Casas (Chiapas, Mexico): Practicum in economic anthropology: Summer 1970

Primary Research Interests:

- Statistical Methods for Decisionmaking in Messy Data Environments
- Microeconometric Evaluation of Social Policies and Programs
- · Social and Economic Development in Latin America
- The Political Economy of Economic Integration in the Western Hemisphere

Additional Professional Appointments and Experience:

Member, Executive Council, Network of Schools of Public Policy, Affairs, and Administration (NASPAA): 2015–

Chair, the Commission on Peer Review and Accreditation (COPRA), Network of Schools of Public Policy, Affairs, and Administration (NASPAA): 2012–2015

The Council for International Exchange of Scholars (CIES), peer reviewer for Fulbright Scholarships in the area of statistics: (2009–2012)

Texas Comptroller of Public Accounts. Statistical evaluation of Texas workforce training programs (with Texas Perspectives, Inc.): 2000–2002

Texas Department of Commerce Roundtable Economist: 1992-1995

Texas Historical Commission and the Meadows Foundation. Economic consultant for the Lower Rio Grande Historical Corridor Project: 1991

Technical Advisory Committee for the Property Tax Division of the Texas Comptroller of Public Accounts. Member and reviewer of statistical methodology used in annual property tax assessments: 1990-2002

Austin Hispanic Chamber of Commerce. Information management consultant: 1990

Texas Legislative Budget Board. Statistical consultant: March 1990

Texas Medical Association. Statistical consultant: November 1989

Texas Banking Department. Statistical consultant: May-July 1989

Texas Department of Agriculture. Statistical consultant; supervised the design and analysis of three opinion surveys: Dec 1988-Apr 1989

El Colegio de México, External Adviser for Computation. Directed a task force to review information system requirements: May-Dec 1987

Kraus International, Inc. (New York, NY). Special consultant on information management and health economics, the VISISA (public health) and CONADES (displaced persons) projects, United States Agency for International Development, El Salvador: 1985-87

Southwest Econometrics, Inc. (Austin, TX). Statistical and management information consultant in the area of hiring discrimination: 1985-87

Teaching:

Primary Courses: Research Methods, Applied Statistics, Social Policy Evaluation, Regional Economic Development

Policy Research Projects: Maternal and Child Health Along the U.S.-Mexico Border (1981-83), Central American Refugee Policy (1983-84); Economic Linkages of the Tourism Industry in Mexico (1988-89); Sectoral and Regional Impacts of North American Free Trade on Texas (1991-92); Transportation Infrastructure in Texas and Mexico under NAFTA (1992-93); Industrial Linkages between Texas and Mexico (1993-94); The Texas Automobile Liability Insurance System [1995-96]; Water Management in the Lower Rio Grande Valley (1996-98); Water Management in the Paso del Norte (1998-99); U.S.-Cuban Relations (2000-01); Modeling U.S.-Cuban Economic Interactions (2001-02)

Scholarly Publications:

- The impact of clinic closures on women obtaining abortion services after implementation of a restrictive law in Texas, American Journal of Public Health, Spring 2016 [forthcoming[]. [With C. Gerdts, L. Fuentes, D. Grossman, K. White, B. Keefe-Oates, K. Hopkins, and J. Potter.]
- Education and Work After High School: A First Look at the Class of 2006. Austin, TX: Ray Marshall Center for the Study of Human Resources, The University of Texas at Austin, September 2007 (With C.T. King, D. Schexnayder, G. Cumpton, and T. Smith)
- Broadband utilization in space: Effects of population and economic structure. *The Information Society.* 22:1-14, 2006 [With J. Horrigan and R. Wilson]
- The contribution of organizational justice in budget decision making to federal managers' organizational commitment. <u>Journal of Public Budgeting, Accounting, and Financial Management</u>, 15(4):505-524, 2003 [with B. Staley, B. Dastoor, and N. Magner]
- Systems and Policies for the Global Learning Economy. Volume 3 in the International Series on Technology Policy and Innovation. Westport, CT: Praeger, 2003. [Co-edited with P. Conceição, D. Gibson, and M. Heitor.]
- New Horizons of the U.S.-Mexico Relationship. A U.S.-Mexican Binational Council Report.

 Washington DC: Center for Strategic and International Studies, September 2001 [With D. Baer, R. Fernández de Castro, A. Peschard-Sverdrup.]
- A Giant Awakens: The Promises and Challenges of MERCOSUR. <u>Texas Business Review</u>, June 2000
- Navigating the Waters of the Paso del Norte: A People's Guide. U.S.-Mexican Special Publication, LBJ School of Public Affairs, 1999. (With J. Schmandt, G. Ward, L. Rhodes, and student researchers.) The Spanish language edition, Navegando las Aguas del Paso del Norte: Una Guía para la Gente, was published in 2000.
- A Better Way to Pay: Options for Texas' Automobile Liability Insurance System. Report for the Foundation for Insurance Regulatory Studies in Texas (FIRST), Austin, TX: 1999. (With K. Matwiczak and student researchers.)
- The Impact of a U.S.-Mexico Free Trade Agreement on the Texas Highway Network, Texas Transportation Institute Research Report 1317-1F, National Technical Information Service, Dated 1996, released in 1998. (With W. Luker, S. Cuellar, J. Memmott, R. Danave, and K. Steffel.)
- <u>Scarce Water: Doing More with Less in the Lower Rio Grande Valley</u>. U.S.-Mexican Policy Report No. 8. Austin: LBJ School of Public Affairs, 1998. (With Jurgen Schmandt, George Ward, and student researchers.)
- Regional concentration and efficiency in Mexican manufacturing. <u>European Journal of Operational Research</u>, 80(3):672-690, 1995. (With G. Bannister)
- <u>Telecomunicaciones en México ante el Reto de la Integración</u>. Monterrey, Mexico: ITESM and University of California at San Diego, 1994. [With A. Ibarra-Yunez, B. Petrazzini, R. Salinas de Gortari, and J. Horrigan]
- <u>U.S.-Mexican Free Trade: The Effect on Textiles and Apparel, Petrochemicals, and Banking in Texas, U.S.-Mexican Policy Studies Program Policy Report 5, Austin: LBJ School of Public Affairs, University of Texas, 1993.</u> (With L. Boske and S. Weintraub)
- Spatial concentration in Mexican industry: A test of the benefits versus the costs. U.S.-Mexican Occasional Paper Series, U.S.-Mexican Policy Studies Program Occasional Paper 4, LBJ School of Public Affairs, 1993. (With G. Bannister)
- <u>Texas-Mexico Multimodal Transportation</u>. Policy Research Project Report #104. Austin: LBJ School of Public Affairs, University of Texas, 1993. (With L. Boske, S. Weintraub, and student researchers)
- Technology, development, and hemispheric free trade. <u>The Annals of the American Academy of Political and Social Science</u>, 526:151-163, March 1993
- Exportaciones y generación de empleo en México: Un estudio sectorial. <u>Investigación</u> Económica, 200:111-140, June 1992. (With A. Ibarra-Yunez)

