

**Department of Political Science
Faculty of Arts and Science/School of Graduate Studies
University of Toronto**

**Innovation and Knowledge Transfer in City-Regions
POL 454H1S/POL 2394S
Winter Term, 2023-24**

Instructor: David A. Wolfe, Munk School of Global Affairs and Public Policy
Office: 367S, 1 Devonshire Place
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Course Description:

This course surveys two of the key themes related to the process of innovation in a knowledge-based economy: the process by which new knowledge is generated and effectively transferred to those organizations with the potential to commercialize it; and secondly, the paradoxical relationship between knowledge creation and proximity in a modern global economy. Increasingly the global economy is seen as a knowledge-based one, hence the critical importance of understanding how new knowledge is generated and deployed in the form of new products and processes. At the same time, the more global the economy becomes, the greater the value of proximity, hence the fascination with how to foster the growth of new regional concentrations of knowledge and innovation, such as Silicon Valley. This course surveys the current state of knowledge concerning these processes and explores the implications of this understanding for public policies designed to stimulate knowledge transfer and promote the growth of dynamic and innovative city-regions.

Required Reading: Course Readings are available online through the Library and the Portal.

Course Evaluation:

Evaluation will consist of a research paper of 20-25 pages (70%) for graduates; and an essay proposal (10%) and research paper of 15 to 20 pages (60%) for undergraduates. Seminar participation and presentations will be worth 30% of the grade for all students. Essay proposals are due in class on **February 16** for undergraduates. Essays are due at the end of the term. A penalty of 1% per weekday will be deducted for late essays and proposals.

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COURSE OBJECTIVES:

- The main objective of this course is to deepen our understanding of the way knowledge is generated and diffused in urban and regional contexts.
- We are also interested in the ways in which firms select from the infinite array of new knowledge to create new products and processes and introduce them to the market.
- Particular attention is focused on how the underlying institutional context for cities and regions shapes and constrains the way in which firms innovate.
- Of particular relevance are the broad processes of interest to evolutionary economists and economic geographers such as path dependency, regional resilience and experimentalist governance in contributing to these processes.
- The course is particularly concerned with questions of urban and regional governance and how these contribute to innovation.

STUDENT LEARNING OUTCOMES:

As we work through this academic content, the course seeks expand your academic skills by meeting several learning objectives:

- Enhancing your *knowledge* about important aspects of the nature of innovation processes in urban and regional settings.
- Building your *comprehension* skills (understanding) of key concepts used in the economic geography and governance literature to explain the nature of the innovation process.
- Develop your ability to *apply* knowledge that has been acquired in class to situations that involve urban and regional economic development.
- Helping foster *critical evaluation* skills by building a capacity for making judgments about the factors that shaped and constrained the innovation process and the implications for urban and regional development based on reasoned argument (an ability to derive conclusions, justify and verify decisions that are based on evidence and to think without prejudice or bias).

COURSE POLICIES

Office hours:

If you have questions about the readings, seminar discussions, or assignments, office hours are best. No appointment is needed. If you cannot make office hours but would like to meet, I can often chat for a few minutes after the class and can sometimes schedule another meeting time on the spot. Otherwise, contact me by emails to schedule a mutually agreeable alternative time.

Email:

Email is an effective way to communicate for short, quick questions, but extended conversations are best conducted face to face during office hours or in a special appointment.

Keep copies:

Students are advised to keep copies of all their draft work and hard copies of their assignments, including drafts of their assignments, until the marked assignments have been returned.

Plagiarism:

Make sure that the information in your essays and on your tests is presented in your own words. PLAGIARISM is a serious academic offence at the University of Toronto and will be treated according to the rules in the university's Code of Behaviour.

For further clarification and information, please see the University of Toronto's policy on Plagiarism at <http://www.utoronto.ca/writing/plagsep.html>.

Illness and Absences:

For 2021-22, the **Verification of Illness** (or "doctor's note") is not required. Students who are absent from academic participation for any reason (e.g., COVID, cold, flu and other illness or injury, family situation) and who require consideration for missed academic work have been asked to record their absence through the ACORN online absence declaration. Students should also advise their instructor of their absence.

