SHAWNA K. METZGER

Curriculum Vitae

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ACADEMIC APPOINTMENTS

2022–present	Assistant Professor, Department of Political Science, University at Buffalo
2021–2022	Assistant Professor (fixed term), James Madison College, Michigan State University
2019–2021	Assistant Professor, General Faculty, Department of Politics, University of Virginia
2018–2019	Visiting Assistant Professor, Department of Government, College of William & Mary
2018	Senior Lecturer, University Scholars Programme, National University of Singapore
2017	Visiting Scholar, Department of Political Science, The Ohio State University (concurrent)
2013–2017	Lecturer, University Scholars Programme, National University of Singapore

EDUCATION

- 2013 Ph.D., Political Science, University of Pittsburgh

 Examining fields: International Relations (Interstate Conflict), Political Methodology
- 2009 M.A., Political Science, University of Pittsburgh
- 2007 B.S. with highest honors, Applied Arts and Science, Rochester Institute of Technology *Degree concentrations*: International Relations, American Politics

MONOGRAPH

Metzger, Shawna K. 2021. *Using Shiny to Teach Econometric Models*. Cambridge: Cambridge University Press. Cambridge Elements: Quantitative and Computational Methods for Social Science.

PEER-REVIEWED ARTICLES

Metzger, Shawna K. 2023. "Proportionally Less Difficult?: Reevaluating Keele's 'Proportionally Difficult." *Political Analysis* 31 (1): 156–163.

Metzger, Shawna K., and Benjamin T. Jones. 2022. "Getting Time Right: Using Cox Models and Probabilities to Interpret Binary Panel Data." *Political Analysis* 30 (2): 151–166.

Metzger, Shawna K. 2022. "Teaching Econometrics Dynamically with R-Shiny." *PS: Political Science & Politics* 55 (1): 225–229.

Metzger, Shawna K., and Benjamin T. Jones. 2021. "Properly Calculating estat phtest in the Presence of Stratified Hazards." *Stata Journal* 21 (4): 1028–1033.

Jones, Benjamin T., and Shawna K. Metzger. 2019. "Different Words, Same Song: Advice for Substantively Interpreting Duration Models." *PS: Political Science & Politics* 52 (4): 691–695.

Metzger, Shawna K., and Benjamin T. Jones. 2018. "mstatecox: A Package for Simulating Transition Probabilities from Semiparametric Multistate Survival Models." *Stata Journal* 18 (3): 533–563. *[Two subsequent major updates published; for most current version, see: https://github.com/MetzgerSK/mstatecox]*

Daniel, William T., and Shawna K. Metzger. 2018. "Within or Between Jobs? Determinants of Membership Volatility in the European Parliament, 1979–2014." *Journal of Legislative Studies* 24 (1): 90–108.

Jones, Benjamin T., and Shawna K. Metzger. 2018. "Evaluating Conflict Dynamics: A Novel Empirical Approach to Stage Conceptions." *Journal of Conflict Resolution* 62 (4): 819–847.

Metzger, Shawna K. 2017. "The Chicken or the Egg?: A Coevolutionary Approach to Disputed Issues and Militarized Conflict." *International Interactions* 43 (5): 771–796.

Metzger, Shawna K. 2017. "Time Is on My Side? The Impact of Timing and Dispute Type on Militarized Conflict Duration." *Conflict Management and Peace Science* 34 (3): 308–329.

Metzger, Shawna K., and Benjamin T. Jones. 2016. "Surviving Phases: Introducing Multistate Survival Models." *Political Analysis* 24 (4): 457–477.

Metzger, Shawna K., and Philippe Raynal. 2016. "A Guide for Designing a Quantitative Literacy or Reasoning Curriculum." *Asian Journal of the Scholarship of Teaching and Learning* 6 (1): 77–98.

Donno, Daniela, Shawna K. Metzger, and Bruce Russett. 2015. "Screening Out Risk: IGOs, Member State Selection, and Interstate Conflict, 1951–2000." *International Studies Quarterly* 59 (2): 251–263.

