

**CONTACT** Westat, Statistics and Survey Methods Unit Email: [griverorz@gmail.com](mailto:griverorz@gmail.com)  
 1650 Research Boulevard, Room 476 Website: [griverorz.net](http://griverorz.net)  
 Rockville, MD 20850 GitHub: [griverorz](https://github.com/griverorz)

**SUMMARY** I have over 10 years of experience in the areas of data science and social science research in both industry and academia. At Westat I serve as architect of advanced quantitative tools for social research, and participate in the strategic planning around methods, technologies, staffing and training both in statistical modeling, computational research, and scientific software development.

As unit leader and head of research and development, I provide expertise in the design, implementation, and evaluation of applied data science solutions. Working closely with a team of methodologists, statisticians, project directors and operations managers, I am responsible for building tools that support faster and more efficient collection of survey data, advice projects areas on research design and analysis with organic and enriched data, and oversee the methodological standards and workflows in advanced analytics, machine learning, and natural language processing.

**EDUCATION** Ph.D. in Political Science, *New York University* 2013  
 M.A. in Political Science, *New York University* 2009  
 M.A. in Social Sciences, *Juan March Institute*, Madrid 2006  
 M.A. in History (Prehistory & Archaeology), *University of Vigo*, Ourense 2004  
 B.A. in History, *University of Vigo*, Ourense 2002

**EMPLOYMENT** **Data Science Lead.** Statistics and Survey Methodology Unit. *Westat.* 2017–present  
 I lead the vision and strategic direction in new business areas. I am responsible for data science solutions in support of internal operations and external clients in the study areas of public health, clinical trials, education, justice, and policy evaluation. In addition to managing the data science unit, I mentor and support the training of new and existing staff in machine learning, Python, and R.

**Senior Data Scientist.** Statistics and Survey Methodology Unit. *Westat.* 2015–2017  
**Statistical Scientist.** Scientific Research Group. *YouGov.* 2014–2015  
**Senior Analyst.** Scientific Research Group. *YouGov.* 2013–2014

**TECHNICAL SKILLS** Languages: Python, C++, JavaScript  
 Experience with `numpy`, `scikit-learn`, `pandas`, `keras`, `NLTK`, `spacy`  
 Stack includes `Flask`, `Celery`, `NGINX`, `SQLAlchemy`  
 Statistics: R, Stata, Jags/Stan  
 Experience with `tidyverse`, `caret`, `Rcpp`, `openNLP`, `statnet`  
 Development in S3 and S4  
 Databases: SQL (PostgreSQL and MySQL), MongoDB, ElasticSearch  
 DevOps: Amazon AWS, Apache Spark, Docker  
 Experience with `Ansible`, `Fabric`, `PySpark/sparklyr`

**BOOKS** 1. Gayo-Avello, D.; Jungherr, A. and **Rivero, G.** (exp. 2018) *Contingent Disruption: Digital Media and Politics*. Cambridge University Press (Under contract).  
 2. **Rivero, G.** (2011) *Análisis de datos incompletos en Ciencias Sociales*. CIS, Madrid.

**PEER-REVIEWED ARTICLES** 1. Tourangeau, R.; Sun, H.; Yan, T.; Maitland, A.; **Rivero, G.** and Williams, D. (exp. 2018): “Web Surveys by Smartphones and Tablets: Effects on Data Quality.” *Social Science Computer Review*. OnlineFirst.

2. Tourangeau, R.; Maitland, A.; **Rivero, G.**; Sun, H.; Williams, D. and Yan, T. (exp. 2018): “Web Surveys by Smartphones and Tablets: Effects on Survey Responses.” *Public Opinion Quarterly*, 81 (4): 896-929.
3. **Rivero, G.** (2017): “Preaching to the Choir. Ideology and Following Behavior in Social Media.” *Contemporary Social Science*. OnlineFirst.
4. Fernández-Vázquez, P.; Barberá, P. and **Rivero, G.** (2015): “Rooting Out Corruption or Rooting For Corruption? The Heterogeneous Electoral Consequences of Scandals.” *Political Science Research and Methods*, 4 (2): 379-397
5. **Rivero, G.** (2015): “Heterogeneous Preferences in Multidimensional Voting Models: Ideology and Nationalism in Spain.” *Electoral Studies*, 40: 136-145.
6. Przeworski, A.; **Rivero, G.** and Xi, T. (2015): “Elections as a Conflict Processing Mechanism.” *European Journal of Political Economy*, 39: 235-248.
7. Barberá, P. and **Rivero, G.** (2015): “Understanding the Political Representativeness of Twitter Users,” *Social Science Computer Review*, 33 (6): 712-729.

