

MARK ZACHARY TAYLOR

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Academic Positions:

2007-Present	Georgia Institute of Technology Sam Nunn School of International Affairs Associate Professor (2013-present) Assistant Professor (2007-2013)	Atlanta, Georgia
2011 Autumn	Georgetown University Visiting Associate Mortara Center for International Studies Edmund A. Walsh School of Foreign Service	Washington D.C.

Education:

1998-2006	Massachusetts Institute of Technology Ph.D. Political Science <u>Fields:</u> International Relations, Political Economy, Comparative Politics, Methods <u>Dissertation:</u> "The Political Economy of Technological Change: A Change in the Debate" Winner of APSA's 2008 Virginia Walsh Award for Best Dissertation in Science, Technology, & Environmental Politics. <u>Committee:</u> Michael Piore (chair), James Snyder, Jonathan Rodden	Cambridge, Massachusetts
2003-2004	ICPSR Summer Program in Quantitative Methods -Time Series Analysis (2004) -Regression Analysis II (2003)	Ann Arbor, Michigan
1993-1995	Yale University M.A. International Relations <u>Fields:</u> International Political Economy, Comparative Science & Technology Policy	New Haven, Connecticut
1991-1992	Kansai University of Foreign Studies Certificate in Japanese Studies (Politics, Policy, & Business)	Osaka, Japan
1986-1990	University of California, Berkeley B.A. Physics	Berkeley, California

Publications & Papers:

Books

[*The Politics of Innovation: Why Some Countries Are Better Than Others at Science & Technology*](#) (Oxford University Press, 2016).

Reviewed by:

- Darius Ornston. 2017. *R&D Management* (forthcoming)
- Damon Coletta. 2017. *Perspectives on Politics* (forthcoming)

- Lehrer, Mark A. 2017. *Journal of Social Policy* 46(1):200-202.
- David Kearn. 2016. *Review of Policy Research* 33(6):686-688.
- Elizabeth Redden. 2016. *Inside Higher Ed* (July 26).
- Trevor Taylor. 2016. *International Affairs* 92(6):1535-1536.

Primary Research Articles

“Toward an International Relations Theory of National Innovation Rates” *Security Studies* 21(1):113-151. (March 2012)

“Does Culture Still Matter?: The Effects of Individualism on National Innovation Rates”
Written with Sean P. Wilson. *Journal of Business Venturing* 27(2):234-247 (Mar 2012)

“Intellectual Property Protection and U.S. Foreign Direct Investment in Emerging Economies” Written with James Mitchell Watkins. *Journal of Intellectual Property Rights* 15(6):415-428 (Nov 2010)

“Federalism and Technological Change in Blood Products” *Journal of Health Politics, Policy and Law* 34(6):863-898 (Dec 2009).

“International Linkages and National Innovation Rates: An Exploratory Probe” *Review of Policy Research* 26(1-2):127-149 (March 2009).

“Conclusion: International Political Economy—Reverse Salient of Innovation Theory” *Review of Policy Research* 26(1-2): 219-223 (March 2009).

“Political Economy of Technological Innovation: A Shift in Focus of the Debate” *Review of Evolutionary Economics and Economics of Innovation* 1:86-153 (Zhejiang Univ. Press, 2009) [in Chinese]

“Political Decentralization and Technological Innovation: Testing The Innovative Advantages of Decentralized States” *Review of Policy Research* 24(3):231-257 (May 2007).

“Empirical Evidence Against Varieties of Capitalism’s Theory of Technological Innovation” *International Organization* 58(3):601-631 (Summer 2004)

Book Chapters

“Patents and Politics” in B.S. Steel (ed.), *Science and Politics: A Guide to Issues and Controversies* (CQ Press/Sage Books, 2014).

“Broadband Enabled Innovation” written with Michael Best in *Trends in Telecommunication Reform 2012: Smart Regulation for a Broadband World*. (International Telecommunications Union, 2012).