Extensions:

Under extraordinary circumstances, consideration will be given to granting an extension based on an official medical note from a doctor or from the University specifying extreme family circumstances.

Accessibility Needs:

The University of Toronto is committed to accessibility. If you require accommodations or have any accessibility concerns, please visit <http://studentlife.utoronto.ca/accessibility>.

TOPICS: Winter Term

Jan. 17: Introduction to the course / Technological Innovation and Local Economic Development

Jan. 24: Technology, Institutions and Socio-Political Change

Jan. 31: Regional Innovation Systems/Clusters/Learning Regions

Feb. 7: Global Production Networks, Global Innovation Networks and Regional Economic Development

Feb. 14: Tacit Knowledge, Path Dependence and New Path Creation in Regional Development

Feb. 21: Reading Week

Feb. 28: The IT Revolution and Implications for Local and Regional Development

March 6: Universities and Regional Economic Development

March 13: Experimental Governance and Regional Economic Development

March 20: Cities, Innovation, and the Economic Geography of Talent

March 27: Urban Governance for the Knowledge Economy

April 3: Knowledge Cities and the Future of Economic Development

Topics:**Jan. 17: Introduction / Technological Innovation and Local Economic Development**

- *W. Brian Arthur, *The Nature of Technology: What It is and How It Evolves*, ch. 2, 9
- *Giovanni Dosi and Marco Grazzi, "On the nature of technologies: knowledge, procedures, artifacts and production," *Cambridge Journal of Economics* 34 (2010): 173-84.
- *Maskell, Peter and Anders Malmberg, 1999, "Localised learning and industrial competitiveness," *Cambridge Journal of Economics* 23: 167-185.
- *Storper, Michael, 1995, "The Resurgence of Regional Economies, Ten Years Later: The Region as a Nexus of Untraded Interdependencies," *European Urban and Regional Studies* 2: 191-221.
- *Morgan, Kevin. 2004. "The exaggerated death of geography: learning, proximity and territorial innovation systems," *Journal of Economic Geography* 4: 3-21.
- Dosi, Giovanni, 1988, "The Nature of the Innovative Process," In *Technical Change and Economic Theory*, ed. G. Dosi et al., pp. 221-238.
- Arthur, W. Brian, 1988, "Competing Technologies: An Overview," in *Technical Change and Economic Theory*, ed. G. Dosi et al., pp. 590-607.
- Rodríguez-Pose, Andrés and Ricardo Crescenzi, 2008, "Mountains in a flat world: why proximity still matters for the location of economic activity," *Cambridge Journal of Regions, Economy and Society* 1: 371-388.
- Rodríguez-Pose, Andrés, 2018. "The revenge of the places that don't matter (and what to do about it)." *Cambridge Journal of Regions, Economy and Society* 11(1): 189-209.
- Pike, Andy, Andrés Rodríguez-Pose and John Tomaney, 2006, *Local and Regional Development*, pp. 96-113.
- Simmie, James, "Innovation and Space: A Critical Review of the Literature," *Regional Studies* 39,6: 789-804.
- Philip Cooke et al. Eds. *Handbook of Regional Innovation and Growth*

Jan. 24: Technology, Institutions and Socio-Political Change

- *Björn Johnson, "Institutional Learning," in *National Systems of Innovation*, ed. Bengt-Åke Lundvall, pp. 23-44
- *J. Rogers Hollingsworth, "Doing institutional analysis: implications for the study of innovations," *Review of International Political Economy* 7:4 (Winter 2000): 595-644.