- The Canada/U.S./Mexico Free Trade Agreement: Forecasting regional impacts and meeting regional needs. Texas Paper on Mexico No. 91-04, Institute of Latin American Studies, University of Texas at Austin, Spring 1992
- Maximizing Benefits of Tourism in Guerrero, Mexico. Policy Research Project Report #93.

 Austin: LBJ School of Public Affairs, 1991. (With S. Weintraub, N.J. Glickman, and student researchers)
- Strengths and weaknesses of Data Envelopment Analysis: An urban and regional perspective. Computers, Environment, and Urban Systems. 14(2), Summer 1990
- Exports and Employment Generation in Mexico: A Sectoral Study. Research Monograph No. 33. Washington, DC: U.S. Commission for the Study of International Migration and Cooperative Economic Development, 1990. (With A. Ibarra-Yunez.) Also published as a chapter in Migration Impacts of Trade and Foreign Investment, S. Díaz-Briquets and S. Weintraub (eds.), Boulder: Westview Press, 1991
- Patterns of inpatient mental health, mental retardation, and substance abuse service utilization in California. Social Science Quarterly. 70(3), September 1989. (With D. Warner and M. Juretic)
- Maternal and Child Health on the U.S.-Mexico Border. Austin: LBJ School of Public Affairs, 1987 (with L. Chan, R. McCandless, B. Portnoy, and D. Warner)
- A framework for evaluating the efficiency of health centers in Nicaragua. In M. Conroy (ed.), Nicaragua: Profiles in the Revolutionary Public Sector. Boulder: Westview Press, 1987. Pp. 127-170
- Inpatient utilization of mental retardation, mental health, and substance abuse services in California hospitals in 1984. Working Paper No. 41, LBJ School of Public Affairs, University of Texas, 1987. (With M. Juretic and D. Warner)
- Payment for mental health inpatient care in California: An analysis of payment sources, facility types, and ethnicity. Working Paper No. 42, LBJ School of Public Affairs, University of Texas, 1987. (With M. Juretic and D. Warner)
- Mental health service utilization in California hospitals by age, ethnicity, and sex in 1983. In R. Rodríguez and M. Coleman (eds.), Mental Health Issues of the Mexican Origin Population in Texas. Austin: Hogg Foundation for Mental Health, 1987. (With D. Warner)
- The implications of growing economic interdependence for future trends in international migration. In <u>The Future of Migration</u>. Paris: OECD Directorate for Social Affairs, Manpower, and Education, 1987. (With S. Weintraub)
- Central Americans on the run: Political refugees or economic migrants? <u>LBJ Comment</u>, 31(3), Spring 1985. (With M. Jamail)
- Why does government grow? In Trudi C. Miller (ed.), <u>Public Sector Performance: A Conceptual Turning Point</u>. Baltimore: The Johns Hopkins University Press, 1984. Pp. 65-101. (With P.D. Larkey and M. Winer)
- Theorizing about the growth in government: A research assessment. <u>Journal of Public Policy Analysis</u>, 1(2), May 1981. (With P. Larkey and M. Winer)
- Regulation and routine decision making: The case of local school districts. Working Paper No. 10. Social & Decision Sciences Department, Carnegie-Mellon University, 1980. (With P.D. Larkey)
- The Insurance Corporation of British Columbia: A case study in program termination. <u>Case Studies in Public Policy and Management</u>. Case #9-380-640. Boston: Intercollegiate Case Clearing House, 1980. (With P.D. Larkey)
- Reycoot River drainage: A proposed timber harvest. <u>Case Studies in Public Policy and Management</u>. Case #9-380-730. Boston: Intercollegiate Case Clearing House, 1980. (With P.D. Larkey)
- The third crossing of Burrard Inlet: A case study in intergovernmental fiscal relations. <u>Case Studies in Public Policy and Management</u>. Case #9-380-646. Boston: Intercollegiate Case Clearing House, 1980. (With P.D. Larkey)

Structural problems in translating Shakespeare into German: An examination of Hamlet's soliloquy. Stanford Quarterly Review, 1(1), Spring 1971

Notes, Proceedings, Reviews, Editorials, and Other Publications:

- "Education and Work after High School: Recent Findings from the Central Texas Student Futures Project", *Texas Business Review*, August 2009 (with D. Schexnayder, G. Cumpton, and C.T. King)
- The Charlotte-Mecklenburg Region and New Urban Development, Report prepared in collaboration with Texas Perspectives, Inc, Citistates Group, and Gateway Planning Group, November 2006
- Prevailing Wage Study for the Austin Independent School District, Report prepared in collaboration with MGT of America and Texas Perspectives, Inc., February 2005
- The Economic Implications of Commuter Rail. Report prepared for the Austin-San Antonio Rail District in collaboration with Texas Perspectives, Inc., October 2004
- <u>Texas Workforce Training Review: A Report to the 78th Texas Legislature</u>. Carole Keeton Rylander, Texas Comptroller of Public Accounts, February 2003 (With C. Alexander, M. Anderberg, R. Garcia, J. Hockenyos, R. Leal)
- U.S.-Mexico Transboundary Water Management: The Case of the Rio Grande/Río Bravo, Recommendations for Policymakers for the Medium and Long Term. A report of the U.S.-Mexico Binational Council. Washington DC: Center for Strategic and International Studies, Instituto Tecnológico Autónomo de México, and the University of Texas at Austin, January 2003. (With others.)
- Medical Emergency: Costs of Uncompensated Care in Southwest Border Counties.

