

CURRICULUM VITAE

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Centre for Policy Research on Science and Technology (CPROST),
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Career

- 1995 - present: Associate Director, Centre for Policy Research on Science and Technology, and Adjunct Professor, School of Communication, Simon Fraser University
- 1986 -1995: Senior Policy Advisor, Science Strategy Branch, Industry Canada and Manager, S&T Economic Analysis Division, (formerly the S&T Data Intelligence Branch, Ministry of State for Science and Technology); responsible for advice, evaluation and analysis on federal S&T expenditures, S&T economic policy, and S&T and innovation performance measurement to senior management and Ministers.
- 1975 – 1985 Program Analyst, Program Branch, Treasury Board Secretariat: responsible for advice, evaluation and analysis for the following portfolios: Science and Technology (including the National Research Council and NSERC), Transport (marine), the Canadian International Development Agency (bilateral, including IDRC), and Communications.
- 1969 - 1974 Engineering Manager, Satellite Control Centre, Telesat Canada, responsible for the design, construction and launch operations of the first Telesat Canada satellite control centre.

Education

B.Sc. (honours) Physics, Dalhousie University, Halifax, Nova Scotia, 1966
M.Sc., Physics, University of Western Ontario, London, Ontario, 1968
B.A.Sc. (cum laude), Electrical Engineering, University of Ottawa, Ottawa, Ontario 1974

Public Service Commission, Career Assignment Program, 1974
Public Service Commission, French language proficiency, 1975

Professional Engineer, registered in Ontario and British Columbia

Courses Taught

Communication 438/851 (Special Projects), 1997, 1999, 2000, 2001, 2002, 2004, 2008, 2009
Communication 438/801 and 362 (Research Methods), 2003, 2004, 2005
Communication 480 Directed Readings, 2000, 2001, 2002, 2004
Communication 487/857; 488/858: S&T Policy, 2006, 2007
Communication 497/498 Undergraduate student theses
Communication 487/851 Communication Field School in Mexico, co-director, 2010, 2011

Member of supervisory committees for M.A. and Ph.D students in the School of Communication at Simon Fraser University and external examiner for theses at the University of British Columbia.

Director, Leonardo Institute (program for Applied Sciences PhD candidates), 2005, 2006, 2007, 2008, 2009

Panels, Delegations and Committee Appointments

- Canadian Science Policy Conference: member advisory committee 2009, 2010, 2011
- Vancouver Economic Development Commission, Academic Advisory Panel, 2008 - present
- Innovation Systems Research Network (SSHRC/NSERC) , member, management committee and western Canada sub-network leader 2001 – present
- THECIS, fellow, and participant in THECIS activities including Banff Summits , 2006 and 2008, Innovation 601, and InnoWest, 2001 - present
- Statistics Canada, member, Advisory Committee on S&T Statistics, 1992 - 1999
- Industry Canada, member, Canadian delegation, APEC working group on industry, science and technology, Vancouver 1997
- Industry Canada, head of Canadian delegation, OECD Conference on S&T Indicators, and member of the editorial board for the 1991 revisions of the “*Frascati Manual*”, Rome, 1991
- Industry Canada, member, OECD Committee of National Experts on S&T Indicators 1986 - 1993

- Natural Resources Canada, member, Canadian delegation, UN Conference on New and Renewable Sources of Energy, Nairobi, Kenya, 1982
- Treasury Board Secretariat, chairman, study on government space programs and their effect on the Canadian aerospace industry, 1977

Evidence given before Parliamentary Committees

- House of Commons Standing Committee on Industry, Natural Resources, and Science and Technology, session 38-1, 23 November 2004, on ISRN research on regional systems of innovation
- House of Commons Standing Committee on Industry, Science and Technology, session 37-1, 7 February 2002, on the peer review system used by Canadian research granting councils