- *John Zysman, "Institutions and Economic Development in the Advanced Countries," in *Organization and Strategy in the Evolution of the Enterprise*, ed. G. Dosi and F. Malerba, pp. 410-455.
- *Giovanni Dosi and Alessandro Nuvolari, "Introduction: Chris Freeman's 'History, Co-Evolution and Economic Growth: an affectionate reappraisal,'" *Industrial and Corporate Change* 29:4 (2020): 1021-1034.
- *David A. Wolfe and Meric S. Gertler, "Innovation and Social Learning: An Introduction," in *Innovation and Social Learning*, ed. Meric S. Gertler and David A. Wolfe, pp. 1-24.
- Charles Edquist and Björn Johnson, "Institutions and Organizations in Systems of Innovation," in *Systems of Innovation: Technologies, Institutions and Organizations*, ed. C. Edquist.
- K. Neilson and B. Johnson, *Institutions and Economic Change: New Perspectives on Markets, Firms and Technology*
- Richard R. Nelson, "What enables rapid economic progress: What are the needed institutions?" *Research Policy* 37 (2008): 1-11.
- Richard R. Nelson and Bhaven Sampat, "Making Sense of Institutions as a Factor Shaping Economic Performance," *Journal of Economic Behaviour and Organization* 44 (2001): 31-54.
- J. Rogers Hollingsworth and Robert Boyer, eds, *Contemporary Capitalism: The Embeddedness of Institutions*

Jan. 31: Regional Innovation Systems / Clusters/ Learning Regions

- *Asheim, Bjørn T., Markus Grillitsch and Michaela Trippl, "Regional Innovation Systems: Past, Present and Future," in Richard Shearmur et al., *Handbook of the Geographies of Innovation*, pp. 45-62.
- *Cooke, Philip, and Kevin Morgan, 1998, *The Associational Economy: Firms, Regions, and Innovation*, ch. 3 "The Region as a Nexus of Learning Processes," pp. 60-82.
- *Asheim, Bjørn, Philip Cooke and Ron Martin, 2006, "The rise of the cluster concept in regional analysis and policy: a critical assessment," in Bjørn Asheim, Philip Cooke and Ron Martin, *Clusters and Regional Development: Critical reflections and explorations*.
- *Ketels, Christian. 2013. "Recent Research on competitiveness and clusters: what are the implications for regional policy," *Cambridge Journal of Regions, Economy, and Society* 6(2): 269-284.
- *Delgado, Mercedes, Scott Stern and Michael Porter, 2014. "Clusters, Convergence and Economic Performance," *Research Policy* 43: 1785-1799.

- *Wolfe, David A. 2009, "Introduction: Embedded Clusters in the Global Economy," *European Planning Studies* 17(2): 179-187.
- Wolfe, David A., and Meric S. Gertler, 2005, "Clusters from the Inside and Out: Local Dynamics and Global Linkages," *Urban Studies* 41, 5/6: 1071-1093.
- Cooke, Philip, 2005. "Regional Knowledge Capabilities and Open Innovation: Regional Innovation Systems and Clusters in the Assymetric Knowledge Economy," in S. Breschi and F. Malerba, eds, *Clusters, Networks and Innovation*, pp. 80-109.
- Cooke, Philip, 2007. "Regional Innovation, Entrepreneurship and Talent Systems," *International Journal of Entrepreneurship and Innovation*
- Iammarino, Simona, 2005, "An evolutionary integrated view of regional systems of innovation: Concepts, measures and historical perspectives," *European Planning Studies* 13, 4: 497-51
- Cooke, P., M. Heidenreich and H.-J. Braczyk, eds, 2004, *Regional Innovation Systems*, 2nd ed., especially introduction by Cooke
- Braunerheljm, Pontus and Maryann Feldman, 2006. *Cluster Genesis: Technology-Based Industrial Development*.

