

# Philip M. Baxter, Ph.D.

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## EDUCATION

### Georgia Institute of Technology

*Ph.D.*, International Affairs, Science, and Technology, May 2021

Dissertation: "Nuclear Communities: Epistemic Community Structure and Nuclear Proliferation Latency"

### George Mason University

*M.P.P.*, Public Policy, January 2010

### Grove City College

*B.A.*, Political Science and History, May 2006

## PROFESSIONAL EXPERIENCE

### Center for Policy Research, University at Albany-SUNY

Research Fellow

October 2018-Present

### George Washington University

Lecturer of International Affairs

August 2018-Present

### James Martin Center for Nonproliferation Studies

Senior Research Associate

August 2015-Sept. 2018

### Georgia Institute of Technology

Research Assistant/ Teaching Assistant/ Instructor

August 2012-August 2015

### MELE Associates

Researcher, College of International Security Affairs,  
National Defense University

July 2011-March 2014

### Pacific Northwest National Laboratory

Nonproliferation Fellow, National Nuclear Security Administration

June 2010-July 2011

### International Monetary Fund

Analyst

Dec. 2006-June 2010

## SPONSORED RESEARCH

Total Funded Awards: 11

Total Award Funding: \$4,335,000

## PEER-REVIEWED PUBLICATIONS

"Patchwork of Confusion: The Cybersecurity Coordination Problem," with Tarun Chaudhary, Jenna Jordan, Michael Salomone. *Journal of Cybersecurity*, Vol 4, Iss. 1, 2019.

"How Small States Acquire Status: A Social Network Analysis," with Jenna Jordan and Larry Rubin. *International Areas Studies Review*, Vol 21, Iss. 3, 2018.

"Networks, Knowledge, and Proliferation: Case Studies of Iran and Pakistan" (R&R)

"Tacit Knowledge Networks and Nuclear Energy Aspirants: Case Studies from Southeast Asia and the Middle East," with Adam Stulberg (R&R)

"North Korea's S&T policy and the development of its domestic nuclear research networks," with Justin Hastings, Philseo Kim, and Man-sung Yim (R&R)

## BOOKS

*Nuclear Modernization in the 21st Century*, editor, with Aiden Warren, Routledge, February 2020.

- "Russia's Nuclear Modernization," in *Nuclear Modernization in the 21st Century*, Routledge, February 2020.

## OTHER PUBLICATIONS AND PRESENTATIONS

Approaches to Nuclear Cooperation: A Review of the U.S.-ROK Agreement," *Science and Diplomacy*, September 2015.

"The False Hope of Nuclear Forensics? Assessing the Timeliness of Forensics Intelligence," *Public Interest Reports*, Federation of American Scientists, Spring 2015, Vol. 68, Num. 2.

"Organizational Seams and Cyber Conflict Escalation" at the 2017 International Studies Association Annual Conference, Baltimore, MD (with Tarun Chaudhary, Jenna Jordan, Michael Salomone, Wes Stayton)

"Getting to the Table: Exploring the Determinants of International Negotiations and Soft Power through Network Analysis," at the 2016 International Studies Association Annual Conference, Atlanta, Georgia

"The Determinants of Terrorism Response: A Quantitative Assessment of how States Respond to Terrorism," at the 2016 International Studies Association Annual Conference, Atlanta, Georgia

"Small States, Strong Ties? Qatar and its Geopolitical Environment" at the 2015 International Studies Association Annual Conference, New Orleans, Louisiana (with Jenna Jordan and Lawrence Rubin)

"Technology and Knowledge Transfer in Nuclear Proliferation Networks: An Iran Case Study" at the 2015 International Studies Association Annual Conference, New Orleans, Louisiana (with Justin V. Hastings and Adam N. Stulberg)

"The False Hope of Nuclear Forensics?: Forensics in Times of Crisis" at the 2015 Georgia Tech Research and Innovation Conference's Ivan Allen Paper Competition, Atlanta, Georgia

"The False Hope of Nuclear Forensics" at the 2014 ISAC-ISSS Joint Annual Conference, Austin, Texas

"Tacit Knowledge in Nuclear Weapons Programs: A Network Approach" at the 2014 International Studies Association South Regional Conference. Second Runner-up (\$150 award) in Jim Winkates Graduate Student Paper Competition, Richmond, Virginia

"Pyroprocessing and the Republic of Korea: A Policy Review" at the 2013 Institute of Nuclear Materials Management, Palm Springs, California

"Explaining the Puzzle of Nuclear Forbearance: States, Prudence and Nuclear Decisions" at the 2013 Midwest Political Science Association, Chicago, Illinois (co-authored with Liz Dallas)