Reviewing and Editing Activities

- Social Sciences and Humanities Research Council: referee for grant applications in S&T policy, innovation research and management of technology
- Science and Public Policy, Research Evaluation, Regional Studies, International Journal of Technology, Knowledge and Society, Technovation and Canadian Journal of Sociology : Referee
- Research Evaluation, guest editor, special number on S&T indicators and their policy implications in Iberoamerica, Vol. 6, #3, 1996
- Science and Public Policy, guest editor, special numbers on S&T indicators and their policy implications, Vol. 19, #5 and #6, 1992
- Aid to Scholarly Publications Programme, referee for the of the Canadian Federation for the Humanities and the Social Science Federation of Canada,
- Occasional international referee for research grant applications: Economic and Social Research Council, UK; CONICYT, Chile,

Research and Teaching Grants

- Natural Sciences and Engineering Research Council: co-investigatior Res'Eau Network "Safe Drinking Water for Small and Rural Communities", 2008 - 2011
- Social Sciences and Humanities Research Council: co-investigatior and workshop co-chair, "Impacts of research in the Social Sciences and Humanities", 2008 -2010, grant #421-2007-1002
- Social Sciences and Humanities Research Council: regional network director and principal co-investigatior, Innovation Systems Research Network study on "The role of local and regional industrial clusters in Canada", grant #412-2000-1002; 2000-2005, and grant #412-2005-1001, 2006 - 2011
- Canadian Water Network (NCE): co-investigatior, "Applications and Barriers to Innovation in Use of Advanced Oxidation Processes", 2001- 2004
- CANARIE/ANAST: co-investigatior: "High-speed Internet video-conferencing for research networks", 2001- 2002

- Social Sciences and Humanities Research Council: Network leader and principal investigator, *InnoCom* (now the Western Canada sub-network for the national Innovation Systems Research Network), grant # 822-98-0005, 1998 - 2001
- Social Sciences and Humanities Research Council: Principal investigator, "*Reanalysis of innovation survey data from the Lower Mainland and the Okanagan*", SFU/SSHRC small research grant., 1998 - 99
- Social Sciences and Humanities Research Council: Principal investigator, "*Measurement of innovation in firms and regional clusters in BC*", grant # 809-97-0012, 1997-98
- UNESCO: First lecturer, *RICYT/UNESCO Chair on S&T Indicators*, National University of Quilmes, Buenos Aires, Argentina, 1997
- Asia Pacific Foundation of Canada: "*Studies for a Canadian S&T Policy in the Asia-Pacific Region*", 1996
- Organization of American States: Lecturer: OAS/ECLAC/RICYT Symposia on S&T and Innovation Indicators:
 - Cartagena (Colombia) and Sao Paulo (Brazil), 1996;
 - Santiago (Chile), Mar del Plata (Argentina) and Port-of-Spain (Trinidad), 1997;
 - Medellin (Colombia), Kingston (Jamaica), and La Cumbre (Argentina), 1998;
 - Port-of-Spain (Trinidad and Tobago) and Santo Domingo (Dominican Republic), 1999

Major Research and Policy Advice Contracts

Government of Canada

- SSHRC (with Catherine Beaudry): "*What have we learned about 'Capturing Impacts' in the Social Sciences and Humanities*", for the SSHRC Capturing Impacts Initiative, 2010
- CUCCIO/CANARIE (with Bruce P. Clayman): "*Network measurement plan and evaluation of benefits of the CANARIE network to researchers*", 2008
- Canada Foundation for Innovation (with SPR Associates): "*Evaluation of the New Opportunities Fund Program*", 2007
- Industry Canada, "*An Analysis of the Classification of Government R&D Funding*", 2007 (CPROST Report 07-03)
- National Research Council (with SPR Associates): "*Delphic survey of Emerging Technologies and Sectors*", 2006
- National Research Council (with Hickling Arthurs Low), "*Studies of NRC Technology Cluster Initiatives*", 2005
- Canadian Association of Graduate Studies, "*Policies of Innovation*", Toronto, 2005
- Council of S&T Advisors, "*The Changing Conduct and Management of S&T*", 2005
- National Research Council /Western Economic Diversification (with Hickling Arthurs Low), "*Baseline Study of NRC Technology Cluster Initiatives*", 2005
- Western Economic Diversification (with Hickling Arthurs Low), "*Evaluation of the International Trade Personnel and First Jobs in S&T Programs*", 2004
- Canada Foundation for Innovation (with Bruce P. Clayman), "*Linkage of Clusters to Research Funding*", 2003, (CPROST Report 04-06)

