CHARLES JONATHAN GOMEZ

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ACADEMIC APPOINTMENTS

2022–Present	The University of Arizona Assistant Professor School of Sociology and School of Information, College of Social and Behavioral Sciences Faculty in Applied Mathematics Graduate Interdisciplinary Program (GIDP)
2017-2022	Queens College, The City University of New York Assistant Professor Director, Data Analytics and Applied Social Research Master's Program [2021-2022] Department of Sociology, School of Social Sciences
2016-2017	The University of California, Berkeley Data Science Postdoctoral Researcher and MIDS Instructor School of Information

EDUCATION

July 2016	Stanford University Ph.D. in Sociology and International Comparative Education Ph.D. Minors in Sociology and Political Science
May 2010	Harvard University M.Pub.Pol. in International and Global Affairs
May 2006	Columbia University M.Sc. in Applied Physics
May 2005	Duke University B.Sc.Eng. in Electrical Engineering, Physics, and Philosophy

PUBLICATIONS

Manuscripts Being Reviewed

- Knowledge Diffusion Reveals Growing Global Inequality in Scientific Recognition. Revise and Resubmit at Nature Communications. [Impact Factor 2021: 14.92]
- Hedgehogs, Foxes, and Global Science: How Ecological Networks Reveal Research Recognition of Countries and Universities (with Dahlia Lieberman and Elina Mäkinen). Preprint: https://doi.org/10.31235/osf.io/89g7u
 Revise and Resubmit at Research Policy. [Impact Factor 2021: 9.35]
- 3. Attachment Preferences in Diverse Collective Problem-Solving Networks and Systemic Performance (with Antonio D. Sirianni and Launy Schweiger). Preprint: https://doi.org/10.31235/osf.io/29kma

Peer-Reviewed Journal Articles

- 2022 Gomez, Charles J., Andrew C. Herman, and Paolo Parigi. 2022. Leading Countries in Global Science Increasingly Receive More Citations than Other Countries Despite Doing Similar Research. *Nature Human Behaviour*. [Impact Factor 2021: 13.66] https://doi.org/10.1038/s41562-022-01351-5
 Media: Times Higher Education, PNAS News, Physics World, Nature Asia, Phys.org
- 2020 Gomez, Charles J., Andrew C. Herman, and Paolo Parigi. 2020. Moving More, but Closer: Mapping the Growing Regionalization of Global Scientific Mobility Using ORCID. Journal of Informetrics. [Impact Factor 2018: 3.879] https://doi.org/10.1016/j.joi.2020.101044
- 2019 **Gomez, Charles J.**^{*} and David Lazer. 2019. Clustering Knowledge and Dispersing Abilities Enhance Collective Problem Solving in a Network. *Nature Communications*. [Impact Factor 2018: 12.03] https://doi.org/10.1038/s41467-019-12650-3
- 2019 Alperin, Juan, Charles J. Gomez, and Stefanie Haustein. 2019. Identifying Diffusion Patterns of Research Articles on Twitter: A Case Study of Online Engagement with Open Access Articles. *Public Understanding of Science*. [Impact Factor 2019: 2.754] https://doi.org/10.1177/0963662518761733
- 2019 Vesselinov, Elena, Sebastian Villamizar-Santamaria, Charles J. Gomez, and Eva Fernandez. 2019. A Global Community or a Global Waste of Time? Content Analysis of the Facebook Site "Humans of New York." *Journal of Urban Affairs*. [Impact Factor 2017: 1.53]
 https://doi.org/10.1020/07252166.2010.1607184