EDITED CHAPTERS

Daniel, William T., and Shawna K. Metzger. 2021. "Assessing the Impact of Membership Turnover on Constituent Views of the European Parliament." In *Personnel Turnover and the Legitimacy of the EU*, ed. John A. Scherpereel. London: Palgrave Macmillian, pp. 35–58.

Jones, Benjamin T., and Shawna K. Metzger. 2016. "Conflict Dynamics." In *Global Encyclopedia of Public Administration, Public Policy, and Governance*, ed. Ali Farazmand. Springer. DOI: 10.1007/978-3-319-31816-5_2548-1

UNDER REVIEW

"Implementation Matters: Evaluating the Proportional Hazard Test's Performance" (conditionally accepted [pending replication], *Political Analysis*)

"Out of Order: Specification Check Sequencing in Cox Models," with Benjamin T. Jones

WORKING PAPERS

Unnamed third paper regarding proportional hazards violation testing

"The Effects of PH Test Performance on Substantive Inference" (working title)

"Hawks, Doves, and the Evolution of Peace," with Benjamin T. Jones and Timothy Nordstrom

"Sawing Logs: Time's Functional Form in Non-Proportional Hazard Corrections"

"Event Sequences in Disputed Issues," with Emily U. Schilling

"How Did I Get Here? Fixed Horizons and Duration Models" (working title), with Benjamin T. Jones

"All at Risk?: A Split Population, Competing Risks Approach"

CONFERENCE/PRESENTATION PARTICIPATION

2023

Panel presentation, MapleMeth, London, ON. "The Effects of PH Test Performance on Substantive Inference"

2022

Panel presentation, American Political Science Association, Montréal, QC. "Stat That: The Proportional Hazard Test's Performance, Reconsidered"

Panel presentation, American Political Science Association, Montréal, QC. "Hawks, Doves, and the Evolution of Peace," with Benjamin T. Jones and Timothy Nordstrom

2021

Panel presentation, American Political Science Association, Seattle, WA. "Out of Order: Specification Check Sequencing in Cox Models," with Benjamin T. Jones

Presenter, International Methods Colloquium Roundtable on Teaching Methods (30APR21). "Teaching Econometrics with R-shiny"

Panel presentation, Midwest Political Science Association, virtual meeting. "Out of Order: Specification Check Sequencing in Cox Models," with Benjamin T. Jones

2019

Panel presentation, American Political Science Association, Washington, DC. "Be Kind, Please PH-Stratify: Duration Models, Stratified Hazards, and Proportional Hazard Testing," with Benjamin T. Jones

Panel presentation, European Union Studies Association, Denver, CO. "Assessing the Impact of Membership Turnover on Constituent Views of the European Parliament," with William T. Daniel

Lightning talk, Midwest Political Science Association, Chicago, IL. "Be Kind, Please PH-Stratify: Duration Models, Stratified Hazards, and Proportional Hazard Testing," with Benjamin T. Jones

Invited presentation, University of Virginia, Quantitative Collaborative. "Getting Time Right: Using Cox Models and Probabilities to Interpret Binary Panel Data," with Benjamin T. Jones

Panel presentation, American Political Science Association Centennial Center Teaching and Learning Symposium on Research Methods, Washington, DC. "Research Methods with Interactive Web Applications"

2018

Poster presentation, Peace Science Society (International), Austin, TX. "Event Sequences in Disputed Issues," with Emily U. Schilling

Short panel presentation, Society for Political Methodology, Provo, UT. "Event Sequences in Disputed Issues," with Emily U. Schilling

Invited workshop participant, James Madison University, Harrisonburg, VA. Workshop title: "The Effects of Personnel Turnover in the European Union," with William T. Daniel

Panel presentation, Midwest Political Science Association, Chicago, IL. "Event Sequences in Disputed Issues," with Emily U. Schilling

Panel presentation, Southern Political Science Association, New Orleans, LA. "Event Sequences in Disputed Issues," with Emily U. Schilling