- Canada Foundation for Innovation (with Bruce P. Clayman), “*The Survival of University Spin-offs and Their Relevance to Regional Development*”, 2003 (CPROST Report 04-03)
- Natural Sciences and Engineering Research Council (with Hickling Arthurs Low) “*Evaluation of the Research Grants Program*”, 2002
- Social Sciences and Humanities Research Council (with Hickling Arthurs Low) “*Mid-term Evaluation of the Canada Research Chairs Program*”, 2002
- Western Economic Diversification Canada “*R&D Expenditures in Western Canada*”, 2000
- Prime Minister’s Advisory Committee on S&T: “*An inventory of policies and programs relating to Highly Qualified Personnel*”, 1999 (CPROST Report 99-03)
- Statistics Canada: “*Comparison of the 1996 Survey of Innovation in the Services Sector and CPROST Surveys of Innovation*”, 1999 (CPROST Report 99-04)
- PRECARN: “*The Measurement of Pre-competitive Research Activity in Canada*”, 1998
- International Development Research Centre: “*Measuring Progress: Performance Indicators for Regional Systems of Innovation*”, IDRC Workshop “*Strengthening Innovation Systems*”, Toronto, 1997 (CPROST Report 97-05)
- Industry Canada: “*Canada’s Trade in the Pacific Rim, a concept paper for APEC/WGIST*”. 1997 (CPROST Report 97-01)
- Statistics Canada: “*Survey of Innovation in Enterprises in BC*”, 1997 (CPROST Report 97-03)
- Industry Canada: “*Canadians’ Knowledge of S&T and S&T Policy Issues*” 1995 (CPROST Report 95-10)
- Industry Canada: Discussant and Rapporteur, Industry Canada Symposium on “*Measuring Trade in High Technology Products*”, Ottawa, October 1995, (CPROST Report 95-11)

Province of British Columbia and Municipal Governments

- BC Net, (with Bruce P. Clayman), “*Evaluation of benefits of the BCNet network to researchers*”, 2009
- Michael Smith Foundation Health of Population Networks (with Brian Wixted) “*Evaluation of Health of Population Research Networks*”, 2008
- Ministry of Technology, Trade and Economic Development (formerly through the Ministry of Advanced Education), “*Estimation of the returns on investment in human capital through funded research*”, 2007 – 2008 (CPROST Report 09-03)
- Ministry of Economic Development (with Bruce P. Clayman) “*Asset Map of the New Media Sector*”, 2007
- District of North Vancouver “*An Analysis of Industrial Clusters in the District of North Vancouver*”, 2007 (CPROST Report 07-05)
- Leading Edge BC (with the Canada Institute for Market Information), “*Bibliography, metrics and analyses of high-tech clusters in the Lower Mainland*”, 2004
- City of Burnaby “*An Analysis of Industrial Clusters in the City of Burnaby*”, 2004, (CPROST Report 04-07)
- Science Council of BC: “*Innovation Studies in BC*”, 1999

- Science Council of BC: Workshop on “S&T Indicators and Benchmarks for a Small Economy”, 1996 (CPROST Report 96-05)