https://doi.org/10.1080/07352166.2019.1697184

- Horowitz, Adam and Charles J. Gomez^{*}. 2018. Identity Override: Why Sexual Orientation Reduces the Rigidity of Racial Boundaries. Sociological Science. [Impact Factor 2018: 2.18]
 https://doi.org/10.15195/v5.a28
- 2016 Evans, Eliza, Charles J. Gomez^{*}, and Daniel A. McFarland. 2016. Measuring Paradigmaticness of Disciplines Using Text. Sociological Science. [Impact Factor 2018: 2.18] https://doi.org/10.15195/v3.a32
- 2015 Gomez, Charles J.* and Paolo Parigi. 2015. Regionalization of Intergovernmental Organization Networks: A Non-Linear Process. Social Networks. [Impact Factor 2015: 3.928] https://doi.org/10.1016/j.socnet.2015.03.007
- 2015 Kizilcec, Rene F., Jeremy Bailenson, and Charles J. Gomez. 2015. The Instructor's Face in Video Instruction: Evidence from Two Large-Scale Field Studies. *Journal of Educational Psychology*. [Impact Factor 2015: 4.83] https://doi.org/10.1037/edu0000013
- 2012 Bustos, Sebastian, Charles J. Gomez, Ricardo Hausmann, and Cesar Hidalgo. 2012. The Conservation of Nestedness Predicts the Location of Future Industries. *PLoS ONE*. [Impact Factor: 2.777] https://doi.org/10.1371/journal.pone.0049393

Manuscripts in Preparation (Presented in order of most developed.)

1. Rising Global Inequality Homogenizes and Stifles Scientific Research (with Sebastian Muñoz-Najar Galvez, Joshua Gagné, Andrew Herman, and Bas Hofstra).

^{*}Denotes co-lead author

- 2. Disenchantment with Big Data Analytics: When Knowledge Mediators Fail (led by Elina Mäkinen).
- 3. The Tragedy of the Network (with David Lazer and Launy Schweiger).
- 4. A Tower of Babel or a Scientific Esperanto? Uncovering the Geography of Scientific Communities.
- 5. The National Divide in International Collaborations in Artificial Intelligence (with Ying Ding and Yi Zhao).

Future Projects and Initial Proofs of Concept

- 1. How Collaboration and Competition between the United States and China Influence Research in the Emerging Field of Artificial Intelligence.
- 2. Relating Field and Institutional Hierarchies.
- 3. Internationally Mobile Scientists Introduce Knowledge in Scientific Communities (with Andrew C. Herman, Elina Mäkinen, and Paolo Parigi).
- 4. Social Network and Text Analysis of Research in Cosmology, Astronomy, and Astrophysics.
- 5. Intellectual Distance and Intellectual Mobility.
- 6. The Global Diffusion of American Social Science.
- 7. What Types of Knowledge Diffuses Best?
- 8. Tracing the Rise of Systems Thinking in the Social Sciences.

GRANTS

In Preparation	National Science Foundation (NSF) Faculty Early Development Career Program (CA-REER). NSF 20-525. How Collaboration and Competition between the United States and China Influence Research in the Emerging Field of Artificial Intelligence. 2023-2028
2020-2023	\$253,897 . Principal Investigator (PI), National Science Foundation (NSF). PD 19-125Y, Science of Science: Discovery, Communication, and Impact (SoS:DCI). Inequality in Global Scientific Research: Implications for Novelty and Innovation.
2019-2020	\$5,900 . PSC-CUNY Research Award (Cycle 50).
2018-2019	\$5,900 . PSC-CUNY Research Award (Cycle 49).
2017-2018	\$8,000 . Mellon Foundation Diversity Grant, CUNY-Queens College.
2016	\$49,900 . Stanford University Freeman Spogli Institute (FSI) Global Development Exploratory Seed Grant, Co-P.I. with Daniel McFarland, Stanford University.
2013	\$2,000 . Center for Philanthropy and Civil Society (PACS) Research Grant, Stanford University.
2011-2015	\$800 . National Science Foundation's Political Networks Travel Grants, University of Michi- gan - Ann Arbor, 2011; The University of Colorado-Boulder, 2012; Indiana University - Bloomington 2013; Reed College and Portland State University 2015.
2010	\$8,000 . The Minerva Project Cybersecurity Summer Grant.

FELLOWSHIPS AND AWARDS

Fellowships

2017-2022	Mellon Fellow, Queens College, CUNY.
2013-2014	Computational Social Science Fellow - Quarter Tuition and Stipend, Institute for Research in the Social Science (IRiSS) Center for Computational Social Science, Stanford University.
2010-2011	The Fred Zannon Graduate Fellowship Full Tuition, Stanford University.
2008-2010	Belfer International and Global Affairs Fellow Stipend, Harvard University.
2009	Belfer Summer Internship Fund Summer Stipend, Harvard University.
2008-2010	Harvard Public Service Fellowship Full Tuition, Harvard University.
2008-2010	GEM/Deloitte Fellowship Full Tuition and Stipend (Declined).
2005-2006	APAM Department Doctoral Fellowship Full Tuition and Stipend, Columbia University.

