

# **PETER W.B. PHILLIPS, PHD**

## **Distinguished University Professor Emeritus**

Johnson-Shoyama Graduate School of Public Policy, University of Saskatchewan  
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### **EDUCATION**

- Ph.D. in International Relations (International Political Economy), London School of Economics.
- Masters of Science in Economics (International Monetary and Trade Theory), LSE.
- Bachelor of Arts (High Honours), Economics & Political Science, University of Saskatchewan.

### **EXPERTISE**

Transnational governance; international political economy; public policy; STI policy; innovation systems in the bio-sciences; intellectual property and knowledge management; regulation and governance; social network analysis and behavioural experimentation; economic impact evaluation.

### **PROFESSIONAL CAREER**

- 2023- Distinguished University Professor Emeritus, University of Saskatchewan  
2014-23 Distinguished University Professor, University of Saskatchewan.  
2004-23 Associate member, Agriculture and Bioresource Policy, Business and Economics, USask.  
2016-23 Founding Director, Centre for the Study of Science and Innovation Policy, Johnson-Shoyama Graduate School of Public Policy, University of Saskatchewan.  
2019-20 Sabbatical: Visiting Fellow, Hoffman Centre, Chatham House, London, UK; Visiting Professor, Transdisciplinary Studies, University of Technology Sydney, Australia  
2012-17 Associate member, Economics, College of Arts and Sciences, University of Saskatchewan.  
2009-23 Professor of Public Policy (tenured), Johnson-Shoyama Graduate School of Public Policy, University of Saskatchewan.  
2012-13 Sabbatical: Visiting Fellow, Universities of Edinburgh, and Visiting Professor, Institute for Advanced Studies, University of Western Australia.  
2009-12 Director, Masters of International Trade Program, University of Saskatchewan  
2007-09 Professor and Head, Political Studies, University of Saskatchewan.  
2007-08 Founding Director (Pro Tem), Johnson-Shoyama Graduate School of Public Policy.  
2006-08 Professor at Large, Institute for Advanced Studies, University of Western Australia.  
2005-06 Sabbatical: Visiting Professor, London School of Economics, London, UK (Aug-Sept 2005); Consultant, OECD, Paris (October-December 2005); Visiting Professor, European University Institute, Florence, Italy (Jan-Mar 2006); Honorary Research Fellow, School of Agricultural and Resource Economics, UWA.  
2004-09 Professor (tenured), Department of Political Studies, University of Saskatchewan.  
2002-05 Director, vCollege of Biotechnology, University of Saskatchewan.  
1999-04 NSERC/SSHRC Chair in Managing Knowledge Based Agri-food Development, Professor of Agricultural Economics, University of Saskatchewan; Associate Member, Management and Marketing, College of Commerce; Professional Associate, Department of Political Studies.  
1997-99 Van Vliet Chair Professor of Agricultural Economics, University of Saskatchewan.  
1992-96 Assistant Deputy Minister, Policy, Saskatchewan Economic Development.  
1990-92 Director, Policy and Research Branch, Saskatchewan Economic Diversification & Trade.  
1983-87 Senior Economist, Economics and Forecasting, Saskatchewan Executive Council.  
1981-83 Research Economist, Economics Division, Royal Bank of Canada, Montreal.