International

- Mexico: Seminar leader on R&D tax credit programs, House of Representatives and Senate of the Government of Mexico, Mexico City, 2000; invited speaker, *Symposium on Regional and Bi-national Partnership for Global Competitiveness*, Monterrey, Nuevo Leon, 2004; invited speaker: *Seminar on Innovation and Clusters*, Universidad de Guadalajara, 2004 and 2008; MBA course lecturer, D779, CUCEA (Universidad de Guadalajara), 2010; invited speaker U de Colima 2010,
- Inter-American Development Bank: *The measurement of R&D and innovation in developing countries; a briefing note for national experts in the Anglophone Caribbean*, 2008; *Workshop on S&T indicators for the Anglophone Caribbean*, Port-of-Spain, Trinidad and Tobago, 2009
- Colombia Observatorio de Ciencia y Tecnologia, member, Supervisory Committee, (COLCIENCIAS) 2000 – 2002; Speaker, *Conference on Innovation*, (COLCIENCIAS) 2008; invited speaker, Pedro J. Amaya seminar series on the policy and management of science, technology and innovation, COLCIENCIAS, 2009
- China: Seminar leader on S&T performance indicators, *State S&T Commission of China*, Beijing; guest lecturer, Tsinghua University (Beijing), 1992; Seminar leader on Canadian science, technology and innovation policy, China Science and Technology Information Centre, Vancouver, 2008
- United States of America, *National Science Foundation*, member, international panel of experts on research evaluation in the United States, Washington, DC, 2001 (see S.E.Cozzens, “Research assessment: what’s next?”, *Research Evaluation*, Vol. 11, #2, pp 65 – 80, August 2002); *National Science Foundation*, consultant to *Resultar* project, (P.I. S.E.Cozzens, Georgia Inst. of Technology), 2007/08
- Chile/Uruguay guest speaker: Santiago and Valdivia, Chile, and Montevideo, Uruguay, 2007, International Development Research Centre/Foreign Affairs Canada; consultant on the integration of the Chilean university system into the Chilean system of innovation, 2008, International Development Research Centre
- Korea: Invited expert on innovation in regional development and the role of government laboratories, *Electronic and Telecommunications Research Institute*, Seoul and Taejon, 2000; *Korean Institute for S&T Evaluation and Planning*, Seoul, 2003, 2006; *Korean Research Institute for Human Settlements*, Anyang, 2003, Daegu, 2005; *Pusan National University* 2006, 2007
- UNESCO: Invited speaker, South Asian Workshop on S&T Indicators, New Delhi, India, 2005
- Sri Lanka/ADB: *Study of the S&T Management Information System for the National Science Foundation*, S&T Personnel Development Project for Sri Lanka, 2004; *Study on Expatriate Scientists and Engineers*, National Science Foundation of Sri Lanka for the Ministry of Science and Technology, 2005 (see CPROST Report 08-03)
- European Union (with SSHRC), *Are Intellectual Property Rights Quanta of Innovation?*, Conference on Intellectual Property Rights and IP Policies, Florence, Italy, 2005

- Australia, *Australian Research Council*, consultant, evaluation of research sponsored by granting councils in Canada, 1998 (see J.A.D.Holbrook, "Evaluation of Research Sponsored by Federal Granting Councils in Canada: The Social Contract", *Research Evaluation*, Vol. 8, #1, pp 31 - 40, 2000)
- Argentina/UNDP: Member, external evaluation review panel for *the Instituto Nacional de Tecnologia Industrial* of Argentina, 1999
- Indonesia/CIDA: Advisor to BAPPENAS Deputy IV for S&T Policy and Planning, *CIDA/Indonesia Development Planning Project*, 1998-99
- Albania/UNESCO: Member, UNESCO/UNDP S&T mission to Albania, 1996 (CPROST Report 96-08)

Refereed and Invited Publications

Books

Holbrook, J.A.D. and Wolfe, D.A. (eds), (2002) "*Knowledge, Clusters and Regional Innovation: Economic Development in Canada*", McGill-Queen's Press, Kingston, ISBN 0-88911-919-8

Chrisman, J.J., Holbrook, J.A.D. and Chua, J.H., (2002) editors and introduction, "*Innovation and Entrepreneurship in Western Canada: From Family Business to Multinationals*", University of Calgary Press, Calgary, ISBN 1-55238-0750

Holbrook, J.A.D. and Wolfe, D.A. (eds.) (2000) "*Innovation, Institutions and Territory: Regional Innovation Systems*", McGill-Queen's University Press, Kingston, 2000, ISBN 0-88911-891-4