Feb. 7: GPNs, GINs and Regional Economic Development

- *Cooke, Phil, 2005, "Regionally asymmetric knowledge capabilities and open innovation: Exploring 'Globalisation 2' – A new model of industry organisation," *Research Policy* 34: 1128-1149.
- *Mackinnon, Danny. 2012. "Beyond Strategic Coupling: Reassessing the Firm-Region Nexus in Global Production Networks." *Journal of Economic Geography* 12:1 (January): 227–45.
- *Parilli, Mario Davide, Khalid Nadvi, and Henry Wai-Chung Yeung. 2013. "Local and Regional Development in Global Value Chains, Production Networks and Innovation Networks: A Comparative Review and the Challenges for Future Research." *European Planning Studies* 21, no. 7: 967–88.
- *Chaminade, Cristina, Claudia De Feuntes, Gouya Harirchi, and Monica Plechero. 2016. "The Geography and Structure of Global Innovation Networks: Global Scope and Regional Embeddedness." In *Handbook on the Geographies of Innovation*, eds Richard Shearmur, Christophe Carrincazeaux, and David Doloreux, 370–81. Cheltenham, UK and Northampton, MA: Edward Elgar.
- *Yeung, Henry Wai-Chung. 2021. "Regional Worlds; from Related Variety in Regional Diversification to Strategic Coupling in Global Production Networks." *Regional Studies* 55, no. 6: 989–1010.
- Amin, Ash, and Nigel Thrift. 1992. "Neo-Marshallian Nodes in Global Networks." *International Journal of Urban and Regional Research* 16, no. 4 (December): 571–87.

- C. Binz and B. Truffer, "Global Innovation Systems – A conceptual framework for innovation dynamics in transnational contexts," *Research Policy* 46 (2017): 1284-1298.
- Bunnell, Timothy G., and Neil M. Coe. 2001. "Spaces and Scales of Innovation." *Progress in Human Geography* 24, no. 4: 569–89.
- Chaminade, Cristina, and Monica Plechero. 2015. "Do Regions Make a Difference? Regional Innovation Systems and Global Innovation Networks in the ICT Industry." *European Planning Studies* 23, no. 2: 215–37.
- Chen, Y.C., and J. Vang. 2008. "MNCs, Global Innovation Network and Developing Countries: Insights from Motorola in China." *International Journal of Business and Management Science* 1, no. 1: 11–30.
- Coe, Neil M., Peter Dicken, and Martin Hess. 2008. "Global Production Networks: Realizing the Potential." *Journal of Economic Geography* 8, no. 3 (May): 271–95.
- Coe, Neil M., Martin Hess, Henry Wai-Chung Yeung, Peter Dicken, and Jeffrey Henderson. 2004. "'Globalizing' Regional Development: A Global Production Networks Perspective." *Transactions of the Institute of British Geographers* 29, no. 4 (December): 468–84.
- Coe, Neil M., and Henry Wai-Chung Yeung. 2015. *Global Production Networks: Theorizing Economic Development in an Interconnected World*. Oxford: Oxford University Press.
- , 2019. "Global Production Networks: Mapping Recent Conceptual Developments." *Journal of Economic Geography* 19, no. 4 (July): 775–801.
- Philip Cooke, "Qualitative Analysis and Comparison of Firm and System Incumbents in the New ICT Global Innovation Network," *European Planning Studies* 21:9 (2013): 1323-1340.
- Swyngedouw, Eric. 1997. "Neither Global Nor Local: Glocalization' and the Politics of Scale." In *Spaces of Globalization: Reasserting the Power of the Local*, ed. K.R. Cox. New York: The Guilford Press.
- Yeung, Henry Wai-Chung. 2009. "Transnational Corporations, Global Production Networks, Urban and Regional Development." *Growth and Change* 40, no. 2 (June): 197–226.
- , 2016. *Strategic Coupling: East Asian Industrial Transformation in the New Global Economy*. Cornell Studies in Political Economy.
- , 2022. *Interconnected Worlds: Global Electronics and Production Networks in East Asia*. Stanford, California: Stanford Business Books.

Feb. 14: Tacit Knowledge, Path Dependence, and New Path Creation

- *Gertler, Meric S. 2003. "Tacit knowledge and the economic geography of context, or the undefinable tacitness of being (there)," *Journal of Economic Geography* 3: 75-99.