## SELECTED BOARDS AND SENIOR UNIVERSITY COMMITTEES

- 2021-24 Board of Directors, Genome Prairie: Member, 2021-; Chair, 2022-  
2021-24 Member, Science Advisory Board on Science Policy, Institute on Governance  
2019-23 Member, Clean Growth Expert Panel, Canadian Climate Institute  
2020-22 Member, Canadian Council of the Academies Expert Panel on Managing Plant Health Risks in the Canadian Context  
2016-19 Member of University Council, USask  
2016-19 Member of Priorities and Planning Committee of University Council, USask  
2018 Member and Co-Chair, Expert Panel Workshop: Towards an Analytical Framework for Appraising the Impacts of AAFC's Science and Innovation Programs, Ottawa, Oct 22-23.  
2010-16 Board of Directors, Ag West Bio: Chair (2014-16); Vice-Chair (2011-14); chair Governance Committee (2011-14); and member Audit Committee (2010-2011)  
1996-17 Founding member and Director, International Consortia of Ag-Biotechnology Research, Rome, Italy; member of Board of Directors (2011-7); Honorary Life Member, 2017-  
2010-12 Member, Interdisciplinary Graduate Committee, College of Graduate Studies, USask.  
2010-11 Co-Chair, Organizing Committee, GM Co-Existence Conference, Vancouver, Oct. 26-8, 2011  
2009-12 Member, Scientific Advisory Board, WineGEN, Vancouver, BC  
2009-12 Member, Board of Directors, Estey Centre for Law and Economics in International Trade  
2006-09 Member, University Review Committee for Tenure and Promotion, USask  
2007-09 Member, University of Saskatchewan Canada Research Chairs Advisory Committee, USask  
2006-10 Member, Ethics Committee, Genome Prairie  
2005-08 Member, University of Saskatchewan Task Force on School of Public Policy, USask  
2004-05 Member, Board of Directors, Canadian Agri-food Policy Institute (CAPI), Ottawa.  
2004-05 Member, Board of Directors, University of Saskatchewan Chaplaincy.  
2004-05 Member, University of Saskatchewan Taskforce on Changing Structures.  
2003-05 Member, Saskatchewan Innovation Council  
2003-06 Member, Board of Directors, Pharmalytics Inc., Saskatoon.  
1999-07 Member, Canadian Biotechnology Advisory Committee (1999-2007); co-chair of the GM Foods Review (2000-2002); member of executive committee (2003-2007)

## TEACHING

- Graduate: JSGS 806.3, Public Policy Analysis; JSGS 859.3, Innovation Policy; JSGS 865.3 Decision Making in Organizations; MIT 801.3 Research Methods; ID 898.3, Knowledge Based Economics AGECE 890.3, Research Procedures; AGECE 855.3, Agricultural Trade Policy  
Undergraduate: AGECE 292.3 Economics of Biotechnology; AGECE 451.3, Agricultural Problems & Policy; POLS 204.3 Canadian Government; POLS 226.3 Public Policy; POLS 362.3 International Political Economy; Econ 102, Macroeconomics  
Program design: Developed the curriculum for the JSGS Masters in Public Administration, Masters of Public Policy and PhD in Public Policy; Developed program for 9 minors in biotechnology and society; developed the Masters in International Trade Program.

## CURRENT AND RECENT MAJOR RESEARCH GRANTS (>45 grants totally >\$250M)

- 2022-25 T. Caulfield, A. Zarzeczny, P. Phillips et al. Translation & Society Team Award, Stem Cell Network.  
2022-24 S. Sichillo, P. Phillips, et al. SSHRC Development Grant on Beyond Endless Frontier (\$170K).  
2022-23 P. Phillips et al. Mitacs Business Strategy Internship with AgWest Bio for Improving the Success of Commercializing Early-Stage Innovation Through Targeted Non-Financial Support Mechanisms (\$75,000).  
2019-23 Bett, K., B. Vandenberg, P. Phillips, et al. Enhancing the Value of Lentil Variation for Ecosystem Survival (EVOLVES). Genome Canada (\$7,432,397). Co-applicant and PI.  
2018-23 Beaudry, Catherine, P. Phillips, et al. Partnership Grant for the Organization of Innovation and New Technologies (4POINT0). SSHRC Partnership Grant, \$2.5 million (estimate \$75K share for research at Saskatoon).

- 2015-22 Moloney, M., P. Phillips, et al. Co-applicant. Designing Crops for Global Food Security, \$37.5 million. Canada First Research Excellence Fund Program. Receive \$3.4 million to run Pillar 4.
- 2915-19 Potter, A., B. Hancock, P. Phillips et al. Co-applicant. Reverse Vaccinology Approach for the Prevention of Mycobacterial Disease in Cattle, \$7,408,600. Genome Canada. Receive \$480K to run GE3LS project.
- 2015-19 Betts, K., B. Vandenberg, P. Phillips, et al. Co-applicant. Application of Genomics to Innovation in the Lentil Economy (AGILE), \$8,132,067. Genome Canada.
- 2014-19 P. Phillips, Co-Applicant and member of Management Committee (D. Wolfe, U of Toronto, lead), Creating Digital Opportunity: Canada's IT Industry in Global Perspective, SSHRC Partnership Grant (\$3.2 million project).
- 2013-18 Co-applicant and Principal Investigator (with J. deBeer, University of Ottawa), Rethinking intellectual property rights for open innovation, SSHRC Insight Grant, \$354,375.
- 2013-17 Co-applicant, NSERC CREATE for Protecting the health of Canadians: Integrated Training Program in Infectious Disease, Food Safety and Public Policy (B. Singh, PI; \$1.65 million; matched, NSERC # 414153-2012).
- 2011-18 Lead, Principal Investigator and Applicant, CFI # 27856 Experimental Decision Laboratory (EDL) at the University of Saskatchewan: A facility for the study of decision-making in complex, uncertain situations (CFI Contribution: \$154,137; total budget \$385,342).
- 2009-14 Co-principal Investigator, Applicant and Co-Lead (with D. Castle), Genome Canada project on Value Generation through Genomics and GE3LS (VALGEN), \$5.4 million.