Holbrook, J.A.D. (1994), "*Resource Book for Science and Technology Consultations, Vols. I and II*", Minister of Supply and Services, Ottawa, ISBN 0-662-22387-X and 0-662-22492-2

Book Chapters

Wixted, B., and Holbrook, J.A.D. (2011), “*Innovation, cities and place: an empirical study of the knowledge system in Vancouver and its place on the Pacific Rim*” in “Practice-based Innovation”, ed. Helina Melkas, Springer, 2011

Wixted, B., and Holbrook, J.A.D. (2010), “Living on the Edge: Globalization of Emerging Human Capital Intensive Clusters in Vancouver”, DRUID Conference, Imperial College, London (UK) (see also CPROST Report 10-03), be published in “*Innovation in Canada*” (*working title*), ed. D. Wolfe, 2011

Holbrook, J.A.D., (2009) “Are Intellectual Property Rights Quanta of Innovation?” in “*The Role of Intellectual Property Rights in Biotechnology Innovation*”, ed. D. Castle, Edward Elgar Publishing, London, pp 24 -36, ISBN 1-84720-980-1

Holbrook, J.A.D. and Salazar, M., (2006) "Innovation Happens in Systems: Implications for S&T Policy" (*in Spanish*) in "*Innovacion y Desarrollo Tecnologico; Politicas, acciones y casos*", ed. R. Arechavala and C. Diaz-Perez, University of Guadalajara, Mexico, pp 15 – 42, ISBN 798-970-27-1208-0

Holbrook, J.A.D., Salazar, M., Crowden, N., Reibling, S., Warfield, K., and Weiner, N. (2004) “The biotechnology cluster in Vancouver” in D.A.Wolfe and M.Lucas, (eds.), “*Clusters in a Cold Climate: Innovation Dynamics in a Diverse Economy*”, McGill-Queen's University Press, Kingston, pp 95 - 112, ISBN 0-88911-919-8

Holbrook, J.A.D. and Hughes, L.P., (2003) “Characteristics of Innovation in a Non-Metropolitan Area: the Okanagan Valley of British Columbia”, in “*Systems and Policies for the Globalized Learning Economy*” P. Conceicao, D.V.Gibson, M.V.Heitor and C.Stolp, (eds.), Greenwood Publishing Group, Westport CN, USA, (the proceedings of the *Third International Conference on Innovation, Science and Technology*, 1999. Austin, Texas), pp 95 – 107, ISBN 1-56720-476-7 (see also CPROST Report 99-01 and Report 99-02)

Holbrook, J.A.D. and Hughes, L.P. (2002) “Innovation, Training and the Management of Highly Skilled Personnel”, in J.J.Chrisman, J.A.D.Holbrook, and J.H.Chua, (eds.), “*Innovation and Entrepreneurship in Western Canada: From Family Business to Multinationals*”, University of Calgary Press, Calgary, AB, pp 171 – 184, ISBN 1-55238-075-0 (see also CPROST Report 00-03 and CPROST Report 00-05)

Holbrook, J.A.D., Padmore, T. and Hughes, L.P., (2000) “Innovation in Enterprises in a non-Metropolitan Area: Quantitative and Qualitative Perspectives” in “*Innovation, Institutions and Territory: Regional Innovation Systems*”, J.A.D.Holbrook and D.A.Wolfe, (eds.), McGill-Queen’s Press, Kingston, pp 173 – 190, ISBN 0-88911-891-4

Holbrook, J.A.D. and Hughes, L.P., (1999) “Measurement of Innovation in Service Industries”, in “*Temas Actuales de Indicadores de Ciencia y Tecnología en América Latina y el Caribe*”, M. Albornoz, (ed.), the proceedings of the *Fourth Iberoamerican Workshop on S&T Indicators*,

RICYT, Mexico City, Mexico, 1999, pp 13 – 22, ISBN 987-98831-01 (see CPROST Report 99-03)