- *Martin, Ron, and Peter Sunley, 2010. "The Place of Path Dependence in an Evolutionary Perspective on the Economic Landscape," in Ron Boschma and Ron Martin, eds, *The Handbook of Evolutionary Economic Geography*, pp. 62-92.
- *Wolfe, David A. 2010. "Strategic management of core cities: Path dependence and economic adjustment in resilient regions," *Cambridge Journal of Regions, Economy & Society* 3: 139-52.
- *Hassink, Robert, Arne Isaksen, and Michaela Trippel. 2019. "Towards a Comprehensive Understanding of Regional Industrial Path Development." *Regional Studies* 53(11): 1636-45.
- *Mackinnon, Danny, Stuart Dawley, Andy Pike, and Andrew Cumbers. 2019. "Rethinking Path Creation: A Geographic Political Economy Approach." *Economic Geography* 95(2): 113-35.
- Storper, Michael, 1997. "The Evolution of Regional Specificities," in *The Regional World*, pp. 59-82.
- Senker, Jacqueline, 1995, "Tacit Knowledge and Models of Innovation," *Industrial and Corporate Change* 4:2 (pp. 425-447).
- Boschma, Ron, and Koen Franken, 2010. "Technological Relatedness, related variety and economic geography," in Philip Cooke et al. Eds. *Handbook of Regional Innovation and Growth*, pp. 187-197.
- Nonaka, Ikujiro, Ryoko Toyama and Akiya Nagata, 2000, "A Firm as a Knowledge-creating Entity: A New Perspective on the Theory of the Firm," *Industrial and Corporate Change* 9:1, pp. 1-20.
- Nonaka, Ikujiro and Hirotaka Takeuchi, *The Knowledge-Creating Company: How Japanese Companies Create the Dynamics of Innovation*
- Nonaka, Ikujiro and David J. Teece, eds, 2000, *Managing Industrial Knowledge: Creation, Transfer and Utilization*
- Isaksen, Arne and Michaela Trippel, 2016. "Path Development in Different Regional Innovation Systems: A Conceptual Analysis," in Mario Davide Parilli et al. eds. *Innovation Drivers and Regional Innovation Strategies*, pp. 66-84.
- Martin, Ron, and Peter Sunley, "Competitiveness and regional economic resilience," in Robert Huggins and Piers Thomson, eds, *Handbook of Regions and Competitiveness*, pp. 287-307.
- Pike, Andy, Stuart Dawley, and John Tomaney, 2010. "Resilience, adaptation and adaptability," *Cambridge Journal of Regions, Economy & Society* 3, 59-70.
- Christopherson, Susan, Jonathan Michie, and Peter Tyler, 2010. "Regional resilience: theoretical and empirical perspectives," *Cambridge Journal of Regions, Economy & Society* 3, 3-10.

- Martin, Ron. and Peter Sunley, 2006. "Path dependence and regional economic evolution," *Journal of Economic Geography* 6: 395-437.
- Martin, Ron, 2011. "Regional Economies as Path Dependent Systems: some issues and implications," in *Handbook of Regional Innovation and Growth*, ed P. Cooke et al., pp.
- Wolfe, David A., and Meric S. Gertler, 2006. "Local Antecedents and Trigger Events: Policy Implications of Path Dependence for Cluster Formation," in P. Braunderhjelm and M. Feldman, eds, *Industrial Genesis: Technology-Based Industrial Development*, pp. 243-263.
- Simmie, James, et al. 2008. *History Matters: Path dependence and innovation in British city-regions*. NESTA Research Report.
- Woodlief, Anthony, 1998. "The Path-Dependent City," *Urban Affairs Review* 33(3): 405-437.

