# Ella Foster-Molina

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Swarthmore, PA 19081

#### **EDUCATION**

# University of Rochester, Rochester, NY

Ph.D. Political Science, expected Summer 2018

M.A. Political Science, 2014

Fields: American Politics, Formal Theory, Comparative Politics

# Swarthmore College, Swarthmore, PA

B.A. Political Science; B.A. Mathematics, 2007

Graduated with Honors

#### PROFESSIONAL POSITIONS

#### Swarthmore College, Swarthmore, PA

Social Sciences Quantitative Laboratory Associate, Fall 2017- present

# Georgetown University, Washington, DC

Visiting Instructor of Government, Fall 2015- Summer 2016

# University of Rochester, Rochester, NY

Instructor, Summer 2015

# SUNY Oswego, Oswego, NY

Adjunct Professor, Spring 2015

#### WORKING PAPERS

"Money Matters: Tradeoffs Between Constituent Service and Legislation"

"Education Matters: Four Decades of Legislative History, Party, Education, and Income"

"Beta Models for Limited Dependent Variables and Heteroskedasticity"

"Job Appeal: How District Economics Dictate the Job History and Legislative Success of Elected Politicians"

#### RESEARCH AND TEACHING INTERESTS

#### **American Politics**

Introduction to American Politics, Race and Ethnic Politics

Institutions: Congress, the Presidency, Courts

Representation, Political Inequality, Civil Liberties

#### Quantitative

Statistical Methods, Research Design, Game Theory

#### TEACHING EXPERIENCE

# Social Sciences Quantitative Laboratory

Developed 19 modular lessons, each 2 hours long, on data science skills.

Delivered 57 individual workshops for approximately 270 unique students.

Swarthmore College, Fall 2017-present

**Professor**, Analysis of Political Data I

Georgetown, Spring 2016

**Professor**, Analysis of Political Data II

Georgetown, Spring 2016

**Professor**, Introduction to Applied Game Theory

Georgetown, Fall 2015

Professor, Race and Ethnicity in US Politics

Georgetown, Fall 2015

Professor, Introduction to American Government

University of Rochester, Summer 2015

Professor, Civil Liberties

SUNY Oswego, Spring 2015

**Professor**, Inequality and Democracy

SUNY Oswego, Spring 2015

Award "Excellence in Teaching by a Graduate Student" 2013-2014

Given to top two teaching assistants in political science

Competitive award with financial prize

Based on faculty nominations

University of Rochester, Spring 2014

#### Head Teaching Assistant, Introduction to International Relations

(Professor Hein Goemans), University of Rochester, Spring 2014

Guest Lecturer Introduction to International Relations (Professor Hein Goemans)

"International Institutions and War," "Asia's Role,"

"Human Rights," "Mid-term Synthesis"

University of Rochester, Spring 2014

#### Program Assistant for Study Abroad (Professor Lynda Powell)

In charge of admissions and journal grader.

Involved in ongoing program revisions.

University of Rochester, Fall 2007-Fall 2009, Spring 2012-Fall 2014

# $\textbf{Teaching Assistant}, \, \underline{\text{Introduction to International Relations}} \,\, (\text{Professor Hein Goemans})$

University of Rochester, Spring 2013

# Teaching Assistant, <u>Introduction to American Politics</u> (Professor Gerald Gamm)

University of Rochester, Fall 2013

# **Teaching Assistant**, Introduction to Political Philosophy (Professor James Johnson) University of Rochester, Fall 2012

# Teacher and Advisee Training Seminars, attendee

University of Rochester, SUNY Oswego, Georgetown, and Swarthmore, 2012-present

# RESEARCH, PROGRAMMING, AND DATA ANALYSIS

# Research Assistant, Pippa Norris, Harvard University, Spring 2017

- Modified anchoring vignette questions in Perceptions of Electoral Integrity survey.
- Created 10 page document describing how to apply anchoring vignette method.
- Implemented Stata and R code modifying variables based on anchoring principles for shared use.

# Research Assistant, Lyndon Estes, Princeton University, Fall 2014

- Extracted data from climate sensing pods across the country using Python and R.
- Collaborated to streamline the database.

#### Research Assistant, Richard Niemi, University of Rochester, 2014

- Data analysis using South Asia Barometer. Examined the impact of education and generational cohort (based on the government regime the respondent grew up under) on sympathy for democracy.
- Assist with determining the beginning and ends of each regime type (ex: liberal democracy, military dictatorship) for five countries.