Holbrook, J.A.D. and Hughes, L.P., (1998) "Innovation in Enterprises in British Columbia", in *"Local and Regional Systems of Innovation"*, J. de la Mothe and G. Paquet, (eds.), Kluwer Academic Publishers, Amsterdam, pp 173 – 190 (see CPROST Report 98-02)

Holbrook, J.A.D., (1997) "Indicators of Innovation in a Small Economy", published as "Indicadores de innovación en una economía pequeña", in *El aniversario de la medición*, H.Jaramillo and M.Albornoz, (eds.), Tercer Mundo Editores, Bogota, Colombia, pp 165 – 183, ISBN 958-9037-342 (see CPROST Report 97-05)

Lipsett, M.S.,and Holbrook, J.A.D., (1997) "Reflections on Indicators of International Cooperation in S&T", published as "Reflexiones sobre indicadores de cooperación internacional en ciencia y tecnología" in *El aniversario de la medición*, H.Jaramillo and M.Albornoz (eds.), Tercer Mundo Editores, Bogota, Colombia, pp 191 – 206 ISBN 958-9037-342 (see CPROST Report 96-06)

Campbell, D.W., and Holbrook, J.A.D. (1982) "International Cooperation and the Development of Institutional Arrangements on Energy", in *"Improving World Energy Production and Productivity"*, L.A.Clinard, M.R.English, and R.A.Bohm (eds.) Bollinger Publishing Co., Cambridge, MA, (proceedings of the *International Energy Symposium II*, 1981, Knoxville, TN), pp 63 – 78, ISBN 0-88410-877-5

Journal Articles

Holbrook, J.A.D., Arthurs, D. and Cassidy, E. (2010), "Understanding the Vancouver Hydrogen and Fuel Cells Cluster: A case study of public laboratories and private research", *European Planning Studies*, Vol. 18, #2, pp 317 - 328

Arechavala, R., Diaz, C., and Holbrook, J.A.D. (2009) "Globalization of Innovation and Dynamics of a Regional Innovation Network: the Case of the Canadian Fuel Cell Cluster", *Atlanta Conference on Science and Innovation Policy*, Atlanta, GA, USA, published on the IEEEExplore site, paper ID 227

Salazar, M., Bliemel, M., and Holbrook, J.A.D. (2008) "A Comparison of R&D Indicators for the Vancouver Biotechnology Cluster". *Journal of Commercial Biotechnology*, Vol 14, #3

Salazar, M. and Holbrook, J.A.D.(2007) "Canadian STI Policy: the product of regional networking", *Regional Studies*, Vol. 41, #8

Holbrook, J.A.D. and Clayman, B.P. (2006) "Research Funding by City: an indicator of technological competitiveness?", *Research Evaluation*, Vol. 15, #3, pp 221 - 231

Holbrook, J.A.D. (2006) "Regional Differences in Innovation in Knowledge-based Industries",

International Journal of Technology, Knowledge and Society, Vol. 2, #4, pp 153 - 162

Holbrook, J.A.D. and Wolfe, D.A. (2005) "The Innovation Systems Research Network (ISRN): A Canadian Experiment in Knowledge Management", *Science and Public Policy*, Vol. 32, #2, pp 109 - 118

Salazar, M. and Holbrook, J.A.D.(2004) "A Debate on Innovation Surveys", presented at a conference in honour of Keith Pavitt: "What do we know about innovation?" SPRU, University of Sussex, November 2003, published in *Science and Public Policy*, Vol.31, #4, pp 254 - 266

Holbrook, J.A.D. and Salazar, M., (2004) "Regional Innovation Systems within a Federation: Do National Policies Affect all Regions Equally?", *Innovation: Management, Policy & Practice*, Vol 6, #1, pp pp 50 – 64 (see also CPROST Report 03-05)

Holbrook, J.A.D. and Hughes, L.P., (2001) "Comments on the use of the OECD Oslo Manual in non-manufacturing based economies", *Science and Public Policy*, Vol. 28, #2, pp 139 – 144 (see also CPROST Report 98-08)