## PUBLICATIONS

### 18 BOOKS:

- Phillips, P. Under peer review. Rethinking Innovation: Going beyond the unicorn hunt. Oxford University Press.
- Phillips, P. and D. Castle (eds). 2022. Provincial science, technology and innovation policy in Canadian provinces and territories. U of Toronto Press.
- Smyth, S., W. Kerr & P. Phillips. 2019. *GM Agriculture and Food Security: Fears and Facts*. CABI.
- Smyth, S. P. Phillips and W. Kerr. 2017. *Biotechnology Regulation and Trade*. Springer. 275 pp.
- Doern, DB, P. Phillips., and D. Castle. 2016. *Canadian Science, Technology and Innovation Policy: The Innovation Economy and Society Nexus*. MQUP, pp 444.
- Kalaitzandonakes, N., P. Phillips, S. Smyth and J. Wesseler (eds). 2016. *The Co-existence of Genetically Modified, Organic and Conventional Foods: Government Policies and Market Practices*. Springer.
- Smyth, S, D. Castle and P. Phillips. 2015. *Research Collection on Agriculture, Biotechnology and Development*. Edward Elgar.
- Smyth, S, D. Castle and P. Phillips. 2014. *Handbook on Agriculture, Biotechnology and Development*. Edward Elgar, pp 880.
- Atkinson, M., Béland, D., Marchildon, G., McNutt, K., Phillips, P., and Rasmussen, K. 2013. *Governance and Public Policy in Canada: A View from the Provinces*. University of Toronto Press.
- Phillips, P., Webb, G., Karwandy, J, and Ryan, C. 2012. *Innovation in Agri-food Research Systems: Theory and Case Studies*. CABI, pp 215.
- Porter, J. and P. Phillips (eds). 2007. *Public Science in Liberal Democracy*. UTP, pp. 343.
- Phillips, P. and C. Onwuekwe (eds). 2007. *Accessing and Sharing the Benefits of the Genomics Revolution*. Kluwer/Springer, pp. 224.
- Phillips, P. 2007. *Governing transformative technological innovation: Who's in charge?* Edward Elgar.
- Phillips, P., S. Smyth and W. Kerr (eds). 2006. *Governing Risk in the 21st Century: Lessons from the World of Biotechnology*. Nova Science Publishers, pp. 112.
- Smyth, S. P. Phillips, W. Kerr and G. Khachatourians. 2004. *Regulating the Liabilities of Agricultural Biotechnology*. Wallingford, UK: CABI Publishing, pp. 210.
- Phillips, P and R. Wolfe (eds). 2001. *Governing Food: Science, Safety and Trade*. McGill University Press/Queens School of Policy Studies, pp. 174.
- Phillips, P. and G.G. Khachatourians. 2001. *The Biotechnology Revolution in Global Agriculture: Invention, Innovation and Investment in the Canola Sector*. CABI, pp. 360.
- Phillips, P. 1990. *Wheat, Europe and the GATT: A Political Economy Analysis*. London: Pinter Publishers. 200 pp (translated and republished in Japanese 1992).

