

# Miriam Barnum

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## ACADEMIC APPOINTMENTS

- 2022- | **Assistant Professor**  
Department of Political Science, Purdue University
- 2022-23 | **Stanton Nuclear Security Postdoctoral Fellow**  
Center for International Security and Cooperation, Stanford University

## EDUCATION

- 2022 | **Ph.D., Political Science and International Relations, University of Southern California**  
Fields: International Security, Quantitative Methods, International Political Economy (minor)  
Dissertation: *Lesser Evils?: WMD Pursuit Beyond Nuclear Weapons*  
Committee: Patrick James (chair), Jacques E.C. Hymans, James Lo, Najmedin Meshkati
- 2016 | **A.B., cum laude, Harvard University**  
Major: Social Studies (High Honors)  
Minor: Computer Science

## PEER-REVIEWED JOURNAL ARTICLES

- 2024 | **Barnum, Miriam**, Christopher J. Fariss, Jonathan N. Markowitz, and Gaea Morales. "[Measuring Arms: Introducing the Global Military Spending Dataset.](#)" *Journal of Conflict Resolution*, OnlineFirst, February 2024.
- 2022 | Fariss, Christopher J., Therese Anders, Jonathan N. Markowitz, and **Miriam Barnum**. "[New Estimates of Over 500 Years of Historic GDP and Population Data.](#)" *Journal of Conflict Resolution*, Volume: 66, Issue: 3 (April 2022), pages 553-591.
- 2020 | **Barnum, Miriam** and James Lo. "[Is the NPT Unravelling? Evidence from Text Analysis of Review Conference Statements.](#)" *Journal of Peace Research*, Volume: 57, Issue 6 (December 2020), pages 740 - 751.
- 2016 | **Barnum, Miriam** and Bryan L. Fearey. "[Sanctions as a Nonproliferation Tool: Lessons from Libya.](#)" *Comparative Strategy*, Volume: 35, Issue: 4 (August 2016), pages 234 - 245.

## BOOK CHAPTERS

- 2023 | "[Nuclear Proliferation.](#)" (with Jacques E.C. Hymans). In *Oxford Bibliographies in International Relations*. New York: Oxford University Press.
- 2022 | "[Handling Missing and Incomplete Data.](#)" In *Handbook of Research Methods in International Relations*. Ed. Huddleston, R.Joseph, Thomas Jamieson, and Patrick James. Cheltenham, UK: Edward Elgar Publishing.

## WORKING PAPERS

“De Jure Powersharing 1975-2019: Updating the Inclusion, Dispersion and Constraints Dataset.” (with Alix Ziff, Ashley Abadeer, Jasmine Chu, Nicole Jao, Marie Zaragoza, and Benjamin A.T. Graham). **Revise and resubmit**, *Journal of Peace Research*.

“Internal Security Threats and WMD Proliferation Choices.”

“Complex Interdependence: Global Value Chains and Military Conflict.” (with Benjamin A.T. Graham and Stephen Schick).

“Targeting Allies? Deterrence, Disarmament, and NGO Activism.”

“Measuring Threat in the International System.” (with Jonathan N. Markowitz and Christopher J. Fariss).

“Do Nuclear Weapons Matter in Near Crisis Situations?” (with Edward Gonzales and Patrick James).

“Appropriable Wealth, Autocracy, and Human Rights.” (with Christopher J. Fariss and Jonathan N. Markowitz).

## FELLOWSHIPS

2021-22 | US-Asia Grand Strategy Predoctoral Fellow, USC Korean Studies Institute

2016-21 | USC Dornsife Provost Fellowship in the Social Sciences

## TEACHING

### As Instructor

- Spring 2024 | POL 491: Senior Research Seminar: Weapons of Mass Destruction, Purdue University.
- Fall 2023 | SCLA 102: Transformative Texts: Conflict and Cooperation, Purdue University.
- Summer 2018, 2019, 2020, 2021 | Graduate Math and Quantitative Methods Bootcamp, University of Southern California.
- Week-long intensive course reviewing mathematical notation, basic statistics, linear algebra, and differential calculus, and introducing data management and visualization with R.

### Experiential Research Education

- 2018–21 | Director of Data Science, Security and Political Economy (SPEC) Lab, University of Southern California.
- Development and implementation of data science training curriculum in R.
  - Supervision of teams of undergraduate research assistants working on data collection, management, analysis, and visualization.
  - Mentoring students as they build skills, take on leadership or co-authorship roles, pursue independent research, and make academic and career choices.