Holbrook, J.A.D., (2000) "Evaluation of Research Sponsored by Federal Granting Councils in Canada: The Social Contract", *Research Evaluation*, Vol. 9, #1 pp 47 – 56

Holbrook, J.A.D. (1996), "A View from the Northern Hemisphere", introduction as guest editor to a special issue of *Research Evaluation*, Vol.6 #3, 170 - 174

Holbrook, J.A.D. and Squires, R.J., (1996) "Firm level Analysis of Determinants of Canadian Industrial R&D Performance", *Science and Public Policy*, Vol 23, #6, pp 369 – 374 (see also CPROST Report 96-02)

Lipsett, M.S., Holbrook, J.A.D, Lipsey, R.G., and de Wit, R.W., (1995) "R&D and Innovation at the Firm Level: Improving the S&T Policy Information Base", *Research Evaluation*, Vol.5, #2, pp 123 - 129

Holbrook, J.A.D. (1992) "Basic Indicators of Technological Performance", *Science and Public Policy*, Vol. 19, #5, pp 267 - 273

Holbrook, J.A.D., (1992) "Why Measure Science?" Special issue of *Science and Public Policy* on S&T Indicators, *Science and Public Policy*, Vol. 19, #5. pp 262 - 266

Holbrook, J.A.D. (1991) "Scale effect on R&D expenditures," *Science and Public Policy*, Vol. 18, #4. pp 259 - 262

Cheng, P.W., Georganas, N.D., and Holbrook, J.A.D. (1977) "Kalman Estimations and Control of the Attitude of Dual-Spin Geostationary Satellites", *Proceedings of the 1975 Midwest Symposium on Circuits and Systems (IEEE, Montreal, 1975)*, *IEEE Transactions on Aerospace and Electronic Systems*, Vol AES-13, #3, pp 236 - 245

Holbrook, J.A.D. (1975) "The Application of Model Atmospheres to Synchronous Satellite Launches," *Canadian Aeronautics and Space Institute Transactions*, Vol. 8, #1., pp 25 - 28

Holbrook, J.A.D. (1974) "The Application of Solar Flare Forecasts to Satellite Launches" *Canadian Aeronautics and Space Institute Journal*, Vol. 20, #10, pp 489 - 491

Lyon, G.F., and Holbrook, J.A.D. (1972) "The Focusing Effect on Satellite Radio Observations due to Travelling Ionospheric Disturbances", *Space Research XII, Proceedings of the 14th COSPAR Plenary Meeting, 1971*, Akademie-Verlag, Berlin, pp 1143 - 1147

Lyon, G.F., and Holbrook, J.A.D. (1969) "An Isolated Field-Aligned Irregularity", *Journal of Geophysical Research*, Vol. 74, #16, pp 4193 - 4195

Holbrook, J.A.D., and Lyon, G.F. (1969) "Irregularities in the Lower Ionosphere deduced from Beacon Satellite Observations", *Journal of Atmospheric and Terrestrial Physics*, Vol. 31, pp 71-79

Refereed Conference Presentations

Wixted, B., and Holbrook, J.A.D. (2010), "Living on the Edge: Globalization of Emerging Technology Clusters in Vancouver", DRUID Conference, Imperial College, London (UK) (see also CPROST Report 10-03)

Arechavala, R., Holbrook, J.A.D., and Diaz, C. (2008) "Policy Environments and Institutional Factors that shape the role of technology in Entrepreneurial Culture"; an Exploratory Study in Mexico and Canada" *EU-PRIME : Europe-Latin America Conference on Science and Innovation Policy*, Mexico City, Mexico (see CPROST Report 08-04)

Holbrook, J.A.D., Arthurs, D. and Cassidy, E. (2007) "Understanding the Vancouver Hydrogen and Fuel Cells Cluster: A case study of public laboratories and private research" *Proceedings of the Hydrogen & Fuel Cells 2007 International Conference*, Vancouver (see CPROST Report 07-03)

Holbrook, J.A.D., and Langford, C.H. (2005) "*The Interaction of Policy and Technology; Should we move to distributed water treatment networks for small water systems?*", 2005 Policy Research Initiative conference in Gatineau, Que.