Feb. 21: Reading Week

Feb. 28: The IT Revolution – Implications for Regional Economic Development

- *Manuel Castells, *The Rise of the Network Economy*, ch. 1
 - *C. Freeman and F. Louca, *As Time Goes By*, pp. 301-335
 - *Juan Alcácer, John Cantwell and Lucia Piscitello, "Internationalization in the information age: A new era for places, firms and international business networks," *Journal of International Business Studies* 47 (2016): 499-512.
 - *Sturgeon, Timothy J. 2003. "What really goes on in Silicon Valley? Spatial clustering and dispersal in modular production networks," *Journal of Economic Geography* 3: 199-225.
 - *Kenney, Martin and John Zysman. 2020. "The Platform Economy: Restructuring the Space of Capitalist Accumulation." *Cambridge Journal of Regions, Economy and Society* 13(1, March): 55-76.
- Carlota Perez, *Technological Revolutions and Financial Capital*, pp. 36-59.
- Chris Miller, *Chip War*
- Margaret O'Mara, *The Code*
- Manuel Castells, *The Internet Galaxy*, ch. 3
- Richard N. Langlois, "Organizing the Electronic Century," in Giovanni Dosi et al, eds, *The Third Industrial Revolution in Global Business*, pp. 119-167.
- David Mowery and Timothy Simcoe, "The Internet," in Benn Steil, et al., *Technological Innovation and Economic Performance*
- National Academies of Sciences, Engineering and Medicine, *Continuing Innovation in Information Technology*, 2016.

Alexander J. Field, "The Information Technology Boom," ch. 5 of *A Great Leap Forward: 1930s Depression and U.S. Economic Growth*.

Paul A. David, "Computer and Dynamo: The Modern Productivity Paradox in a Not-Too-Distant Mirror," in OECD, *Technology and Productivity: The Challenge for Economic Policy*

March 6: Universities and Regional Economic Development

*Shiri Breznitz, *The Fountain of Knowledge: The Role of Universities in Economic Development*, pp. 16-40

*Feldman, Maryann, and Ian Stewart, 2008. "Wellsprings of Modern Economic Growth: Higher Education, Innovation and Local Economic Development," in *Annual World Bank Conference on Development Economics 2008*.

*Feller, Irwin, 1999, "The American University System as a Performer of Basic and Applied Research" in *Industrializing Knowledge*, Ed. Lewis M. Branscomb, Fumio Kodama, and Richard Florida, pp. 65-101.

*Bramwell, Allison and David A. Wolfe, 2008, "Universities and Regional Economic Development: The Entrepreneurial University of Waterloo," *Research Policy* 37(8): 1175-87.

*Robert Maxim and Mark Muro, 2021. "[Supporting distressed communities by strengthening regional public universities: a federal policy proposal](#)." The Brookings Institution.

Martin Kenney and David C. Mowery, eds, *Public Universities and Regional Growth*

Goldstein, H. and Glaser, K. 2012. "Research universities as actors in the governance of local and regional development," *The Journal of Technology Transfer* 37 (2): 158-174

Geiger, Roger and Creso M. Sá, *Tapping the Riches of Science: Universities and the Promise of Economic Growth*

Breznitz, Shiri M. and Feldman, Maryann P., 2012. "The Engaged University," *Journal of Technology Transfer* 37(2): 139-157.

Wolfe, David A. 2009, "Universities and Knowledge Transfer: Powering Local Economic and Cluster Development," in *Research and Innovation Policy: Changing Federal Government-University Relations*, eds G. Bruce Doern and C. Stoney

Helen Thorp and Buck Goldstein, *Engines of Innovation: The Entrepreneurial University in the Twenty-first Century*.

Rosenberg, Nathan, 2003, "America's Entrepreneurial Universities," in *The Emergence of Entrepreneurship Policy*, ed. David M. Hart, pp. 113-37.

David C. Mowery and Bhaven N. Sampat, 2005, "Universities in National Innovation Systems," in Fagerberg et al. *The Oxford Handbook of Innovation*

- Nelson, Richard R. 1996, "Capitalism as an Engine of Progress," in *The Sources of Economic Growth*
- Roger L. Greiger, 2004, *Knowledge and Money: Research Universities and the Paradox of the Marketplace*.
- Crow, Michael M. And Christopher Tucker, 2001, "The American Research University System as America's *de facto* Technology Policy," *Science and Public Policy* 28:1 (February): 2-10.
- Florida, Richard, and Wesley M. Cohen, 1999, "Engine or Infrastructure? The University role in Economic Development," in *Industrializing Innovation*, Ed. Lewis M. Branscomb, Fumio Kodama, and Richard Florida, 589-610.
- Rosenberg, Nathan, and Richard R. Nelson, 1994, "American universities and technical advance in industry," *Research Policy* 23:3 pp.323-348.
- Faulkner, Wendy, and Jacqueline Senker, 1995, *Knowledge Frontiers: Public sector research and Industrial Innovation in Biotechnology, Engineering Ceramics, and Parallel Computing*.