 Report for The United States/Mexico Border Counties Coalition, September 2002 (With MGT of America, Texas Perspectives Inc, and Sjoberg Evashenk Inc.)
- Democratic Institution Building in Central America, <u>Discovery</u>, 16(1), 2001 (With R. Todd) Smart Jobs and Skills Development Review: A Report to the 77th Texas Legislature.
 - Carole Keeton Rylander, Texas Comptroller of Public Accounts, March 2001 (With C. Alexander, M. Anderberg, R. Garcia, J. Hockenyos, R. Leal)
- A Vision for Tomorrow's El Paso: Economic Adjustment Strategic Plan. Report for the City of El Paso. Austin: Texas Perspectives, Inc., December 1999. Also available online at www.ci.el-paso.tx.us/ecodev2/wwwroot/strategic.htm (With Texas Perspectives, Angelou Economic Advisors, and MGT of America.)
- U.S.-Mexico Transboundary Water Management: The Case of the Rio Grande/Río Bravo, Recommendations for Policymakers for the Medium and Long Term. A report of the U.S.-Mexico Binational Council. Washington DC: Center for Strategic and International Studies, Instituto Tecnológico Autónomo de México, and the University of Texas at Austin, January 2003. (With others.)
- <u>Historic Preservation at Work for the Texas Economy</u>. A collaborative report prepared for the Texas Historical Commission, April 1999. [Contributor and member of the Advisory Committee along with others from the Center for Urban Policy Research at Rutgers University and Texas Perspectives Inc.]
- A Profile of the Aircraft Industry in Texas, A Profile of the Apparel Industry in Texas, A Profile of the Industrial Machinery Manufacturing Industry in Texas, A Profile of the Measuring and Controlling Instruments Industry in Texas, A Profile of the Medical Instrument Manufacturing Industry in Texas. Five in-depth sectoral studies published, by the Texas Manufacturing Assistance Center (TMAC), Texas Department of Commerce, Austin, TX, May 1996. (With J. Hockenyos and J. Horrigan)
- Tracking U.S. Trade. A set of trade indices and commentary on U.S. trade in the hemisphere, published as a monthly press release and Web page. Austin: Center for the Study of Western Hemispheric Trade, April 1996–2000

- "Border State Linkages to Mexico", pp. 43-54 and 91-106 in C. Blair (ed.), Mexican Policy and Industrial Development, Austin: Center for the Study of Western Hemispheric Trade (CSWHT), March 1996.
- NAFTA follow-up. Background paper for the Future of the Region Project, Association of South Texas Communities and the University of Texas at San Antonio's Center for Economic Development, October 1994.
- Dallas and Texas would be big winners under NAFTA. <u>The Dallas Morning News</u>, 14 November 1993. (With S. Weintraub)
- NAFTA: Challenges and opportunities for a 21st-century Texas. <u>Texas Lyceum Journal</u>, 10(1):16-23, Spring/Summer 1993. (With S. Weintraub)
- International Transportation Corridor Study: A Report on the Macro Perspective. A study prepared for the Texas Office of the Governor, Austin: LBJ School of Public Affairs, August 1993 (with L. Boske and S. Weintraub)
- Free trade update. Texas Perspective, 5(3):6-11, 1992
- Another approach to trade policy. <u>Texas Perspective</u>, 5(1-2): 3-7, 1992. (With J. Hockenyos) Making North American free trade work. Texas Business Review, December 1991. Also
- published as a chapter in L. Strout (ed.), <u>Manufacturing in Texas</u>, Austin, TX: Bureau of Business Research, Graduate School of Business, University of Texas, 1993
- U.S.-Mexico Free Trade Agreement: Issues and implications for manufacturing. <u>Texas</u>
 <u>Consortium Report on Free Trade</u>, Texas Department of Commerce (Business Development Division) and the Office of the Governor, October 1991, pp. 117-125
- Free trade over Texas. San Antonio Light, 15 September 1991. (With J. Hockenyos)
- Texas under free trade: Some sectoral, regional, and modeling considerations. <u>Proceedings of a Conference Sponsored by the Federal Reserve Bank of Dallas</u>. Dallas: Federal Reserve Bank of Dallas, 14 June 1991. (With J. Hockenyos)
- North American free trade: A Texas perspective. <u>Texas Perspective</u>, 4(4-5):3-6, 1991. (With J. Hockenyos)
- Hospital care for schizophrenia in California in 1984. A note in <u>Hospital and Community</u> Psychiatry, 41(9):1026-27, September 1990. (With D. Warner and L. Crumpton)
- Maternal and child health on the Texas-Mexico Border. In G. Rodríguez and M. Williams, <u>Second Symposium on Health and Human Services in the U.S. and Mexico</u>. Austin: School of Social Work, University of Texas at Austin, 1989. (With R. McCandless and D. Warner)
- Sourcebook on Central American Refugee Policy: A Bibliography with Subject and Country Index.