Awards

- 2015 Acxiom Diversity Scholarship Winner (\$5,000), Acxiom, Inc.
- 2013 Nominated for Stanford GSE Outstanding Graduate Teaching Award.
- 2001 Intel Science Talent Search Semifinalist.

CONFERENCE PRESENTATIONS

Global Scientific Fields Are Less Novel as Concentrated International Influence Dictates Research Trends.

- 2021 Networks 2021. Virtual: 5 July 2021
- International Conference on Computational Social Science (IC²S²). (Original Location: M.I.T., Cambridge, MA). Virtual: 18 July 2020
- 2019 The Society for the Social Study of Science (4S) Annual Meeting. New Orleans, Louisiana. 4 September 2019
- 2019 INSNA: International Conference on Social Network Analysis (Sunbelt). Montreal, Quebec. 30 June 2019

Rising Global Inequality in the Acknowledgement of Scientific Research.

2020 American Sociological Association Annual Meeting. (Original Location: San Francisco, California). Virtual: 22 July 2020

Attachment Preferences in Diverse Collective Problem-Solving Ventures and Systemic Performance.

2020 International Conference on Computational Social Science (IC²S²). 2020. (Original Location: M.I.T., Cambridge, Massachusetts). Virtual: 18 July 2020

A Tower of Babel or a Scientific Esperanto? Uncovering the Geography of Scientific Communities Using International Networks of Citations, Topic Similarity, and Mobility.

- 2019 American Sociological Association Annual Meeting. New York City, New York. 15 August 2019
- 2018 American Sociological Association Annual Meeting. Philadelphia, Pennsylvania. 14 August 2018
- 2018 International Conference on Computational Social Science (IC²S²) 2018. Chicago, Illinois.
 13 July 2018

Identity Override: Why Sexual Orientation Reduces the Rigidity of Racial Boundaries. (with Adam L. Horowitz)

2017 American Sociological Association Annual Meeting. Montreal, Quebec. 15 August 2017

On Shadow Libraries: Comparing Download and Citation Patterns in Sci-Hub and Web of Science. (with Sebastian Muñoz-Najar)

2017 The Science of Team Science Annual Conference. Tampa, Florida. 14 June 2017

Measuring Paradigmaticness Using Text.

2016 American Sociological Association Annual Meeting. Seattle, Washington. 22 August 2016

A Post-Pax Americana Scientia?

2014 SocInfo, 6th Annual Conference. Barcelona, November 2014. Accepted into proceedings.

Regionalization of Intergovernmental Organization Networks: A Non-Linear Process.

- 2013 American Political Science Association Annual Meeting. Chicago, Illinois. 29 August 2013
- 2013 American Sociological Association Annual Meeting. New York, New York. 12 August 2013
- 2012 Fifth Annual Joint North American and Japanese Mathematical Sociology Conference. Denver, Colorado. August 2012
- 2012 Fifth Annual Political Networks Conference and Workshop. University of Colorado, Boulder. June 2012

Global Knowledge Structures: International Patterns of Language Adoption in Political Science.

- 2015 American Sociological Association Annual Meeting. Chicago, Illinois. 23 August 2015
- 2014 American Sociological Association Annual Meeting. San Francisco, California. 19 August 2014
- 2014 Political Networks 2014. Montreal, Quebec, Canada. 30 May 2014
- 2013 American Educational Research Association Annual Meeting, San Francisco, California. 1 May 2013

Clustering Knowledge and Dispersing Abilities Enhance Collective Problem Solving in a Network.

- 2015 American Sociological Association Annual Meeting. Chicago, Illinois. 24 August 2015
- 2012 Academy of Management Annual Meeting. Boston, Massachusetts. August 2012
- 2012 American Sociological Association Annual Meeting. Denver, Colorado. August 2012
- 2011 Workshop on Information in Networks. Stern School of Business, New York University. September 2011 - **Poster**
- 2011 Political Networks. Ford School of Public Policy, University of Michigan, Ann Arbor. June 2011 **Poster**
- 2011 INSNA: The International Conference on Social Network Analysis (Sunbelt). Saint Petersburg, Florida. February 2011

Tragedy of the Network.