2017

Invited presentation, The Ohio State University. "Getting Time Right: Using Cox Models and Probabilities to Interpret Binary Panel Data," with Benjamin T. Jones

Invited presentation, University of Minnesota, Political Methodology Colloquium. "Getting Time Right: Using Cox Models and Probabilities to Interpret Binary Panel Data," with Benjamin T. Jones

Panel presentation, American Political Science Association, San Francisco, CA. "Getting Time Right: Using Cox Models and Probabilities to Interpret Binary Panel Data," with Benjamin T. Jones

Panel presentation, European Consortium for Political Research (Standing Group on Parliaments), Basel, Switzerland. "Determinants of Membership Volatility in the European Parliament, 1979–2014," with William T. Daniel

Panel presentation, European Union Studies Association, Miami, FL. "Determinants of Membership Volatility in the European Parliament, 1979–2014," with William T. Daniel

Invited presentation, STEM Innovation Symposium, Yale-NUS College. "The University Scholars Programme's Quantitative Reasoning Foundation Module"

Session presentation, International Methods Colloquium (24MAR17). "Asking about 'Which': Improving Substantive Interpretations of Duration Models," with Benjamin T. Jones

Panel presentation, Western Political Science Association, Vancouver, BC. "Determinants of Membership Volatility in the European Parliament, 1979–2014," with William T. Daniel

2016

Panel presentation, American Political Science Association, Philadelphia, PA. "Determinants of Membership Volatility in the European Parliament, 1979–2014," with William T. Daniel

2015

Panel presentation, American Political Science Association, San Francisco, CA. "Blinded by the Past?: A Competing Risks, Split Population Approach to Dynamics"

Panel presentation, Visions in Methodology, Lexington, KY. "Surviving Phases: Introducing Multistate Survival Models," with Benjamin T. Jones

Panel presentation, International Studies Association, New Orleans, LA. "Evaluating Conflict Dynamics: Many Conceptualizations, A Novel Empirical Approach," with Benjamin T. Jones

2014

Panel presentation, Peace Science Society (International), Philadelphia, PA. "Evaluating Conflict Dynamics: Many Conceptualizations, A Novel Empirical Approach," with Benjamin T. Jones

Panel presentation, American Political Science Association, Washington, DC. "High Stakes or Close Proximity?: Explaining the Frequency of Militarization in Disputed Issues"

2013

Poster presentation, American Political Science Association, Chicago, IL. "The Chicken or the Egg?: A Coevolutionary Approach to Disputed Issues and Militarized Conflict"

Panel presentation, Journeys in World Politics, Iowa City, IA. "High Stakes or Close Proximity?: Explaining the Frequency of Militarization in Disputed Issues"

2012

Poster presentation, Peace Science Society (International), Savannah, GA. "Blinded by the Past?: A Competing Risk, Split Population Approach to Conflict Dynamics"

Panel presentation, American Political Science Association, New Orleans, LA. "Conflict Dynamics in Militarized Disputes: The Impact of Issue Salience on Timing and Duration Interdependence"

2011

Panel presentation, Peace Science Society (International), Los Angeles, CA. "Do States Gain Security from IGOs: Which States, Which IGOs?," with Daniela Donno and Bruce Russett

Poster presentation, Peace Science Society (International), Los Angeles, CA. "Conflict Dynamics in Militarized Disputes: Timing and Duration Interdependence"

Panel presentation, International Studies Association, Montreal, QC. "When Do IGOs Promote Peace Among Their Member States?," with Daniela Donno and Bruce Russett

2010

Panel presentation, Midwest Political Science Association, Chicago, IL. "Do Intergovernmental Organizations *Really* Promote Peace?: The Importance of Existing Interaction Opportunities"

GRANTS AND AWARDS

Grants

"Improving Substantive Interpretations of Duration Models." USP Academic Research Fund grant, National University of Singapore. 7/2017–2/2018.

Society of Political Methodology NSF Travel Grant. 2017, 2018.