 Austin: LBJ School of Public Affairs and The Central America Resource Center, 1985 (edited with Margo Gutiérrez and Milton Jamail)
- Economic explanations of public sector growth: A review. In S.J. Bowers (ed.), <u>Proceedings of the Seventy-Sixth Annual Conference on Taxation</u>. Columbus, OH: The National Tax Association-Tax Institute of America, 1983. (With P.D. Larkey and M. Winer)
- Review of Public Budgeting in America (by T. Lynch). In Journal of Finance, 36(1), March 1981

Presentations at Professional Conferences:

- "Predicted Individual and Cumulative Effects of College Preparation Activities on College Enrollment in Central Texas", Poster, 2012 APPAM Fall Research Conference, Baltimore, MD (with G. Cumpton and D. Schexnayder)
- La estadística frente a la historia y la tecnología: Nuevas perspectivas en la evaluación de programas sociales. Los Caminos de la Descentralización en América Latina, workshop organized by the Fundação Getulio Vargas São Paulo. Olinda, Brazil: 11 January 2005
- Intra-industrial linkages in the Americas. Latin American Studies Association Annual Meetings, Washington DC: 8 Sept 2001
- ¿Cómo instrumentar una política social? 1er Foro PROFMEX-Guanajuato de Ideas Innovadoras para el Desarrollo de México, Guanajuato, Mexico: 14 April 1999
- New patterns of regional development in the Americas. Invited speaker, First University of Oklahoma Symposium on Latin America: 14 November 1998

- Knowledge, innovation, and economic development. 2nd International Conference on Technology Policy and Innovation, Lisboa, Portugal: 3 August 1998
- The context of technology and development in Mexico. 9th PROFMEX-ANUIES International Conference, Morelia, Mexico: 11 December 1997
- Patterns, trends, and niches in U.S.-Mexican business relations. 1997 Border States Caucus, Cross-Border Trade & Taxation Seminar, Austin, TX: 17 February 1997
- Integración hemisférica y las relaciones comerciales con los países pequeños. Seminario Internacional Chile y Canada, Santiago, Chile: 16 July 1996
- The internationalization of state and local government. 56th National Conference of the American Society of Public Administrators, San Antonio, TX: 25 July 1995
- NAFTA and the food industry. 17th Annual Conference of the International Association of Culinary Professionals, San Antonio, TX: 6 April 1995
- Patterns of commodity flows to the border in US-Mexican trade. Conference on NAFTA and transportation, US-Mexican Policy Studies Program, LBJ School of Public Affairs: 24 March 1995
- The challenge of hemispheric economic integration. 8th PROFMEX-ANUIES International Conference, Puerto Vallarta, Mexico: 16 November 1994
- La experiencia en la aplicación del NAFTA y expectativas en relación con el TLC entre Costa Rica y México. International conference on the Free Trade Agreement between Costa Rica and Mexico sponsored by the Costa Rican Legislative Assembly and the Center for Democracy, San José, Costa Rica: 14 October 1994
- A comparison of trade and enterprise in Poland and Latin America. Seminar on Freedom, Trade, and Markets in a High-Tech Age, Northwood University, Midland, MI: 17 June 1993
- Los Desafíos de la integración norteamericana. Seminario Internacional sobre Ajuste Estructural y Democracia en América Latina, San José, Costa Rica: 31 May-3 June 1993
- Spatial Impacts of NAFTA on the Texas economy. Exploring the Possibilities Conference on NAFTA, Federal Reserve Bank of Dallas, Fraser Institute, and the LBJ School of Public Affairs. San Antonio, TX: 27 April 1993
- Los desafíos del Tratado Trilateral de Libre Comercio enfrente del actual sistema continental de transporte. Segundo Seminario Internacional de Sistemas de Transporte y Vialidad Urbana, Puerto Vallarta, Mexico: 10-12 December 1992
- The impact of NAFTA on patterns of U.S.-Mexico transportation. Transportation Research Forum, St Louis, MO: 23 October 1992
- The politics and economics of North American Free Trade: Regional perspectives. Hudson Institute and Fraser Institute, Washington DC: 24 June 1992
- Public health issues relating to trade liberalization. U.S.-Mexico Border Health Association Meetings, Tampico, Mexico: 7-10 June 1992
- Relaciones tecnológicas e industriales bajo el ATLC: Un enfoque al norte de México y Texas. Simposio sobre el Acuerdo Trilateral de Libre Comercio, Universidad Autónoma de Coahuila, Saltillo, Mexico: 27-28 May 1992
- Regional concentration and efficiency in Mexican manufacturing. The 11th European Congress on Operational Research, Rheinisch-Westfälische Technische Hochschule, Aachen, Germany: 18 July 1991
- Impactos regionales del Acuerdo de Libre Comercio. Binational Workshop on Contemporary Border Issues, El Colegio de Sonora, Hermosillo, Mexico: 13-15 March 1991
- Some practical and theoretical limitations of Data Envelopment Analysis. Association of American Geographers, Baltimore, MD: 20 March 1989
- Policy decisionmaking for maternal and child health services: An information management perspective. Second Symposium on Health and Human Services in the U.S. and Mexico, Mexico DF: 8-10 July 1987
- Analysis of the efficiency of health centers in Nicaragua. The Eighth Annual Research Conference of the Association for Public Policy Analysis and Management, Austin, TX: 30 October 1986

- The management of health centers in Nicaragua and El Salvador: A comparative perspective.

 The Latin American Studies Association annual meetings, Boston, MA: 25-26 October 1986
- Perspectives on the Nicaraguan public health sector. Mini-Conference on the Nicaraguan Public Sector, Institute of Latin American Studies, University of Texas: 21 October 1986
- Psychiatric utilization of California hospitals by age, ethnicity, and sex in 1983. The Fifth Robert Lee Sutherland Seminar in Mental Health, San Antonio, TX: 24-26 September 1986
- Enhancing the analytical component of quantitative methods courses: Microcomputers in the graduate classroom. The Second Annual IBM University Academic Educational Projects Conference, San Diego, CA: 5-8 April 1986 (Published in the IBM Academic Information Systems Proceedings, Milford, CT: IBM Academic Information Systems, 1986)
- Maternal and child health on the US-Mexico border. University of Texas System Symposium on Texas-Mexico Border Health, Austin, TX: 14 March 1986
- Microcomputer decision support in rural hospitals: The case of the Dominican Republic. The Operations Research Society of America and The Institute of Management Sciences semi-annual meetings, Atlanta, GA: 4 November 1985
- Instructional computing for management students. Association for Public Policy Analysis and Management annual meetings, New Orleans, LA, 14 October 1984
- Oracles for policymakers: Issues in the representation and automation of organizational knowledge. The Midwest Political Science annual meetings, Chicago, IL: 12 April 1984
- Implications of current trends in third-world militarization: A statistical forecasting perspective. The Tom Slick Conference on World Peace, Austin, TX: 2 February 1984 (Published in J. Mehta, ed., <a href="https://doi.org/10.1016/jhi/hittps://doi
- Border health: A statistical perspective. American Academy of Pediatrics Executive Border Health Committee meeting, San Diego, CA: 18 January 1984
- Births along the border: An assessment of natality in key counties and municipios. The American Public Health Association annual meetings, Dallas, TX: 15 November 1983
- Patterns and trends in natality along the US-Mexico border. US-Mexico Border Health Association Annual Meetings, Albuquerque, NM: 14 June 1983
- Cuidado de la salud materno-infantil proporcionado a lo largo de la frontera EEUU-México. Bi-National Conference of the Office of International Health of the Texas Department of Health and Human Services, El Paso, TX: 13 November 1981
- Regulation and routine decisionmaking: The case of local school districts. The Public Choice Society Annual Meetings, San Francisco, CA: 16 April 1980 (Based on a monograph written with P.D. Larkey)
- Towards a predictive theory of budgeting: Round IV. The Public Choice Society Annual Meetings, Roanoke, VA: 9 April 1976 (Based on collaborative work with J.P. Crecine, O.A. Davis, M.A.H. Dempster, and A. Wildavsky)