### >75 CHAPTERS IN BOOKS, including:

- Phillips, P. and A. Ballantyne. 2022. Saskatchewan: Where innovation is a contact sport. In *Ideas, Institutions, and Interests: Canadian Provincial Science, Technology, and Innovation Policy*, P. Phillips and D. Castle (eds). University of Toronto Press.
- Phillips, P., S. Smyth and J. de Beer. 2018. Access and Benefit Sharing the Age of Digital Biology. In *Genetic Resources in an Access and Benefit Sharing Era: Indigenous Peoples as Stakeholders*, Chidi Oguamanam (ed), Cambridge University Press.
- Phillips, P.W.B. 2017. Public-Private R&D in the Development of the Canola Industry in Canada. In Nicholas Kalaitzandonakes, Elias G. Carayannis, Evangelos Grigoroudis, Stelios Rozakis (eds), *From Agriscience to Agribusiness - Theories, Policies and Practices in Technology Transfer and Commercialization*. Springer, 101-117.
- Ugochuckwu, A. and Peter W. B. Phillips. 2017. Technology Adoption by Agricultural Producers: A Review of the Literature. In Nicholas Kalaitzandonakes et al. (eds), *From Agriscience to Agribusiness*. Springer, 361-378.
- Phillips, P., and S. Smyth. 2017. The Risk Analysis Framework and Biosafety Policy. Chapter 13 in *Genetically Modified Organisms in Developing Countries*, edited by Ademola A. Adenle, E. Jane Morris and Denis J. Murphy. Cambridge University Press.

### >95 PEER REFEREED JOURNAL ARTICLES, including:

- Lassoued, R., Peter W.B. Phillips, Stuart J. Smyth. 2023. Exploratory Analysis on Drivers and Barriers to Canadian Prairie Agricultural Technology Innovation and Adoption. *Smart Agricultural Technology* 100257. <https://doi.org/10.1016/j.atech.2023.100257>.
- Ugochukwu, A. I., & Phillips, P. W. B. 2022. Data sharing in plant phenotyping research: perceptions, practices, enablers, barriers and implications for science policy on data management. *The Plant Phenome Journal*, 5, e20056. <https://doi.org/10.1002/ppj2.20056>
- Pixley, K, Falck-Zepeda, J, Paarlberg, R, Phillips, et al. 2022. Genome Edited Crops for Improved Food Security of Smallholder Farmers. *Nature Genetics*.
- Awada, L., Phillips, P. W. B., & Bogdan, A. M. 2022. Governance and stewardship for research data and information sharing: Issues and prospective solutions in the transdisciplinary plant phenotyping and imaging research center network. *Plants, People, Planet* 4(1), 84-95.
- Smyth, S, Webb, S, and Phillips, P. 2021. The role of public-private partnerships in improving global food security. *Global Food Security* 31, 100588.
- Awada L, Nagy C, Phillips PWB. 2021. Contribution of land use practices to GHGs in the Canadian Prairies crop sector. *PLoS ONE* 16(12): e0260946. <https://doi.org/10.1371/journal>.
- Phillips, P., D. Castle and S. Smyth. 2020. Evidence-based policy making: determining what is evidence. *Heliyon* 6 (7), e04519.
- Phillips, P., Jo-Anne Relf-Eckstein, Graeme Jobe, Brian Wixted. 2019. Configuring the new digital landscape in western Canadian agriculture. *NJAS - Wageningen Journal of Life Sciences*.
- Lassoued, R., P. Phillips, S. Smyth and H. Hesselin. 2019. Estimating the cost of regulating genome edited crops: expert judgement and overconfidence. *GM Crops and Food* 10:1, 44-62.
- Deutscher, KM, K. Walker and Peter W.B. Phillips. 2019. Conscience in public administration: More than just a chirping cricket? *Canadian Public Administration*, 62(2), doi.org/10.1111/capa.12320.
- Ademola A. Adenle, E. Jane Morris, Denis J. Murphy, Peter W.B. Phillips, Eduardo Trigo, Peter Kearns, Yun-He Li, Hector Quemada, José Falck-Zepeda, John Komen. 2018. Rationalising the Governance of GM Technologies in Developing Countries. *Nature Biotechnology* 36(2), 137-9.

### SELECTED STRATEGIC INSTITUTIONAL VENTURES (>12 ventures that leveraged C\$800M)

- 2016-2019 Member of team that developed and won C\$153M federal grant to develop the Protein Industries Canada supercluster, which leveraged another C\$300M.
- 2015-2019 Leader and founding director, Johnson Shoyama Center for the Study of Science and Innovation Policy, with 8 core faculty and > \$7M research funding.
- 1999-2006 Member of development team of virtual College of Biotechnology; second director; secured more than \$5M funding, engaged with more than 60 faculty in 5 colleges, created 9 new degree programs and graduated more than 300 students.
- 2004-2008 Member of development team and founding director, Johnson-Shoyama Graduate School of Public Policy, Saskatoon campus; hired first faculty and staff complement, got programs