March 13: Experimental Governance and Regional Economic Development

- *Sabel, Charles F., and Jonathan Zeitlin. 2012. "Experimentalist Governance." In *The Oxford Handbook of Governance*, ed. David Levi-Faur. Oxford: Oxford University Press, 169–84.
- *Morgan, Kevin. 2019. [*Experimental Governance and Territorial Development*](#). Scoping Paper in Experimental Governance. Paris: Organisation for Economic Co-operation and Development.
- *Wolfe, David A. 2019. [*Experimental Governance: Conceptual Approaches and Practical Cases*](#). Scoping Paper in Experimental Governance. Paris: Organisation for Economic Co-operation and Development.
- *OECD. 2020. *Broad-based Innovation Policy for all Cities and Regions*. Paris: Organisation for Economic Co-operation and Development, ch. 5
- *Sabel, Charles F. 1996. "Experimental Regionalism and the Dilemmas of Regional Economic Policy." Paper presented to the. Conference on Socio-Economic Systems of Japan, the United States, The United Kingdom, Germany and France. Institute for Fiscal and Monetary Studies, Tokyo.
- Sabel, Charles F. 1994. "Learning by Monitoring: The Institutions of Economic Development." In *The Handbook of Economic Sociology*, eds Neil J. Smelser and Richard Swedberg. Princeton, NJ and New York: Princeton University Press and Russell Sage Foundation, 137–65.
- Bradford, Neil, and David A. Wolfe. 2017. "Learning Through Governance: Innovation in the Knowledge Economy." In *The Elgar Companion to Innovation and Knowledge Creation*, eds

Harald Bathelt, Patrick Cohendet, and Sebastian and Simon Henn, Laurent. Cheltenham, UK: Edward Elgar, 723–38.

March 20: Cities, Innovation, and the Economic Geography of Talent

- *Wolfe, David A. 2014. "Introduction," in David A. Wolfe, ed., *Innovating in Urban Economies: Economic Transformation in Canadian City-Regions*, Toronto: University of Toronto Press.
- *Scott, Allen J., 2012. "On urbanization and urban theory," in *A World in Emergence: Cities and Regions in the 21st Century*, pp. 15-31.
- *Storper, Michael and Allen J. Scott, 2009. "Rethinking human capital, creativity and urban growth," *Journal of Economic Geography* 9: 147-167.
- *Scott, Allen J. 2007. "Capitalism and Urbanization in a New Key? The Cognitive-Cultural Dimension," *Social Forces* 85(4): 1465-1482.
- *Martin, Ron, and James Simmie, 2008. "Path Dependence and Local Innovation Systems in City Regions," *Innovation: Management, Policy & Practice* 10(2-3): 183-196.
- Audretsch, David, 2002, "The Innovative Advantage of US Cities," *European Planning Studies* 10(2): 165-176.
- Simmie, James, 2003. "Innovation and Urban Regions as National and International Nodes for the Transfer and Sharing of Knowledge" *Regional Studies* 37(6 & 7): 607-620.
- Duranton, Gilles and Diego Puga, 2000. "Diversity and Specialisation in Cities: Why, Where and When Does It Matter," *Urban Studies* 37(3): 533-555.
- Wolfe, David A. 2009. *21st Century Cities in Canada: The Geography of Innovation*, ch. 1 & 2. Online at: <http://www.conferenceboard.ca/documents.aspx?did=3311>.
- Wolfe, David A. and Allison Bramwell, 2008. "Innovation, creativity and governance: Social dynamics of economic performance in city-regions," *Innovation: Management, Policy & Practice* 10(2-3): 170-182.
- Storper, Michael, 2013, *Keys to the City*, Part I
- Glaeser, Edward, 2011. *Triumph of the City*, esp. ch. 1 and 2.
- Enrico Moretti, *The New Geography of Jobs*
- Montgomery, John, 2007. *The New Wealth of Cities: City Dynamics and the Fifth Wave*.
- Wolfe, David A. 2009. *21st Century Cities in Canada: The Geography of Innovation*, ch. 3. Online at: <http://www.conferenceboard.ca/documents.aspx?did=3311>.
- Scott, Allen J. 2008. "The Cognitive-Cultural Economy and the Creative City," in *Social Economy of the Metropolis*, pp. 64-83.