Invited Lectures, Addresses, and Training Seminars:

- Promoting institutional linkages in inter-American policy studies. Invited talk, Instituto de Desarrollo Económico Regional, Universidad de la Frontera, Temuco, Chile: 8 April 2002
- Statistical approaches to estimating the utilization of emergency medical services by undocumented immigrants along the U.S.-Mexican border. Invited discussion, U.S.-Mexico Border County Commission, Phoenix, AZ: 25 May 2001
- The economic impact of Texas worker training programs. Testimony before the Texas House Committee on Economic Development, 77th Texas Legislature: 28 March 2001
- Herramientas útiles para el análisis de políticas públicas: La modelación estadística de la consulta popular del 16 de mayo 1999. Invited lecture for the masters program in public policy at the Universidad Rafael Landívar, Guatemala City: 11 August 2000
- Análisis estadístico de los resultados de la consulta popular de reformas constitucionales del 16 de Mayo 1999. Comisión de Apoyo Técnico del Congreso, Guatemala City: 1 June 1999

- Globalization: Brakeless train or gale of creative destruction? Invited lecture for the International Business Fellows Program, Graduate School of Business, University of Texas at Austin, 29 April 1998
- Mexico and the media. Covering the Americas Conference: A Day with U.S. and Latin American Foreign Correspondents, College of Communication, University of Texas: 24 April 1998
- Transborder economic integration: Opportunities and threats. Invited lecture for the International Business Fellows Program, Graduate School of Business, University of Texas at Austin, 25 February 1998
- The dynamics of expanded trade. Keynote address for the 8th Annual Expanding Abroad Conference, University of Texas Law School and the Southwest Chapter of the U.S.-Mexican Chamber of Commerce, Cancún, Mexico: 14 November 1997
- Texas in the global economy. Keynote address for International Perspectives, a seminar on sponsored by Texas International Partnership, Austin, TX: 17 October 1996
- Informe sobre NAFTA. Lecture for the Instituto Chileno-Norteamericano, Santiago, Chile: 20 June 1996
- Plains to ports: NAFTA and future patterns of transportation in West Texas. Big Spring I-27 Corridor Council, Big Spring, TX: 8 June 1995
- What went wrong with Mexico? Keynote address for the 1995 All-State Meeting of the District Export Councils of Texas, Austin, TX: 2 June 1995
- NAFTA and Mexico: An update. Keynote address for the North Texas Commission, Dallas, TX: 31 March 1995
- Hemispheric economic integration. USIA Training Program for European journalists, University of Texas: 13 February 1995
- Western hemispheric economic integration. USIA Training Program for Brazilian journalists, University of Texas: 17 January 1995
- NAFTA–Economic impacts on Texas. Keynote address for the Thirty-Sixth Institute on Property Taxation and State Comptroller's Property Tax Division 16th Annual Conference, Austin, TX: 12 December 1994
- Free trade and rural economic development in Texas. Texas Rural Economic Development Council, Austin, TX: 8 December 1994
- Globalization and the western hemisphere. USIA Training Program for Brazilian Government Officials. LBJ School of Public Affairs, University of Texas: 5 December 1994
- NAFTA and the energy sector. Texas Renewables '94 Conference, sponsored by the Texas Renewable Energy Industries Association and others. Austin. TX: 20 November 1994
- NAFTA in perspective. John Ben Shepperd Public Leadership Forum, Austin, TX: 1 October 1994
- Researching the Mexican market. Conference on formulating strategies for doing business in Mexico. Center for International Business & Educational Research, Austin Small Business Development Center, and others, Austin, TX: 3 August 1994
- Integrating the U.S. and Mexican economies. Texas International Education Consortium Latin American Economic Journalists Program, Austin, TX: 31 May 1994
- NAFTA's challenges for small business. Plenary meeting of Texas' regional Small Business Development Centers, Austin, TX: 19 May 1994
- U.S.-Mexican economic integration: Media responses and responsibilities. Roundtable presentation for the Cox newspaper chain, Austin, TX: 12 May 1994
- NAFTA: The big picture. American Law Firm Association, Dallas, TX: 14 April 1994
- Transportation impacts of NAFTA along the Houston-Indianapolis corridor. Arkansas Department of Transportation, Little Rock, AR: 24 March 1994
- The impact of NAFTA on border cities. UT Pan-American and the Center for International Business Education & Research, McAllen, TX: 18 March 1994
- NAFTA and Texas cities. Small City Managers Association, Salado, TX: 10 March 1994
- How will NAFTA affect operations of the City of Austin? City of Austin Executive Forum, Austin, TX: 23 February 1994