"Conflict Dynamics in Militarized Interstate Disputes." USP Academic Research Fund grant, National University of Singapore. 1/2015–6/2016.

"Implementing a Sustainable Integrated Online Learning Platform for the University Scholars Programme's Senior Seminar Module." Learning Innovation Fund – Technology grant, National University of Singapore. Co-Principal Investigator, with Mark Brantner and Mabel Wong. 12/2014–12/2017.

American Political Science Association Travel Grant. 2012, 2019.

School of Arts and Sciences PBC and Alumni Travel Fellowship, University of Pittsburgh. 2011.

Department of Political Science Conference Travel Grant, University of Pittsburgh. 2010, 2012.

Awards

NUS Annual Teaching Excellence Award, National University of Singapore. AY 2015/16, AY 2016/17. USP Teaching Excellence Award, National University of Singapore. AY 2015/16, AY 2016/17.

Scholarships

Dietrich School of Arts and Sciences Teaching Fellow, University of Pittsburgh. 2013.

Graduate Student Assistant, University of Pittsburgh. 2012.

Umberger Fellowship, University of Pittsburgh. 2011.

Part-Time Instructor, University of Pittsburgh. 2010, 2012.

School of Arts and Sciences Teaching Fellow, University of Pittsburgh. 2009–2010.

School of Arts and Sciences Teaching Assistant, University of Pittsburgh. 2008–2009.

School of Arts and Sciences Graduate Fellow, University of Pittsburgh. 2007–2008.

Presidential Scholarship, Rochester Institute of Technology. 2006–2007.

Naval ROTC Scholarship, Carnegie Mellon University. 2005.

TEACHING EXPERIENCE

Main Instructor

Undergraduate

International Security (GOVT 329), College of William & Mary. Spring 2019 (2 sections).

Introduction to International Relations

- World Politics (PS 0500), University of Pittsburgh. Summer 2010 (1 section), Fall 2010 (1 section), Spring 2012 (2 sections).
- Introduction to International Politics (GOVT 204), College of William & Mary. Fall 2018 (2 sections), Spring 2019 (1 section).
- International Relations I: World Politics and International Security (MC 220), Michigan State University. *Fall 2021 (1 section)*.
- Introduction to International Politics (PSC 102), University at Buffalo. Fall 2023 (1 section).

Intellectual Responsibility in a Complex World (USR4002A), National University of Singapore. Spring 2015 (1 section), Fall 2015 (1 section). **team-taught

Research Methods (GOVT 301), College of William & Mary. Fall 2018 (1 section).

Quantitative Reasoning Foundation: War and Democracy (UQF2101H), National University of Singapore. Fall 2013 (2 sections), Spring 2014 (1 section), Fall 2014 (1 section), Spring 2015 (1 section), Spring 2016 (2 sections), Fall 2016 (2 sections), Spring 2018 (2 sections).

Passing Time: Temporality and Econometrics (UQR2211), National University of Singapore. *Spring 2014 (1 section), Spring 2017 (1 section).*

Policy Evaluation (MC 364), Michigan State University. Spring 2022 (1 section).

US Foreign Policy (MC 326), Michigan State University. Fall 2021 (1 section), Spring 2022 (1 section).

GRADUATE

Political Research with Quantitative Methods (mathematics portion) (PLAD 7100), University of Virginia. *Fall 2019 (1 section), Fall 2020 (1 section)*.

Linear Models

- Advanced Quantitative Applications in Political Science (PLAD 8310), University of Virginia. *Spring 2020 (1 section), Spring 2021 (1 section).*
- Intermediate Statistics for Social Science (PSC 531), University at Buffalo. *Spring 2024 (1 section)*.

MLE/GLM

- Advanced Quantitative Topics in Multivariate Analyses (PLAD 8320), University of Virginia. *Fall 2019 (1 section), Fall 2020 (1 section).*
- Advanced Statistics for Social Science (PSC 631), University at Buffalo. *Fall 2022 (1 section), Fall 2023 (1 section).*

Event History Analysis

- Event History Analysis (PLAD 8500), University of Virginia. Spring 2020 (1 section), Spring 2021 (1 section).
- Empirical Frontiers: Event History Analysis (PSC 731), University at Buffalo. *Spring 2023 (1 section)*.