"Preventing Nuclear Smuggling: An Analytical Approach to Evaluating Nuclear Security Effectiveness" at the 2013 Georgia Tech Research and Innovation Conference's Ivan Allen Paper Competition

## TEACHING EXPERIENCE

**George Washington University**, Washington, DC

Instructor of Record: *US National Security*, Fall 2021

Instructor of Record: *Emerging Threats*, Spring 2021

Instructor of Record: *US National Security*, Fall 2020

Instructor of Record: *Emerging Threats*, Summer 2020

Instructor of Record: *Emerging Threats*, Spring 2020

Instructor (Discussion Sections): *International Security*, Fall 2019

Instructor of Record: *Emerging Threats*, Spring 2019

Instructor (Discussion Sections): *International Security*, Fall 2018

**University of Southern California**, Washington, DC

Instructor of Record: *Technology and International Relations*, Spring 2018

Instructor of Record: *Technology and International Relations*, Spring 2017

Instructor of Record: *Technology and International Relations*, Spring 2016

**Georgia Institute of Technology**, Atlanta, GA

Instructor of Record: *American Government in Comparative Perspective*, Summer 2015

Instructor of Record: *American Government in Comparative Perspective*, Summer 2014

Instructor of Record: *American Government in Comparative Perspective*, Summer 2013

Teaching Assistant: *Introduction to International Relations*, Spring 2013

Teaching Assistant: *Science, Technology, and International Affairs*, Fall 2012

**National Defense University**, Washington DC

Curriculum Lead and Lecturer: *Controlling the Bomb*, 2011-2012

## INVITED PRESENTATIONS

“Applied GEOINT for Nuclear Proliferation Detection”, University of Albany-SUNY, March 2021

“Technical Capacity and Network Analysis: Examining Critical Know-How for Nuclear Energy,” Applications of Innovative Tools and Technologies for Nonproliferation and Disarmament Diplomatic Workshop, Krems, Austria, April 2018

“Technical Capacity and Network Analysis: Examining Critical Know-How for Nuclear Energy,” International Workshop on the Applicability of New Tools and Technologies for Non-Proliferation, Vienna, Austria, April 2018

“Cyber-conflict and Escalation: A Review of Scenario Outputs” The Dynamics of Command, Control, and Communication in Cyber Conflict Escalation. Washington, DC, November 2017.

“Epistemic Communities and Additive Manufacturing: Examining Middle East Nuclear Energy Aspirants,” Carnegie Endowment for International Peace, May 2017

“Network Analysis and the Structure of Scientific Communities in Nuclear Weapons Programs: The Cases of Iran and Pakistan,” Middlebury Institute of International Studies at Monterey, November 2016

“Organization of Tritium Production Research and Development,” Savannah River National Laboratory, October 2016

“Technology and Knowledge Transfer in Nuclear Proliferation Networks,” Vienna Center for Disarmament and Non-Proliferation, November 2015

## SPONSORED RESEARCH AND OUTREACH

Principal Investigator, “The Melian Dilemma: Examining Regional Power Responses to Great Power Transitions,” (\$169,400)

Project Manager, “Open Source Analytics Training to Advance BW Nonproliferation Capacity,” US Department of State. 2020-2021 (\$279,574)

Project Manager, “Know Your Customer Training Illicit Ballistic Missile Procurement,” US Department of State. 2019-2020 (\$435,679)

Principal Investigator, “Open-Source Mapping of Chemical Communities,” US Department of State. 2018-2020 (\$94,800)

Co-Principal Investigator, “Open-Source Mapping of Proliferation Capabilities,” US Department of State. 2017-2018 (\$649,000)

Project Manager, “Exploratory Study to Identify Trends in Fake News involving Weapons Capabilities,” Skoll Foundation. 2017-2018 (\$50,000)

Principal Investigator, “Hydrogen-Isotope Solid Storage R&D,” Savannah River National Laboratory. 2017-2018 (\$25,000)

Principal Investigator, “The Organization of Tritium Production R&D,” Savannah River National Laboratory. 2016 (\$20,000)

Principal Investigator, “Cooperative Threat Reduction Metrics and Evaluation,” US Department of State. 2015-2020 (\$1.84M)

Co-author & Researcher, “The Dynamics of Command, Control and Coordination in Cyber-Conflict Escalation: A Scenario-based Examination,” Carnegie Corporation of New York. 2015-2017 (\$485,000)

Principal Investigator, “Global Nuclear Security Effectiveness Study,” US Department of State. 2015-2016 (\$287,000)

## **SERVICE AND AFFILIATIONS**

Acting Managing Editor, *The Nonproliferation Review*, January-April 2017

Member, American Political Science Association (APSA), International Studies Association (ISA), and International Network for Social Network Analysis (INSNA)

Reviewer, *International Studies Quarterly* and *The Nonproliferation Review*