#### CHAPTERS IN BOOKS

1. Barberá, P. and **Rivero, G.** (2012): ¿Un tweet, un voto? Desigualdad en el debate político en Twitter. In Cotarelo, R. and Crespo, I. (ed.): *La comunicación política y las nuevas tecnologías*. Ed. Libros de la Catarata: 200–220.
2. Lapuente, V.; Fernández-Vázquez, P. and **Rivero, G.** (2011): Carencias en el control vertical y horizontal de la corrupción. In Estefanía, J. (Ed.): *Informe sobre la Democracia en España, 2011*. Fundación Alternativas: 199–222.

#### OTHER PUBLICATIONS

1. Riddles, J.; Burke, J.; **Rivero, G.** and Rust, K. (2017): Adjustments to Student Weights to Account for Student Nonresponse in the National Assessment of Educational Progress. *Proceedings of the Joint Statistical Meetings*. American Statistical Association.
2. **Rivero, G.** and Fernández-Vázquez, P. (2011): Las consecuencias electorales de los escándalos de corrupción municipal, 2003–2007. *Estudios de Progreso*, 59.

#### UNDER REVIEW

1. Suhay, E.; Klasnja, M. and **Rivero, G.** (2018): “Explanations for Inequality and Political Attitudes among Affluent Americans.” (under review)  
*Awards: APSA Class and Inequality Section’s 2018 Best Paper Prize*
2. Tourangeau, R.; **Rivero, G.**; Cook, T. and Edwards, B. (2017): “Responsive designs in face-to-face longitudinal surveys.” (under review)

#### WORKING PAPERS

1. Klasnja, M.; Smeets, P.; Suhay, E. and **Rivero, G.** (2017): “The Political Preferences of the Wealthy in the U.S. and the Netherlands.”
2. Gallego, J.; **Rivero, G.** and Martínez-Gordillo, J.D. (2017): “An Early Detection Model for Corruption in Public Procurement.”
3. Sun, H. and **Rivero, G.** (2017): “One Size Does not Fit All. Measuring Interviewer Quality in Face-to-Face Surveys.”

#### ADDITIONAL TRAINING

- Short courses*
- R and Spark: Tools for Data Science Workflows. *National Institute of Statistical Sciences* Sep. 2017  
Statistical Learning and Data Mining. *Trevor Hastie/Rob Tibshirani* Oct. 2016
- Long courses*
- Quantitative Methods for Social Research. *ICPSR, University of Michigan* June–Aug. 2005  
*Courses:* Bayesian Statistics, Advanced MLE, Game Theory II, Regression Analysis III
- PGCert in Advanced Methods of Applied Statistics, *UNED* 2005  
*Areas:* Robust Statistics, Resampling Methods, Multivariate Statistics
- Coursework of the Ph.D. in Economic Theory, *U. Santiago de Compostela* 2004  
*Courses:* Microeconomics, Macroeconomics, Social Choice, Game Theory, Cooperative Games