External Teaching

Instructor, Regression Analysis I: Introduction and Application, ICPSR Summer Program. Summer 2021.

Thesis/Dissertation Committees

MA PROJECTS/THESES

Matthew Barberio (UB), Faith Miller (UB)

Independent Study Supervisor

Improving Duration Model Interpretations Using R. *Student*: Nguyen Phuong Nhu (Business Analytics + USP). Fall 2017.

Graduating in a Recession: Factors and Implications. *Student*: Denise Cheok Jia Yuan (Economics + USP). Spring 2015.

Faculty Project Advisor

Policy Research Seminar (PUBP 610, required MPP second-year course), College of William & Mary. *Project Title*: "Women and Violent Extremism." Fall 2018.

Recitation Instructor

Research Methods in Political Science (PS 0700), University of Pittsburgh. *Main Instructor*: Chris W. Bonneau. *Spring 2013 (3 sections)*.

Interactive Apps

http://www.shawnakmetzger.com/teaching/democ (used Flash, currently not working)

Interactive map, permits students to view various quantitative indicators of democracy across space and time [UQF2101H]

http://www.shawnakmetzger.com/olsApp

Allows students to see the effect of violating OLS's assumptions via simulation [UQF2101H]

http://www.shawnakmetzger.com/parHaz

Allows students to see different parametric survival models' hazard functions [UQR2211]

http://www.shawnakmetzger.com/whySurv

Allows students to see why survival models are needed, and OLS is not always sufficient, via simulation [UQR2211]

LASSO_bchamp app

Uses Beauchamp's replication data (2017, AJPS) to allow students to assess various ridge regression/LASSO models' performance by selecting different λ values [Cambridge Element: see https://metzgersk.github.io/shinyElement for lite version]

leastSq app

Allows students to manually find the least squares estimates for a linear model using a set of artificial data by dragging sliders to set different slope and intercept values [Cambridge Element: see https://metzgersk.github.io/shinyElement]

leastSqLASSO app

Allows students to manually find the least squares estimates for a LASSO model using a set of artificial data by dragging sliders to set different slope and intercept values [Cambridge Element: see https://metzgersk.github.io/shinyElement]

linRegEstms app

A variant of olsApp that focuses on efficiency by comparing the performance of different estimators in the presence of various classic linear regression assumption violations [Cambridge Element: see https://metzgersk.github.io/shinyElement]

mleLM app

Allows students to manually find the maximum likelihood estimates for a linear model using a set of artificial data by dragging sliders to set different slope and intercept values [Cambridge Element: see https://metzgersk.github.io/shinyElement]

mleLogit app

Allows students to manually find the maximum likelihood estimates for a logit model using a set of artificial data by dragging sliders to set different slope and intercept values [Cambridge Element: see https://metzgersk.github.io/shinyElement]

Predicted probability apps (3 different apps)

Allows students to see calculation for a logit predicted probability, with auto-updating equations, based on the covariate values they select. The apps either use a simple set of data (predProbs, predProbs2) or data from a research article, to replicated the reported quantities (predProbs_HMST, using Hensel, Mitchell, Sowers, and Thyne's 2008 Journal of Conflict Resolution piece) [Cambridge Element: see https://metzgersk.github.io/shinyElement]

predProbsMNL app

Same as above, only for multinomial logit, using CSES vote choice data from the 2012 Mexican election [Cambridge Element: see https://metzgersk.github.io/shinyElement]

Various other apps for maximum likelihood models: https://metzgersk.github.io/shinyAdvReg

OTHER RESEARCH EXPERIENCE

Research Assistant, Nita Rudra. 2013.

Teaching/Research Assistant, Daniela Donno, Jude C. Hays. 2012.