- Executive briefing on the economic integration of Texas and Mexico. Texas Department of Commerce, Austin, TX: 10 February 1994
- NAFTA and the future of the border economy. Leadership Laredo Alumni Symposium, Laredo, TX: 11 November 1993
- Beyond NAFTA: Economic integration in the Western Hemisphere. Bamerindus Bank International Executive Development Program (Curitiba, Paraná, Brazil), IC², University of Texas: 8 July 1993
- Retos y oportunidades regionales bajo el Tratado de Libre Comercio. Keynote address for the Día de Economía, Instituto Tecnológico y de Estudios Superiores de Monterrey, Monterrey, Mexico: 31 March 1993
- Capitalizing on the free trade initiative with Mexico. Texas Commercial Banking Conference, NationsBank, San Antonio, TX: 12-13 March 1993
- Spatial and sectoral impacts of NAFTA on Texas. Conference sponsored by the University of Texas' Center for International Business Eduation and Research in conjuction with others, Austin: 23 February 1993
- Economic prospects for the greater Dallas-Fort Worth Metroplex under NAFTA. Coopers & Lybrand Symposium on Capitalizing on the Free Trade Agreement with Mexico, Dallas, TX: 10 February 1993
- Conducting business under liberalized North American trade. EXPO 92 continuing professional educational program for the Texas Society of Certified Public Accountants: San Antonio, TX (7 December 1992); Arlington, TX (14 December 1992)
- Regional prospects for Texas under North American free trade. Texas Economic & Demographic Association, Houston, TX: 2 December 1992
- The challenges of North American free trade. University of Texas Graduate School of Business Alumni: San Antonio, TX (9 November 1992); Houston, TX (11 January 1993)
- An economist's evaluation of NAFTA. The United North American Conference of the AIESEC (an international business students' association), Austin, TX: 6 November 1992
- The challenges of NAFTA. ITESM/UT Business PhD Program, Austin, TX: 14 July 1992
 Free trade in the western hemisphere. Delta Kappa Gamma Society International Leadership & Management Seminar, UT Graduate School of Business Executive Development Program, Austin, TX: 7 July 1992
- Decision-making in U.S. foreign policy. An address to a group of Latin American and German policy makers and opinion leaders, Phelps Stokes Fund and University of Texas International Center, Austin, TX: 3 February 1992
- The future of Texas-Mexico trade: Challenges for state policymakers. A professional training seminar for the Governor's Executive Development Program, Texas Office of the Governor, Austin, TX: 8 January 1992
- Taking the pulse of North American free trade negotiations. The Mexican Working Group Seminar Series, Institute of Latin American Studies, University of Texas, Ausin, TX: 18 November 1991
- Texas, North American free trade, and the world economy. International Council Program, Texas Ex-Students Association, Austin, TX: 14 November 1991
- Implications of the Canada/U.S./Mexico Free Trade Agreement on the rest of the Western Hemisphere. Caribbean Erasmus University MBA Program, UT Graduate School of Business, Austin, TX: 5 Sept 1991
- Positioning Texas for North American free trade. The Executive Council Workshop of the Texas Ex-Students' Association, Austin, TX: 13 July 1991
- Texas under free trade: Some sectoral, regional, and modeling considerations. The Federal Reserve Bank of Dallas, Dallas, TX: 14 June 1991
- The prospect of a US/Mexico Free Trade Agreement: Finding niches and seizing opportunities. Women's Chamber of Commerce of Texas, Austin, TX: 18 April 1991

- Implications of the Free Trade Agreement on Texas and southwestern business: Setting an agenda for negotiations. U.S. Small Business Administration and AT&T Conference on U.S.-Mexico Trade, San Antonio, TX: 9 April 1991
- North American free trade: Managing the uncertainties and maximizing the benefits. The Texas Economic Forum, Austin, TX: 29 March 1991
- Canada/US/Mexico free trade, the border economy, and the Latino community. Tomás Rivera Center Invitational Seminar, San Antonio, TX: 21 March 1991
- The economic impact of a U.S./Mexico free trade agreement: A Texas perspective. Texas-Mexico Legislative Conference, the Texas House of Representatives and the Texas Senate: 7-8 February 1991
- Managing information in the public sector: A statistical perspective. A professional training seminar for the Governor's Executive Development Program, Texas Office of the Governor, Austin, TX: 27 November 1990
- Practical statistics for policy decisionmaking. A professional training seminar for the Governor's Executive Development Program, Texas Office of the Governor, Austin, TX: 11 January 1990 Informationsverarbeitung in der öffentlichen Verwaltung: Ein Blick auf die Zukunft.
- Führungsakademie des Landes Baden-Württemberg, Karlsruhe, Germany: 7 July 1989 Black and Mexican-American utilization of hospital inpatient services for mental illness and substance abuse. National Institute of Mental Health Minority Mental Health Services.
- substance abuse. National Institute of Mental Health Minority Mental Health Services Research Workshop, Austin, TX: 15 June 1989
- Mental health care for minorities. Center for Cross-Cultural Research, University of Texas Medical Branch, Galveston, TX: 6 February 1989
- Tourism and economic development in Latin America. Institute of Latin American Studies Coyuntura Seminar Series: 20 September 1988
- Software tools and the user interface for geographical information systems (GIS).

 MappingTechnology Navigation Forum. Apple Computer, Inc., Cupertino, CA: 17 June 1988
- Statistical software for UNIX-based computers: The state of the art and a glimpse at the future.