RESEARCH AFFILIATIONS	Research affiliate ( <i>Doctor miembro</i> ). <i>Juan March Institute</i> , Madrid Visiting Scholar. Institute for Economic Analysis, <i>CSIC</i> , Barcelona	2013–present 2010–2011
GRANTS	<i>Digital Media and Politics</i> , €8,000. University of Konstanz. Andreas Jungherr (PI) <i>Dictatorial Repression and Judicial Systems. The Determinants of Authoritarian Stability and Transitional Justice</i> , €30,000. Spanish Ministry of Science. Paloma Aguilar (PI) <i>Technologies of Rebellion and Violence during Civil War</i> , €12,000. Institut Català Internacional per la Pau. With Laia Balcells (PI) <i>Disentangling the Origins and Consequences of Authoritarian Institutions</i> , €3,612. Juan March Institute. With Abel Escriba (Co-PI)	2017 2012–2015 2011 2010
FELLOWSHIPS & AWARDS	McCracken Fellowship, <i>GSAS, New York University</i> Juan March Fellowship, <i>Juan March Institute</i> Research assistant fellowship, <i>U. de Santiago de Compostela</i> Xunta de Galicia Graduate Fellowship, <i>Xunta de Galicia</i> Prize to the best academic record, <i>Universidade de Vigo</i> Research assistant fellowship, <i>Spanish Ministry of Education</i>	2007–2012 2003–2007 June–Sept. 2003 2002–2003 2002 2001–2002
TEACHING EXPERIENCE	<i>Workshops &amp; Summer Schools</i> “Big Data for Public and Private Sectors” (40 hours). <i>U. del Rosario, Bogotá</i> “Advanced R” (6 hours). <i>Westat</i> “Introduction to Statistical Programming in R” (6 hours). <i>Westat</i> “Incomplete Data Analysis in Surveys” (8 hours). <i>U. Autònoma de Barcelona</i>  <i>Teaching Assistant</i> Power & Politics in America. Prof. Patrick Egan. <i>NYU</i> Power & Politics in America. Prof. Sanford Gordon. <i>NYU</i> International Politics. Prof. Shanker Satyanath. <i>NYU</i> Quantitative Methods for Political Science. Prof. Matthew Stevens. <i>NYU</i>	June 2017 June 2016 Feb. 2016 Nov. 2010  Fall 2012 Spring 2012 Fall 2011 Fall 2008 & Spring 2009
INVITED TALKS	University of Durham, Universidad del Rosario (Colombia) Trinity College of Dublin TIGER (Toulouse School of Economics) Instituto Tecnológico Autónomo de México, Spanish National Research Council Universitat Autònoma de Barcelona	2017 2016 2014 2012 2011
ORGANIZED CONFERENCES	The Organization of Security and Justice System Institutions in Autocracies. <i>Hosting institution: Juan March Institute - Carlos III, Madrid</i> <i>Committee: P. Aguilar, A. Escribà-Folch, J.A. Mayoral, J. Ríos Figueroa, and G. Rivero</i> Contingent Disruption: Digital Media and Politics. <i>Hosting institution: University of Konstanz, Konstanz</i> <i>Committee: D. Gayo-Avello, A. Jungherr, and G. Rivero</i>	June, 2015  May, 2018
OUTREACH	Member of the editorial board of the social science blog “Politikon”  <i>Mentions and interviews in media</i> El Mundo. “ <i>El voto oculto de Donald Trump</i> ”. Oct. 27, 2016. Univisión. “ <i>Por qué es muy improbable que fallen las encuestas como dice Trump</i> .” Oct. 25, 2016. El País. “ <i>La corrupción sale gratis en España</i> ”. Jul. 2, 2016.	2015–present

Expansión. “*El porqué de la corrupción política*”. Jun 30, 2016.  
Xataka. “*¿Predice el big data sobre redes sociales mejor que las encuestas quiénes ganan las elecciones?*”  
Dec. 15, 2015.  
Pacific Standard. “*Why do we elect corrupt politicians.*” Nov. 24, 2014.  
El País. “*Rajoy y Rubalcaba empatan en la valoración de los usuarios de Twitter*”. Sep. 26, 2011.

#### *Writings in media*

Ahora. “*Cuando PP y PSOE perdieron a los jóvenes*”, with María Ramos. Jul. 8 2016.  
El País. “*El éxito de las encuestas*”, with Kiko Llaneras. Mar. 30, 2015.  
European Politics and Policy Blog, London School of Economics. “*Political discussions on Twitter during elections are dominated by those with extreme views*”, with Pablo Barberá. Dec. 13, 2014.

**CONFERENCES** *Political science*: APSA (2010, 2011, 2013, 2015, 2017), MPSA (2010, 2011, 2015, 2017, 2018), EPSA (2011, 2012), ECPR (2010), IPSA (2011, 2012), CES (2018)  
*Statistics and survey methods*: FedCASIC (2018), BigSurv (2018), AAPOR (2017), ITSEW (2016), MOLS (2018), JSM (2017)  
*Others*: ALICE (2011)

**RESEARCH ASSISTANSHIPS** Prof. Adam Przeworski (NYU). Collection of constitutional and electoral data for the dataset *Political Institutions and Political Events*. 2008 – 2011  
Prof. Covadonga Meseguer (CIDE). Technical review and discussion of the book *Learning, Policy Making, and Market Reforms*. Cambridge University Press. 2007 – 2008

**SERVICE & MEMBERSHIP** *Referee*  
*Journals*: Political Behavior; Journal of Conflict Resolution; Dados; Spanish Journal of Political Science; Journal of Survey Statistics and Methodology; Armed Forces and Society; War in History; Social Science Computer Review; Southern European Politics and Society; El Profesional de la Información; Revista Internacional de Sociología  
*Book publishers*: Cambridge University Press  
*Funders*: Spanish National Agency for Evaluation and Prospective, Institute of Education Sciences

#### *Member of expert panels*

Bureau of Justice Statistics

#### *Mentorship*

Shane Campbell (Washington Statistical Society, 2017-2018)  
Ruodan Zhang (Midwest Political Science Association, 2017-2018)

#### *Professional memberships*

American Political Science Association (Political Methodology Section), American Statistical Association (Statistical Learning and Data Science Section)

**MISCELLANEA** Tracking of the Spanish 2011 legislative elections using sentiment analysis, with Pablo Barberá 2011  
Website: <http://www.tuitometro.es/> (Inactive since November, 20, 2011)