Teaching/Research Assistant, Daniela Donno, Charles S. Gochman. 2010.

Teaching/Research Assistant, Daniela Donno, Charles S. Gochman. 2009.

Teaching/Research Assistant, Despina Alexiadou, Daniela Donno. 2009.

Teaching/Research Assistant, Charles S. Gochman, Jonathan Woon. 2008.

PROFESSIONAL SERVICE

Departmental

? Thesis/dissertation committees listed <u>above</u> under "Teaching Experience".

Member, Political Science Methods Field Examination Committee, University at Buffalo. 2022–present.

Coordinator, USP Quantitative Reasoning Foundation Domain, National University of Singapore. 2014–2018.

Founding Director, USP Quantitative Reasoning Centre, National University of Singapore. 2015–2017.

Member, USP Quantitative Reasoning Foundation Search Committee, National University of Singapore. 2016–2017.

Co-chair, USP Assessment Planning Committee, National University of Singapore. 2015–2016.

Member, USP Quantitative Reasoning Foundation Curriculum Committee, National University of Singapore. 2013–2018.

Member, USP Quantitative Reasoning Foundation Search Committee, National University of Singapore. 2013.

Graduate Student Representative, Global Studies Search Committee, University of Pittsburgh. 2011.

Graduate Student Organizer, World Politics Workshop, Department of Political Science, University of Pittsburgh. 2010–2013.

University

Mentor, William & Mary Women's Mentoring program. AY 2018/19.

Research Assistant/Website Prototype Designer, Governance Group, University of Pittsburgh. 2011.

Presenter, "Cheating and Plagiarism," New Teaching Assistant Orientation, University of Pittsburgh. 2010.

Graduate Assistant, Model NATO Simulation, University of Pittsburgh. 2008.

Discipline

GENERAL

Editorial Board, Conflict Management and Peace Science. 2019–present.

Member, Conflict Management and Peace Science Palmer Prize Selection Committee. 2020.

Invited Participant, Issue Correlates of War workshop, Peace Science Society (International). 2019.

Panel Chair, American Political Science Association annual meeting (Political Methodology section), Washington, DC. 2019.

Discussant, American Political Science Association annual meeting (Political Methodology section), Washington, DC. 2019.

Discussant, Visions in Methodology conference, Athens, GA. 2019.

Discussant, Visions in Methodology conference, Hamilton, ON. 2014.

VISIONS IN METHODOLOGY

Co-host, Visions in Methodology conference, Columbus, OH. 2018.

Officer (Webmaster), Visions in Methodology. 2017–present. (http://www.visionsinmethodology.org)

Creator and maintainer, VIMbot – A Publication Aggregator for VIM on Twitter, Visions in Methodology. 2016–*present*. (https://twitter.com/PSci_VIMbot)

COMMUNITY

Scoring Room Co-Lead, Division B, Midwestern Regional, New York State Science Olympiad. 2023–present.

Scoring Room Co-Lead, Division C, Midwestern Regional, New York State Science Olympiad. 2023–*present*.

Event Supervisor, Division B, State Final, Virginia Science Olympiad. 2019–2021.

Event Supervisor, Division B, Charlottesville Regional, Virginia Science Olympiad. 2019–2020.

Event Volunteer, Division B, National Final, Science Olympiad. 2019.

Event Supervisor, Division C, Midwestern Regional, New York State Science Olympiad. 2009–2013.

Assistant Event Supervisor, Division C, Midwestern Regional, New York State Science Olympiad. 2006–2008.

Assistant Event Supervisor, Division B, State Final, New York State Science Olympiad. 2006.

REVIEWER: American Journal of Political Science, American Political Science Review, Comparative European Politics, Conflict Management and Peace Science, Economic and Political Studies, Hague Journal of Diplomacy, International Interactions, International Studies Quarterly, International Studies Review, Journal of Conflict Resolution, Journal of International Relations and Development, Journal of Peace Research, Journal of Politics, Political Science Research and Methods, Review of International Organizations, Stata Journal

REFERENCES

Available upon request.