### As Teaching Assistant

- Fall 2020–Spring 2021 | IR 412 & 413: Applied Data Science for International Relations 1 & 2, University of Southern California. (Instructor: Benjamin A.T. Graham)
- Summer 2017 | Graduate Math and Quantitative Methods Bootcamp, University of Southern California. (Instructors: Therese Anders and Suzie Caldwell-Mulesky)
- Summer 2015 | Introduction to the Study of Humanity, Harvard Center for Hellenic Studies. Napflio, Greece. (Instructors: Nicolas Prevelakis and Kevin Caffrey)

## RESEARCH ASSISTANCE

- 2018–21 | USC Security and Political Economy (SPEC) Lab (PIs: Benjamin Graham, Jonathan Markowitz, and Megan Becker)
- 2017–18 | Near Crisis Project (PI: Patrick James)
- 2013–15 | National Security Office, Los Alamos National Laboratory (Director: Bryan Fearey)
- 2013-14 | Civil Society Regulations in Hybrid Regimes (PI: Payam Mohseni)

## CONFERENCE PRESENTATIONS

“New Forum, New Framing: Shifting Approaches to Deterrence and Disarmament”

- American Political Science Association, 2023

“Appropriable Wealth, Autocracy, and Human Rights.”

- Political Economy of International Security Workshop, USC, 2023
- International Studies Association, 2023

“Internal Security Threats and WMD Proliferation.”

- Stanton Fellows Seminar, 2022
- Harvard-USC Conference on Asian Security Issues, Harvard University, 2022
- Center for Peace and Security Studies, University of California, San Diego, 2021
- American Political Science Association, 2021
- International Studies Association, 2021
- Peace Science Society workshop *Leaders and Nuclear Politics*, 2020
- International Studies Association, 2020 (Cancelled due to COVID-19)
- American Political Science Association Annual Meeting, 2019 (Poster)

“Targeting Allies? Deterrence, Disarmament, and NGO Activism.”

- American Political Science Association, 2022
- International Studies Association, 2021

“Measuring Arms: Introducing the Global Military Spending Dataset.”

- American Political Science Association, 2022

“Trade is the Weakest Form of Interdependence: Foreign Investment, Migration, and Conflict.”

- American Political Science Association, 2023
- Pacific International Politics Conference Online Speaker Series, 2020
- International Studies Association, 2020 (Cancelled due to COVID-19)

“Do Nuclear Weapons Matter in Near Crisis Situations?”

- Peace Science Society, 2019 (Poster)
- International Studies Association, 2019
- International Studies Association-West, 2018

“Sanctions as a Nonproliferation Tool: Lessons from Libya.”

- CSIS Project on Nuclear Issues Summer Conference, 2015

## S E R V I C E

### **Service to the Discipline**

2018-21 *Discussant*, USC Center for International Studies Working Paper Series.  
2016, 2018 *Volunteer*, International Studies Association-West Annual Meeting.

Reviewer, *American Political Science Review*, *Political Science Research and Methods*, *International Studies Quarterly*.

### **Service to the Department**

#### **Purdue Political Science**

2023-24 Undergraduate Studies Committee

#### **Stanford Center for International Security and Cooperation**

2023 Social Science and International Security Fellowship Selection Committee  
2023 *Mentor*, CISAC undergraduate mentoring program.

#### **USC Political Science and International Relations**

2019-20 *Committee member*, Graduate Student Committee, CIS Working Paper Series.  
2019 *Panelist*, Qualifying Exams Workshop.  
2017-18 *Co-President*, Graduate Student Association.

## A D D I T I O N A L T R A I N I N G

2018 *Summer Workshop on Analysis of Military Operations and Strategy*. Saltzman Institute of War and Peace Studies.

2018 *Public Policy and Nuclear Threats Summer Workshop*. UC Institute on Global Conflict and Cooperation.

2017 *Summer Program in Quantitative Methods of Social Research*. Inter-university Consortium for Political and Social Research.

## S K I L L S

*Programming Languages*: R, Python, OCaml, C, PHP, JavaScript

*Other Computing Tools*: Stan, Stata, RMarkdown,  $\text{\LaTeX}$ , Qualtrics, D3, SQL, HTML, CSS

*Foreign Language*: German (proficient)

## R E F E R E N C E S

Patrick James  
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University of Southern California  
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Department of Political Science and IR  
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