Holbrook, J.A.D. (2004) "A University as the Seed of a Cluster; the biotechnology cluster in Vancouver" *CORS/INFORM Conference*, Banff, AB

Langford, C.H., and Holbrook, J.A.D., (2003) "Applications and Barriers to Innovation in Use of Advanced Oxidation Processes", *International Union of Pure and Applied Chemistry*, Ottawa

Holbrook, J.A.D. (2003) "Local and regional industrial clusters in Canada: The biotechnology cluster in Vancouver", *Conference on Innovative Clusters and Regional Economic Development:*

An International Comparison, Korean Research Institute on Human Settlements, Anyang, Korea

Holbrook, J.A.D. and Langford, C.H. (2003) "The Interaction of Policy and Technology: Potable Water Systems post-Walkerton", *Canadian Water Network First National Symposium*, St. John, NB

Holbrook, J.A.D. (1998) "Problems in Adapting the Frascati Manual for use in Resource-based Economies", *Taller Internacional Sobre la Adaptacion del Manual Frascati para America Latina*, Medellin, Colombia (see CPROST Report 98-08)

Hughes, L.P., and Holbrook, J.A.D. (1998) "Measuring Knowledge Management: A New Indicator of Innovation in Enterprises", *5th International Conference on S&T Indicators*, Cambridge, England (see CPROST Report 98-02)

Holbrook, J.A.D. (1997) "The Use of National Systems of Innovation Models to Develop Indicators of Innovation and Technological Capacity", *Third Iberoamerican Workshop on S&T Indicators*, RICYT, Santiago, Chile (see CPROST Report 97-06)

Holbrook, J.A.D. (1991) "The Numbers Game; The Policy Dilemma", *Proceedings of the Conference on Engineering Human Resources*, Canadian Engineering Human Resources Board, Ottawa

Book Reviews

Holbrook, J.A.D. (2010) "Innovation in Public Sector Services: Entrepreneurship, Creativity, and Management", edited by Paul Windrum and Per Koch, book review, *Science and Public Policy*, Vol. 37, #2

Holbrook, J.A.D.(2008), "Something for everyone:" a review of The Handbook of S&T Studies, 3rd edition, edited by Edward J. Hackett, *et.al.*, book review, *Science and Public Policy*, Vol. 35, #8 p 620

Holbrook, J.A.D. (1997) "Definitive Text", a review of a report by the DSTI, OECD, *Science and Public Policy*, Vol. 24, #5, pp 359 - 360

Holbrook, J.A.D., (1995) "A five cent cigar for the policy maker; a review of S&T Policy in Interdependent Economies, by David Mowery", book review, *Science and Public Policy*, Vol. 22, #5, pp 345 - 347

Holbrook, J.A.D. (1995) "A Good Review from Van Dieman's Land; a review of the Australian Industry Commission draft report on R&D", book review, *Science and Public Policy*, Vol. 22, #4, pp 277 - 278

Holbrook, J.A.D., (1995)" The OECD is not the only game in town; a review of the European Report on Science and Technology Indicators, 1994", book review, *Science and Public Policy*, Vol.22, #3, pp 213 - 214

Media Articles and Interviews

Adam Holbrook, panellist, *Public Science in Canada / Strengthening Science and Policy to Protect Canadians*, PIPSC Symposium, Gatineau, QC, May 2010

Adam Holbrook, "A new approach to S&T policy....", *ReSearch Money*, p.8, Vol 23, #19, 9 December 2009

Adam Holbrook, panellist, *Canadian Science Policy Conference*, Toronto, ON, October 2009

Adam Holbrook, "What is the real return on our research investments in universities?", *ReSearch Money*, p.8, Vol 22, #13, 15 August 2008

Adam Holbrook, (interviewed by Christie Clarke) "BC Drinking Water Policy", CKNW, Vancouver, 13 September 2007

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