“The Political Economy of National Leadership in Science and Technology” in *Leadership in Science and Technology: A Reference Handbook*. Ed. William Bainbridge pp. 272-280 (Sage Publications, 2011)

“Politics and the Science of Science Policy” written with Harvey Sapolsky in *Handbook of Science of Science Policy* eds. John H. Marburger III, Kaye Husbands Fealing, Julia Lane, Bill Valdez, and Stephanie Shipp. (Stanford University Press, 2011)

“Empirical Evidence Against Varieties of Capitalism’s Theory of Technological Innovation” in *Debating Varieties of Capitalism: A Reader* ed. Bob Hancke pp. 221-250 (Oxford University Press, 2009)

Public Policy Articles

“An Economic Ranking of the US Presidents, 1789–2008: A Data-Based Approach” *PS: Politics and Political Science* 45(4):596-604 (Oct 2012)

“Why Women Leave Science: Fixing the Leaky Pipeline has become a Matter of National Competitiveness” written with Sue V. Rosser. *Technology Review* 112(1): M17-M19 (Jan/Feb 2009)

“Economic Security: Expanding Women's Participation in US Science” written with Sue V. Rosser. *Harvard International Review*. 30 (3):20-24 (Fall 2008)

“Dominance Through Technology” *Foreign Affairs* 74(6):14-20. (Nov/Dec, 1995)

Education and Pedagogy

“Regression Analysis” chapter in *21st Century Political Science: A Reference Handbook*. Eds. John Ishiyama and Marijke Breuning pp. 478-489 (Sage Publications, 2010)

“Podcast Lectures as a Primary Teaching Technology: Results of a One-Year Trial” *Journal of Political Science Education* 5(2):135-153 (2009).

Selected Recent Conference Papers

“Expectations and Outcomes about Research and Commercialization in International University Research Ventures” with Jan Youtie. 2016. Technology Transfer Society Annual Conference (Nov 2016, Phoenix, AZ)

“Innovation, Alliances, and Threats” with John Schmid. 2016. Economics and Security Reconsidered, peer-review workshop sponsored by *International Organization*, U. Penn, and American University—SIS (June 2016, Philadelphia, PA)

“Three Cultural Boundaries of Science, Institutions, and Public Policy: A Theory of Co-production” written with Brendon Swedlow 2012 American Political Science Association Annual Meeting & Exhibition (Aug 2012, New Orleans, LA)

“Anticipating Obstruction to Science and Technology Policy: When and How Does Technological Change Create Political Backlash?” Paper Presented at International Conference on Innovative Methods for Innovation Management and Policy (IM2012) (Beijing, China, 2012)

“Innovation Politics: When and How Does Technological Change Create Political Action?” Paper Presented at APSA Annual Convention (Seattle, WA 2011)

“Mechanisms of International Technological Governance” Paper Presented at ISA Annual Convention (Montreal, Canada, 2011)

“Why Do Great Powers Give Up the Technological Frontier?: Institutions, Security, and Innovation in the Long-Run” Paper Presented at ISA Annual Convention (Montreal, Canada, 2011)

“Conflict, Cooperation, and Technological Change in IR Theory” Midwest Political Science Association National Conference (Chicago, 2010)

“National Innovation Rates: The Evidence For/Against Domestic Institutions” Conference Paper, International Studies Association Conference (San Francisco, 2008).

“National Innovation Rates: The Evidence For/Against Domestic Institutions” 103rd American Political Science Association Meeting (Chicago, 2007).

“International Relations Theory and Technological Power” 102nd American Political Science Association Meeting (Philadelphia, 2006)

"Political Institutions, Economic Performance, and Global Inequality: The Case of Decentralization" 100th American Political Science Association Meeting (Chicago, 2004)

“Comparing Technological Innovation Rates in Different Capitalist Systems” Midwest Political Science Association National Conference (Chicago, 2004)

“A Study of the Comparative Political Economy of Innovation: How Political Institutions Affect Long-Run Technological Progress” 98th Annual APSA Meeting (Boston, 2002)

“IPC Conference Summary on Globalization” with Teresa M. Lynch, David Hsu, Kamal M. Malak. MIT Industrial Performance Center Working Paper 00-001 (Boston, 2000)