# Research Assistant, Lynda Powell, University of Rochester, 2012

• Analyze preferences over representational styles of United States residents.

# Consultant, 2 de Mayo Entertainment Consulting, Princeton, NJ, 2011

- Create programs in Python to parse documents containing information on media availability.
- Analyze efficiency of data documentation and transmission.

#### Consultant, SureTech, Princeton, NJ, 2011

- Build portions of database management software.
- Review website development using PHP.

#### Research Assistant, Jim Johnson, University of Rochester, 2008

• Document the influence of Elinor Ostrom on the impact of collective action and the allocation of scarce resources.

# Research Assistant, Larry Rothenberg, University of Rochester, 2008

- Investigate the evolution of gerrymandering in the United States.
- Research the legal history of court cases regarding gerrymandering.
- Analyze the impact of districting decisions on vote choice California between 1980 and 1990.

#### Statistical Analyst, Analysis and Inference, Swarthmore, PA, 2006

- Analyze data related to court cases to determine baseline frequencies of relevant events.
- Write tutorials to introduce novice programmers to R.

#### Grant Writer, National Hispanic University, San Jose, CA 2004

- Help create a robotics program for immigrant and first generation elementary school students focused on hands on learning.
- Write grant applications to fund program.
- Program successfully funded in September 2004.

#### PUBLISHED DATASET

**Harvard Dataverse** 2017, "Historical Congressional Legislation and District Demographics 1972-2014." doi:10.7910/DVN/CI2EPI

# GRANTS AND AWARDS

Travel Award for Text as Data Conference, Northwestern University, 2014 Summer Research Assistant Fellowship, University of Rochester, 2014 Charles E. Lanni Summer Research Fellowship, University of Rochester, 2008, 2014 Excellence in Teaching by a Graduate Student, University of Rochester, 2013-2014 PEPR Research Assistant Grant, University of Rochester, 2012 Provost's Fellowship, University of Rochester, 2007-2009, 2012-2013

#### SERVICE EXPERIENCE

Cofounder, Writing Group, Swarthmore College, 2018

 Cofounded a weekly group to provide support for the development of research ideas among Swarthmore faculty and staff.

Cofounder, Working Group, University of Rochester, 2012 - 2015

• Cofounded a weekly workshop to provide support for the development of research ideas among female graduate students in political science.

**Tutor**, Carlson Library Tutoring, University of Rochester, 2014

Tutored students from disadvantaged backgrounds in English, Math, History, and Economics.

# CONFERENCES and PRESENTATIONS

#### Liberal Arts Consortium on Online Learning 2018

"Digital Tools for Data Science Skills"

# American Political Science Association Annual Meeting 2016

"Forty Years of Inequality: Legislative History, Party, Education, and Income"

# Georgetown Quantitative Models, Spring 2016

"Automated Content Analysis: Understanding Text as Data through Regular Expressions and Word Clouds"

# Midwest Political Science Association Annual Meeting 2016

"Education Matters: Four Decades of Legislative History, Party, Education, and Income"

# Georgetown American Government Speaker Series, Spring 2016

"Race Matters: Tradeoffs Politicians Make when their District Does Not Reflect Their Race"

# American Political Science Association Annual Meeting 2015

"Understanding Time Constraints and Policy: An Analysis Using Legislation, Staffing Resources, and Twitter"

# Midwest Political Science Association Annual Meeting 2015

"Descriptive Representation, Policy, and Communication: Understanding Tradeoffs and Their Impact on Policy"

#### Midwest Political Science Association Annual Meeting 2014

"Casework and Legislation: An Analysis of Representation using Twitter, Facebook, and Press Releases"

# Midwest Political Science Association Annual Meeting 2013

"Money Matters: The Influence of Affluence on Political Representation"

# **SKILLS**

Technical: R, Stata, SPSS, Excel, ArcGIS, Python, LaTeX

Languages: Spanish (fluent)

# REFERENCES

Lynda Powell
Associate Professor
University of Rochester
Dept. of Political Science
lynda.powell@ur.rochester.edu

Matthew Blackwell
Assistant Professor
Harvard University
Dept. of Government
mblackwell@gov.harvard.edu

Richard Niemi Associate Professor University of Rochester Dept. of Political Science niemi@rochester.edu