 American Statistical Association, Austin Chapter, Austin, TX: 21 April 1988
- The crisis in Central America: A panorama of the policy options. The LBJ School Forum, University of Texas: 1 March 1988
- Nuevos métodos econométricos en el campo de la microeconomía aplicada. The Economics and Statistics faculties of the Instituto Tecnológico Autónoma de México (ITAM), Mexico DF: 8 May 1987
- Métodos de evaluación de productividad en empresas del sector manufacturero del area metropolitana de Monterrey. Two invited lectures at the Instituto Tecnológico y de Estudios Superiores de Monterrey, Monterrey, NL, Mexico: 11 & 25 February 1987
- La evaluación de la productividad relativa en centros de salud. The Ford Foundation, the Nicaraguan Ministry of Health, and the Pan-American Health Organization, Managua, Nicaragua: 15 July 1986
- La localización óptima de unidades de salud. The Ford Foundation, the Nicaraguan Ministry of Health, and the Pan-American Health Organization, Managua, Nicaragua: 8 July 1986
- Microcomputers in public policy analysis. U.S. Council for International Exchange of Scholars and the University of Texas International Center: 13 August 1985
- Issues in health care in the Dominican Republic. Institute of Latin American Studies, University of Texas: 30 January 1985
- How computers are changing the way we conduct statistics and management science. The University of Texas Microcomputer Users Group: 27 April 1984
- Municipal resource allocation: A budgetary decisionmaking approach to evaluating the impact of General Revenue Sharing. School of Urban and Public Affairs, Carnegie-Mellon University: 24 September 1982

Media Presentations:

Democracy in Guatemala. News feature program, KUT public radio, Austin, TX: 28 March 1999

- Drawing together: U.S.-Mexican linkages in the border region. "Austin at Issue" program, KLRU Public Television, Austin, TX: 9 April 1997
- Integración hemisférica. Interview, "Dimensión Internacional" program, United States Information Service, Santiago, Chile: 19 March 1997
- Chile y el NAFTA. Interview, "Temas del Fin del Siglo" program, University of Chile Radio 102.5, Santiago: 19 April 1996
- NAFTA on its second anniversary. Discussant, Christian Science Monitor Radio, 2 January 1996 The North American Free Trade Agreement. Panelist, "Access Program". KUT Radio, Austin, TX: 10 November 1993
- ¿Está preparada la empresa mexicana para la globalización y competencia? Crossfire panelist, Administración Estrategica para el Año 2000. ITESM, Monterrey, Mexico: 5 November 1993
- The North American Free Trade Agreement. Guest commentator, "Soundsight". KUT Radio, Austin, TX: 24 January 1993
- The impact of the Mexican elections on Texas. Presentation and roundtable discussion. WOI Radio, San Antonio, TX: 4 July 1988.
- Tex-Mex border music. Guest commentator, "The Morning Show". WYEP Radio, Pittsburgh, PA: 8 October 1978

Positions with Professional Journals & Other Publications:

Consulting Editor, <u>Student Journal of Latin American Studies</u>, University of Texas (2009–)

Principal statistician for the weekly "Tracking Texas" feature of the Texas Journal section of <u>The Wall Street Journal</u> (1993-2000)

Regular columnist: El Financiero International (1993-94)

Contributing Editor: <u>Texas Perspective</u>, a bi-monthly forum on the regional economy (1991-97) Methodology book note editor: Journal of Policy Analysis and Management (1983-85)

New book annotator: Journal of Economic Literature (1978-82)

- Regular referee: <u>Journal of the Operational Research Society</u> (1991–); <u>European Journal of</u> Operational Research (1991–); Social Science Quarterly (1989–)
- Occasional journal referee: Administration Science Quarterly (1989); American Journal of Political Science (1982); Application of Management Science (1990); Computers and Operations Research (1993); International Trade Journal (2002); Journal of Evolutionary Economics (1993); Journal of Management Science and Policy Analysis (1990); Latin American Research Review (2002); Policy Sciences (1978); Public Administration Review (1987-1990)
- Other professional refereeing: American Heart Association (1998); IC² Institute (1991); Longman Publishing Company (1984); McGraw-Hill Publishers (1995); National Science Foundation, Social and Economic Sciences Division (1982); Random House (1986); University of Michigan Press (1997); Pennsylvania University Press (1997); Sage Publications (2007, 2009); Berkeley Electronic Press (2009)

Significant Fellowships, Grants, and Awards:

- Principal Investigator, "Inter-American Policy Studies" (\$100,000 for one year). William and Flora Hewlett Foundation: 2002-2003
- Principal Investigator. "Inter-American Policy Studies" (\$300,000 over two years). William and Flora Hewlett Foundation: 1999–2001
- Co-Principal Investigaror. "U.S.-Mexican Policy Studies" (\$375,000 over three years). William and Flora Hewlett Foundation: 1996-99 (with Sidney Weintraub)
- Principal Investigator. "Monitoring Trade Trends in the Western Hemisphere" (\$22,929). Center for the Study of Western Hemispheric Trade: 1995-96
- Faculty Development Grant (\$5000). Center for International Business Education Research, University of Texas Graduate School of Business: 1993

- Co-Principal Investigator. "Multi-modal Planning and the U.S.-Mexico Free Trade Agreement" (\$450,000). Texas Department of Transportation: 1992-95
- Co-Principal Investigator. "International Transportation Corridor Study" (\$32,000). Texas Office of the Governor: 1992-93
- Principal Investigator. "Exports and Employment Creation in Mexico: A Sectoral Study" (\$5,000). Peer-reviewed research contract with the U.S. Commission for the Study of International Migration and Cooperative Economic Development: 1988-89
- Elspeth Rostow Centennial Fellowship. Grant from the University of Texas to support on-going research efforts: 1987-88 and again in 1988-89
- Fulbright Fellowship. Nine-month grant to lecture and conduct research on technology assessment and regional econometric modeling at the Instituto Tecnológico y de Estudios Superiores de Monterrey (ITESM): 1987
- Principal Investigator. "Evaluating the State of the Industrial Infrastructure in Key Mexican Regions". University Research Institute Summer Research Grant (University of Texas): June-July 1987
- Co-Principal Investigator. "Analysis of Hispanic Mental Health Hospitalization Rates". Hogg Foundation for Mental Health: August 1986-February 1988
- Principal Investigator. "Microcomputer-Based Systems for Assessing the Effectiveness and Efficiency of Urban Hospitals in Developing Countries". Mike Hogg Foundation Grant: April 1986-August 1987
- Co-Principal Investigator. "An Intelligent Advisory System for Urban Government". Mike Hogg Foundation Grant: April 1985-March 1986
- Co-Principal Investigator. IBM/University of Texas Project Quest grant to develop a microcomputer laboratory and instructional software for management students: July 1984-December 1986
- Principal Investigator. University Research Institute Research Grant (University of Texas) to compile a bibliography on public policy relating to Central American refugees: 1984-85
- Principal Investigator. "Information Management for Rural Hospitals in the Dominican Republic", Tinker Foundation Field Research Grant: Summer 1984
- Co-Principal Investigator. Radian Corporation fellowship to explore the development of computerized "intelligent advisory systems" for regulatory decisionmaking: 1984-1988
- Co-Director. LBJ Foundation project analyzing U.S. and regional policy related to Central American refugees: 1983-84
- Co-Director. Joint Robert Wood Johnson Foundation and American Academy of Pediatrics project examining maternal and child health policy along the U.S.-Mexico border: 1981-83
- Principal Investigator. Moody Grant from the Lyndon Baines Johnson Foundation to conduct research on budgetary decisionmaking at the Lyndon Baines Johnson Presidential Library, Austin, TX: 1976