Book Reviews

Review of *Courting Science: Securing the Foundation for a Second American Century*. By Damon V. Coletta (Stanford University Press, 2016) in *Perspectives on Politics*. (forthcoming)

Review of *America Inc?: Innovation and Enterprise in the National Security State*. By Linda Weiss (Cornell University Press, 2014) in *Political Science Quarterly* 129(4): 752-754 (Winter 2014-2015)

Review of *Betting on Biotech: Innovation and the Limits of Asia’s Developmental State*. By Joseph Wong (Cornell University Press, 2011) in *Perspectives on Politics* 11(4):1228-1230 (December 2013)

Review of *Good Capitalism, Bad Capitalism, and the Economics of Growth and Prosperity*. By William J. Baumol, Robert E. Litan, and Carl J. Schramm (Yale University Press, 2007) in *Review of Policy Research* 24(3):73-75. (January 2008)

Grants

- Georgia Tech Provost’s Fund for Excellence in Grad Studies \$16,740 (awarded Aug 2016)
- DoD Minerva Program, US Army Research Office \$194,000 (awarded Apr 2016)
- DoD Minerva Program, US Army Research Office \$404,000 (awarded Feb 2015)
- Georgia Tech Provost’s Fund for Excellence in Grad Studies \$3,000 (awarded Jan 2015)
- Georgia Tech Faculty Foundation Grant \$2,200 (awarded Feb 2012)
- NSF (Program: Science of Science & Innovation Policy) \$94,843 (awarded April 2011)
- European Union Center of Excellence (Faculty Research Grant) €2,500 (awarded May 2010)
- NSF (Program: Science of Science & Innovation Policy) \$57,605 (awarded Sept 2008)
- Kauffman Foundation (Program: Research on Entrepreneurship) \$32,750 (awarded Feb 2008)

Teaching Experience:

Courses (Instructor) [class sizes range from 9 to 270 students]

Georgia Institute of Technology:

- American Government (INTA 1200)
- South America IPE & Study Abroad (INTA 4241)
- Empirical Research Methods (INTA 6003)
- Globalization (INTA 6306)
- Innovation and the State (INTA 6740)
- International Political Economy (INTA 3301)
- IPE Senior Seminar (INTA 4740)
- IPE Senior Thesis (INTA 4741)

- PhD Seminar (INTA 8010)
- U.S. Foreign Policy (INTA 3110)

Massachusetts Institute of Technology:

- Intro to Bivariate & Multivariate Regressions (short course)

Tufts University:

- International Relations through Science Fiction 2000F

Nova Intercultural Institute (Tokyo):

- English as a Second Language 1991(Summer)

Teaching Interests: Political Economy, International Relations, American Politics, Comparative Politics, US Foreign Policy, Quantitative/Qualitative Research Methods, Politics of Science & Technology.

Student Advising: **Ph.D. Thesis Supervision:** Mollie Taylor
M.S. Thesis Supervision: Banafsheh Azizi, Jason Mills, Mollie Taylor
B.A. Thesis Supervision: Keida Ackerman, John Akin, Craig Atkinson, Mithuna Bhatt, James Birch, Glenn “Jake” Blackwell, Jordan Edwards, Naihobe Gonzalez, Chris Herron, Trelton Hubbard, David Miller, Stephanie Provow, Kyla Rogers, Anne Staight, Kathryn Stucki, Anthony Tauber, Anthony Tilden, James Watkins, Jane Wong

Professional Service:

- Grants Panel Review Member, National Science Foundation, SciSIP (2016)
 - Program Committee, Atlanta Science Conference (2013)
 - Chair, Science, Technology, Environmental Politics Section of APSA (2008-2011)
 - Member, Editorial Board *Review of Policy Research* (2007-present)
 - Book Reviews Editor, *Review of Policy Research* (2007-2011)
 - APSA Conf. Program Chair for Science, Technology, Environmental Politics Section (2008)
 - Member, Editorial Board *Journal of Information Technology & Politics* (2007-2010)
 - Reviewer: *American Journal of Political Science*, *American Political Science Review*, *Comparative Politics*, *Cross-Cultural Management*, *Industry & Innovation*, *International Interactions*, *International Organization*, *International Studies Quarterly*, *Information Technologies and International Development*, *Journal of Business Venturing*, *Journal of Global Security Studies*, *Journal of Industry, Competition and Trade*, *Journal of Information Technology & Politics*, *Journal of International Business Studies*, *Journal of International Marketing*, *Journal of Political Science Education*, *Journal of Small Business Management*, *New Political Economy*, *NSF Grant Proposals (STS Program, SciSIP Program)*, *Political Studies*, *Research Policy*, *Review of International Political Economy*, *Review of Policy Research*, *Security Studies*, *Technological Forecasting & Social Change*, *World Politics*.
 - Associate Editor, *MIT International Review* (2005-2007)
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University Service:

- Nunn School Planning Committee, Georgia Tech, Sam Nunn School (2013-Present)
- Graduate Education Committee, Georgia Tech, Sam Nunn School (2012-Present)
- INTA member, Georgia Tech STS Certificate Standing Committee (2012-Present)
- Director of Graduate Studies, Georgia Tech, Sam Nunn School (2015-2016)
- Director of Intl Development Minor, Georgia Tech, Sam Nunn School (2013-2016)
- Development Faculty Search Committee, Georgia Tech, Sam Nunn School (Spring 2015)
- Director of Master’s Degree Program, Georgia Tech, Sam Nunn School (2013-2015)
- Development Post-Doc Search Committee, Georgia Tech, Sam Nunn School (Spring 2014)
- Undergraduate Education Committee, Georgia Tech, Sam Nunn School (2008-2014)
- Atlanta Conference on Science & Innovation Policy, Organizing Committee (2012-2013)
- Judge, Spring UROP Symposium (Apr 2012)
- Sam Nunn School Representative to Georgia Tech Faculty Senate (2008-2011)

- Georgia Tech Leadership Roundtable, Inst. for Leadership & Entrepreneurship (Nov 2011)
 - Georgia Tech Executive Roundtable, Participant (Jan 20, 2011)
 - EU Faculty Search Committee, Georgia Tech, Sam Nunn School (Fall 2010)
 - IR Faculty Search Committee, Georgia Tech, Sam Nunn School (Spring 2010)
 - Grants Tutorial for INTA PhD Students (June 2009)
 - Instructor & Faculty member, Argentina Study Abroad Program (May 2009)
 - Judge, Georgia Tech Undergraduate Research Spring Symposium & Awards (Mar 2009)
 - Georgia Tech, Phi Kappa Phi Award Committee (Mar 2009)
 - IR Faculty Search Committee, Georgia Tech, Sam Nunn School (Fall 2007)
 - IR Faculty Search Committee, MIT Department of Political Science (Fall 2003)
 - Political Science Department Representative, MIT Graduate Student Council (2002-2003)
 - Vice-President, International Relations Grad. Student Council, Yale University (1994-1995)
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Invited Presentations:

“The Politics of Innovation”

- School for the Future of Innovation, Arizona State University (Nov 2016)
- The Center for Urban Science and Progress, New York University (Sep 2016)
- The Mercatus Center, George Mason University (Sep 2016)
- School of International and Public Affairs, Columbia University (Sep 2016)

“Why Are Some Countries Better at Science and Technology Than Others?”

- East-West Center, University of Hawaii (Dec 2014)
- Instituto de Ciencia Política, Pontificia Universidad Católica de Chile, Santiago Chile (Oct 2013)
- John F. Kennedy School of Government, Harvard University (Dec 2012)
- Edmund A. Walsh School of Foreign Service, Georgetown University (Dec 2012)
- Institute for Global and International Studies, The George Washington University (Nov 2011)

“Does Culture Matter for National Innovation Rates?”