- approved, secured and renewed teaching and learning space and recruited first cohort of students.
- 2011-2012 Member of development team, Global Institute for Food Security, which secured \$52M endowments and leveraged >\$50M competitive research grants.
- 1999-2020 Founding GE3LS scholar with Genome Canada; one of few scholars in Canada with continuous funding since beginning of program.
- 1998-2015 AAFC Policy Research Networks: Led creation of Canadian Agrifood Trade Research Network (CATRN), the first policy research network; all PRNs have leveraged more than \$8M over the past 20 years.
- 1998-2000 Member, local development team, Genome Prairie, which has generated more than \$111M research activity from Genome Canada and \$150M from others
- 1999-2004 NSERC/SSHRC Chair in Managing Technological Change: developed and held 5-year, \$1.25M peer reviewed research chair.

## RECENT CONSULTING WORK

- Macall, D, Stuart Smyth and P. Phillips. 2022. Impacts of changes to Canada's Plant Breeders' Rights Act. CFIA Commissioned study.
- Phillips, P. and P. Boxall. 2019. Pathways to impact: Opportunities and strategies for evaluating AAFC investments in agri-food research. AAFC Commissioned Expert Study, AAFC Contract #104466717.
- Buckingham, D., P. Phillips, et al. 2018. What We Heard – Barton Forward: Optimizing Growth in the Agri-food Sector. CAPI, Ottawa (personal service contract).
- Schmaltz, K, P. Phillips, S. Johnson. 2017-18. Nisku-Leduc Cluster Strategy Study. Ballard Consulting Group, Edmonton, AB (\$200,000).
- Phillips, P., Relf-Eckstein, J. and Ballantyne, A. 2018. Disruptive Transformation of the Agri-Ecosystem: A Case Study of Bundled Emergent Technologies. A project for Agriculture and Agri-Food Canada, Strategic Policy Branch. Contract 01B68-117-0245. March 2018.
- Phillips, P., Boland, and Ryan, C. 2012-3. Public-Private-Producer Partnerships (P4s) in Canada. AAFC Contract #01B68-12-0213, pp.120.
- Fulton, M, M. Atkinson and P. Phillips. 2010-11. Governing Major Science Initiatives in Western Canada. Contract WD-11-002. Western Economic Diversification, pp. 69 (\$9,500).
- Phillips, P., Graeme Webb, Bill Boland and Cami Ryan. 2010. Research and Innovation Delivery Models in Agri-based Innovation Systems: Final Report. Contract 01B68-10-012, Innovation Policy Analysis, Research Branch, AAFC, September 21.
- Phillips, P., Oswald Henry and Tom Porter, 2000. Standards in Emerging Biodiverse Industries: Western Canadian Agri-Food Interests in the Canadian Standards Strategy. Study prepared for Western Economic Diversification, June (\$40,000).

## SELECTED AWARDS AND PRIZES

- Research and writing awards: Saskatchewan Book Awards for scholarly writing, 2001 (co-author, *The Biotechnology Revolution in Global Agriculture*) and for scholarly writing, publishing and publishing in education, 2005 (as co-editor, Saskatchewan Encyclopedia); International Chris Award, 2004 (joint recipient with DAVS); first prize in the Scholarly/Reference category in the 2009 New York Book Show sponsored by the Bookbinders' Guild of New York (March 2009 (author of essay in *Imagining Science*, edited by Caulfield and Caulfield));
- Professorships: University of Saskatchewan Distinguished Professor, 2014-; University of Regina Graduate Studies and Research Adjunct Professor, 2010-2020; University Technology Sydney Visiting Professor 2020; Institute of Advanced Study, University of Western Australia, Perth, Professor-at-large, 2006 to 2008; European University Institute Visiting Professor, Florence, Italy, 2006; LSE Visiting Professor, 2005; University of Regina Faculty of Administration Adjunct Professor 1997-2000.
- Fellowships: The Centre for Innovation Studies (THECIS) Fellow, Calgary, 2003 to date; Canadian Agricultural Trade Policy Research Network (CAPTRN) Senior Fellow, 2006-2016; Affiliate, Martin Prosperity Institute, Rotman School of Management, University of Toronto.
- Listed in Who's Who in Canada, 2001 to date