Professional Affiliations:

- · American Economic Association
- · American Statistical Association
- Association for Public Policy Analysis and Management
- · Latin American Studies Association
- · Population Association of America
- The Institute of Mathematical Statistics
- Western Economic Association

A Selection of Additional Professional Activities:

Member, Commission on Peer Review and Accreditation (COPRA), National Schools of Public Policy, Affairs, and Administration (NASPAA): 2012–

· Chair, COPRA Eligibility Committee

- Extenal Academic Consultant, Latin American & Caribbean Studies Group, University of Central Florida: June 2003
- Chair and discussant (three panels). 7th International Conference on Technology Policy and Innovation, Monterrey, Mexico: 10-13 June 2003
- Member, External Academic Review Committee for the Masters Program in Public Administration and Policy (MAPP), Centro de Investigación y Docencia Económica (CIDE), Mexico City: May 2003
- Session Chair and discussant (for five panels). 4th International Conference on Technology Policy and Innovation, Curitiba, Brazil: 29-31 August 2000
- Chair, Local Organizing Committee. 3rd International Conference on Technology Policy and Innovation, Austin, TX: 30 August–2 September 1999
- Mentor-supervisor, Comisión de Apoyo Técnico, Congress of the Republic of Guatemala: 1998– Member, Center for Global Studies Task Force on Water & Drought Management in the Lower Rio Grande Valley, Houston Advanced Research Center: 1996–99
- Session Chair: Free Trade and Labor in the Southern Cone, IX Southern Labor Studies Conference, UT Austin: 27 October 1995
- Member, Board of Directors, PROFMEX Consortium for Research on Mexico, an international organization dedicated to promoting policy-related research on Mexico: 1994–
- Member. The Mexican Center Advisory Committee, Institute of Latin American Studies, UT Austin: 1993-
- Member. Ad Hoc Committee on Higher Education, Texas Higher Education Coordinating Board: 1992-1993
- Consulting economist. Forces of Change Project, Texas Comptroller of Public Accounts: 1992-94 Moderator. Conference on "NAFTA, the Pacific and Australia/New Zealand", Edward Clark Center for Australian Studies and the LBJ School of Public Affairs: 1 October 1992
- Moderator. Conference on the "Sociodemographic Effects of the 1980s Economic Crisis in Mexico", Ford Foundation-Mexico, the Population Research Center (UT), and the Institute of Latin American Studies (UT): 23-25 April 1992
- Member. Border Working Group, Texas Office of the Governor: 1991-92
- Member. Research Advisory Panel, State of Texas Educational Economic Policy Study Center: 1991-94
- Member of the Steering Committee and Chair of the Manufacturing Subcommittee. Texas Consortium on Free Trade (serving the Texas Governor's Office and Department of Commerce): 1990-92
- Moderator. Bi-National Colloquium on "The Development of Agriculture in Mexico: Current Prospects and Policies", The Mexican Secretaría de Agricultura y Recursos Hidráulicos and the Institute of Latin American Studies, University of Texas: 16 November 1990
- Session Chair. VI PROXMEX/ANUIES Symposium on "Changes in US-Mexican Economic Relations", Mazatlán, Mexico: 5 October 1990
- Session Chair. Conference on "The Diffusion of Innovations in the Public Sector", Ford Foundation, the LBJ School of Public Affairs, and the JFK School of Government, Austin, TX: 15-16 September 1989
- Session Chair. NSF Conference on "The Practice of Policy Analysis: Mutual Implications of Context and Methodology", IC² Institute, University of Texas: 23-25 March 1988
- Organizer. International symposium on "Academic Computation for Social Science Research: The State of the Art", El Colegio de México, Mexico DF: 23 November 1987
- Academic adviser. Exchange program between the University of Texas and the Universidad Autónoma de Nuevo León (Monterrey, NL, Mexico): January-December 1987
- Session Chair. Conference on "Graduate Study in Economics and Public Policy in the United States", sponsored by the United States Embassy (Mexico) and the Institute of International Education, Mexico DF: 25 September 1987

- Session chair (2 sessions). "Computers and Policy Analysis" and "Microstudies on the Evolution of the Public Sector in Nicaragua", Eighth Annual Research Conference of the Association for Public Policy Analysis and Management, Austin, TX: 30 October through 1 November 1986
- Session chair. Conference on "Industrial Reconversion and Economic *Apertura*: The Role of High Technology in Mexico", Insitute of Latin American Studies, University of Texas at Austin: 28-29 April 1986
- Session chair. Conference on "Informatics Policy in Colombia: New Developments in the Regulation of Hardware, Software, and Telecommunications", Institute of Latin American Studies, University of Texas at Austin: 13-14 February 1986
- Country Report analyst. Frost & Sullivan Political Risk Services, Inc (New York, NY). Specialist on the Dominican Republic and Mexico: 1986-1988
- Session chair. Conference on "Privatization in Latin America", Institute of Latin American Studies, University of Texas at Austin: 3 February 1984

Special Skills:

- Fully proficient in Spanish and German; solid speaking and research skills in Portuguese; reading skills in Italian and French
- Advanced computer programming skills: Command of numerous programming languages and analytical packages; practical expertise in the design of computerized management information systems; working knowledge of a wide range of hardware and operating environments

May 2015