- Instituto de Ciencia Política, Pontificia Universidad Católica de Chile, Santiago, Chile (Nov 2014)
- Collegio Carlo Alberto, University of Torino, Turin, Italy (Oct 2012)
- NSF-SciSIP Principal Investigators Conference, National Academy of the Sciences, Washington, DC (Sept 2012)

“Future Directions in Science, Technology and Environmental Policy Research: Reflections on Demand and Supply” Dupont Summit 2011, Carnegie Institution for Science, Washington, DC (Dec 2011)

“Towards an International Relations Theory of National Innovation Rates: Recent Evidence and New Hypotheses” Georgetown University International Theory and Research Seminar, Georgetown University (Sept 2011)

“Why Do Great Powers Give Up the Technological Frontier?” LBJ School of Public Affairs, University of Texas at Austin (Mar 2009)

"Economic Globalization: The Socio-Economics of the US Financial Crisis". Georgia Tech, Diversity Forum. (Nov 2008)

“The Credit Crisis” Georgia Tech, School of Economics, ECON Club Public Forum (Oct 2008)

“Political Determinants of National Innovation Rates: Security v. Institutions” Georgia Tech, INTA Work in Progress Colloquia (Oct 2008)

“The Politics of Technological Change” MIT Political Science Work in Progress Colloquia (April 2005)

“Measures of National Scientific & Technological Capabilities: Applications for Weapons Proliferation Studies” Belfer Center for Science & International Affairs, Harvard University (Feb 2005)

“Technological Innovation in the European States” European University Institute, Florence, Italy (May 2004)

Awards:

- 2008 Virginia M. Walsh Award for Best Dissertation in Science, Technology, and Environmental Politics (Awarded by the STEP Division of the APSA)
- MIT Graduate Student Council Teaching Award (Humanities, Arts, & Social Sciences) (2006)
- Graduate Fellowship, MIT Department of Political Science (1998-1999)
- Ryoichi Sasakawa Young Leaders Fellowship, Yale University (1993-1994)
- Onishi Iryo Foreign Student Scholarship (1992)
- Kansai Gaidai Merit Scholarship (1991-1992)

Research & Business Experience:

May 2001-
September 2001 **Massachusetts Institute of Technology** Cambridge, Massachusetts
Research Assistant: Assisted Professor Scott Stern (MIT-Sloan School) in the econometric analysis of national patent, science labor, and economic data in order to estimate the parameters of the Romer model of endogenous growth (NBER Working Paper #7891).

August 1995-
August 1997 **Price Waterhouse LLP** Toronto, Canada
Management Consultant: Researched and analyzed client’s international economic situation, organizational behavior, global market position, and relevant government policies. Designed, constructed, and implemented technical solutions to business problems. Participated in strategic planning, and corporate reorganization. Wrote reports and proposals in support of business operations for use by colleagues, clients, and for general public dissemination.

Summer
1994 **Department of Commerce, Technology Administration** Washington, D.C.
Research Intern: Conducted research, analyzed data, and wrote briefings concerning US-related R&D for the Assistant Secretary for Technology Policy. Initiated, designed, programmed, and assisted in the set-up of the Asian Technology Program's Internet electronic information dissemination project.

1987-1989 **Lawrence-Berkeley Laboratory** Berkeley, California
Research Assistant: Conducted graduate level research on superconductors. Wrote scientific reports on research in progress including proposals for areas of further study, explanatory briefs for non-technical readers. Prepared various superconducting materials. Designed and constructed high-efficiency testing systems and devices. Tested samples and analyzed data for superconducting properties.

Community Involvement:

Aug 2003, Aug 2005 MIT Committee on Race Relations, *Freshman Orientation Diversity Facilitator*
Aug 1998 – June 2000 MIT Graduate Student Volunteer Corps, *Volunteer*
June 1996 – Dec. 1996 American Red Cross, *Volunteer (International Logistician; Damage Assessment Tech.)*
Jan. 1992 – May 1992 Onishi-Iryo Company (Osaka), *Intercultural Exchange*
Sept. 1991 – Jan 1992 Kansai Gaidai University Homestay Program, *Participant*
June 1990 – Mar. 1991 Highland General Hospital, *Volunteer*

Memberships:

- American Association of Wine Economists
- American Economic Association
- American Political Science Association
- International Studies Association

Midwest Political Science Association
Sloan Industry Studies Program, Alfred P. Sloan Foundation
Southern Political Science Association