2015 Political Networks 2015. Portland, Oregon. 19 June 2015

TEACHING

Queens College, City University of New York		
2018-2020	Introduction to Computational Social Science (Graduate).	
2018-2020	Social Theory for Quantitative Researchers and Data Scientists (Graduate).	
2018	Data and Society (Undergraduate).	
2017	Sociology of Knowledge (Advanced Undergraduate and Graduate).	
University of California, Berkeley		

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2016-2017	Research Design and Applications for Data and Analysis (Graduate).
2016-2017	Social Theory and Organizational Analysis (Undergraduate and Graduate).

SERVICE

Service to	the Department
2021-2022	<i>Director</i> , Sociology Department Graduate Program on Data Analytics and Applied Social Research.
2018-2022	Committee Member and Chair, Sociology Department Graduate Curriculum Committee.
2017-2022	$Committee\ Member,$ Sociology Department Seminar and Workshop Series Organizing Committee.
2018-2021	<i>Committee Member</i> , Sociology Department Personnel and Budget (P&B) Committee (i.e., department's governing body).
2018-2019	Committee Member, Search Committee for Data Analytics Faculty Line.
Service to	the University
2018-2019	Committee Member, Working Committee on Establishing a School of Data Science.
2018-2021	Senator, College-at-Large Seat, Queens College Senate.
Service to	the Discipline and the Wider Academic Community
2021-2024	<i>Committee Member</i> , American Sociological Association's Section on Communication, Information Technologies, and Media Sociology (CITAMS) Nominations Committee.
2021-	$Committee\ Member, \ American\ Sociological\ Association's\ Section\ on\ Rationality\ and\ Society\ Nominations\ Committee.$
2020	<i>Committee Member</i> , American Sociological Association's Section on Science, Knowledge and Technology (SKAT) Robert K. Merton Book Award.
Service as	Ad-hoc Reviewer
Journals	American Sociological Review; Sociology of Education; Journal of Web Science; Public Understanding of Science; Minerva; Journal of Informetrics; Journal of Complex Networks; Journal of Computational Social Science, PLOS One
Conferences	The Web Conference–WWW; International Conference on Computational Social Science (IC^2S^2) ; Academy of Management
Book Proposals	Columbia University Press; SAGE

Thesis Supervision

- 2021 Dahlia Lieberman, CUNY-QC, M.A.
- 2021 Joshua Megnauth, CUNY-QC, M.A.
- 2020 Rafael Arevalo, CUNY-QC, M.A.
- 2020 Jiawen (Jessica) Duan, CUNY-QC, M.A.
- 2020 Sungji (Peter) Shin, CUNY-QC, M.A.
- 2020 Joseph Vorbeck, CUNY-QC, M.A.
- 2018 Randy Cruz, CUNY-QC, M.A.

PROFESSIONAL MEMBERSHIPS

American Sociological Association Association for Information Science and Technology International Network for Social Network Analysis International Society for Informetrics and Scientometrics Society for Social Studies of Science (4S) Academy of Management (Occasional)

INDUSTRY & CONSULTING EXPERIENCE

Facebook, Inc.

 Utility - Profile Team
 June 2015 - September 2015

 Ph.D. Research Intern
 Menlo Park, CA

 • Communicated findings to and collaborated with product managers, data engineers, and data scientists.

Stanford University

Statistical Software and Data Consulting Consultant

- Analyzed social science data and programming issues for the social science departments.
- Assisted students, faculty, and postdocs with technical and methodological issues related to R, Stata, and Unix.

Accenture, LLP

 $\label{eq:accenture} Accenture\ Information\ Management\ Services\\ Analyst$

October 2006 - 2008 New York, NY

- Customized Accenture's Delivery Methodology for Custom Development (ADM-CD) for UPS's global I.T. platform and their organizational specifications.
- Developed database architecture, requirements, documentation, and internal and external presentations for Accenture's business intelligence platform for private businesses and state and local governments.

January 2013 - August 2016 Stanford, CA