- Storper, Michael and Michael Manville, 2006. "Behaviour, Preferences and Cities: Urban Theory and Urban Resurgence," *Urban Studies* 43(8): 1247-1274.
- Gertler, Meric S. and Tara Vinodrai, 2005, "Anchors of Creativity: How Do Public Universities Create Competitive and Cohesive Communities?" in *Taking Public Universities Seriously*, pp. 293-315. http://www.utoronto.ca/progris/web_files/recentpub.htm.
- Florida, Richard, 2002, "The Economic Geography of Talent," *Annals of the Association of American Geographers* 94(2): 743-55.
- Glaeser, Edward L. et al., 1992, "Growth in Cities," *The Journal of Political Economy* 100(6): 1126-52.
- Glaeser, Edward L., 2000, "The New Economics of Urban and Regional Growth," in *The Oxford Handbook of Economic Geography*, eds Gordon L. Clark, Maryann P. Feldman and Meric S. Gertler, pp. 83-98.
- Gertler, Meric S., et al. 2014. "Attracting and Retaining Talent: Evidence from Canada's City-Regions," in Jill Grant, ed., *Seeking Talent for Creative Cities: The Social Dynamics of Innovation*, Toronto: University of Toronto Press.
- Florida, Richard, 2002, *The Rise of the Creative Class: And How it's Transforming Work, Leisure, Community and Everyday Life*
- Florida, Richard, 2005. *The Flight of the Creative Class: The New Global Competition for Talent*.

March 27: Urban Governance for the Knowledge Economy

- *Jen Nelles and David A. Wolfe, "Urban Governance and Civic Capital," *Territory, Politics, Governance* <https://doi.org/10.1080/21622671.2022.2123031>
- *Bradford, Neil, and Allison Bramwell, "Governing Urban Economies: Innovation and Inclusion in Canadian City-Regions," in Neil Bradford and Allison Bramwell, eds. *Governing Urban Economies: Innovation and Inclusion in Canadian City-Regions*, Toronto: University of Toronto Press, pp. 3-18.
- and
- *Bramwell, Allison, and Neil Bradford, "Civic Infrastructures of Innovation and Inclusion? Reflections on Urban Governance in Canada," in Neil Bradford and Allison Bramwell, eds, *Governing Urban Economies: Innovation and Inclusion in Canadian City-Regions*, Toronto: University of Toronto Press, pp.319-37.
- *Safford, Sean, 2009. *Why the Garden Club Couldn't Save Youngstown: The Transformation of the Rustbelt*, ch. 6.
- *Storper, Michael et al. 2015. *The Rise and Fall of Urban Economies: Lessons from San Francisco and Los Angeles*, ch. 8, pp. 169-92.

- Wolfe, David A. 2009. *21st Century Cities in Canada: The Geography of Innovation*, ch. 4 & 5. Online at: <http://www.conferenceboard.ca/documents.aspx?did=3311>.
- Pike, Andy, Andrés Rodríguez-Pose and John Tomaney, "Institutions: Government and Governance," in *Local and Regional Development*, pp. 123-146.
- Henton D. J. Melville and K. Walesh. 1997. *Grassroots Leaders for the New Economy: How Civic Entrepreneurs Are Building Prosperous Communities*, San Francisco: Jossey-Bass Publications. Chapter 1.
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