# quelo center MEDIA & INFORMATION POLICY



#### **Mission**

Named after the late James H. and Mary B. Quello, the Quello Center is one of the leading U.S. academic centers in communication, media, and information policy. Our work examines the interactions between technology, policy, and society at the level of individuals, communities, and society. We collaborate with practitioners to translate rigorous academic research into the design and implementation of better information policy and governance. The Center's interdisciplinary research draws from multiple empirical methods and multi-disciplinary theoretical perspectives. The Center is based in the Department of Media and Information at Michigan State University (MSU). It consists of a core set of researchers, complemented by research associates across MSU as well as other U.S. and international universities and research centers.

# **Research Areas**

	ICTs & society	Interactions of ICTs and society, e.g., social media use and self-esteem; information seeking and COVID-19 beliefs; community impacts of ICTs.
	Digital equity and inclusion	Several projects focus on broadband access and quality, digital skills, and barriers to use, across rural and urban communities, to inform decisions aimed at narrowing digital divides.
	Governance of emerging technologies	Roles of policy in harnessing the benefits of emerging technologies (e.g., 5G, 6G, IoT, AI), public interest innovation, responsible innovation, and agile governance.
89	Platform and Internet policy	Our work covers a range of themes related to renewed efforts to design policy frameworks for digital platforms, to revisit Section 230, and to address the market power of big tech.
>	Information security	With researchers in computer science and criminal justice, we explore the economic, legal, behavioral, technical, and policy aspects of cybersecurity.
*	Foundations of information policy	Work in this area develops foundational methods and knowledge informing policy responses to challenges such as digital platform power, data ethics, and the governance of AL

digital platform power, data ethics, and the governance of AI.

# Welcome to the Quello Center

# **Board Members**





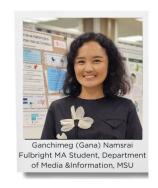
# Leadership





# **Research Fellows**





#### **Advisory Board**

As of June 30, 2025

Marjory S. Blumenthal, Science and Technology Policy and Strategy Expert, MSBlumenthal, LLC

Vincent Curren, Principal, Breakthrough Public Media Consulting

Roderick S. Coy, Of Counsel, Clark Hill

**William H. Dutton**, Professor Emeritus at the University of Southern California, Senior Fellow, Oxford Internet Institute (OII) and former Quello Center Director

Alyssa Harvey Dawson, Chief Legal Officer of HubSpot

**David L. Donovan**, President and Executive Director, New York State Broadcasters Association, Inc.

John D. Evans, Chairman and CEO, Evans Telecommunications Co., and The John D. Evans Foundation

**Brian Fontes**, Chief Executive Officer for the National Emergency Number Association (NENA)

**Heidi Hennink-Kaminski**, Dean, College of Communication Arts and Sciences (ex officio)

**Grace Koh,** Vice President for Government Relations, Ciena

Richard D. McLellan, McLellan Law Offices PLLC and Trustee MSU College of Law

**Michael R. Nelson**, Senior Fellow, Technology and International Affairs Program, Carnegie Endowment for International Peace

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Robert M. Pepper, Technology Policy

**Gary Reid,** Distinguished Senior Academic Specialist Emeritus; former WDBM-FM and WKAR Manager

**Michael J. Stern**, Chairperson, Department of Media and Information, MSU (ex officio)

**Shawn Turner,** WKAR Public Media General Manager and Professor of Strategic Communication, Department of Communication, MSU

**Steven S. Wildman**, Professor of Media and Information Emeritus, Michigan State University; former Director of the Quello Center; Senior Fellow with the Silicon Flatirons Center and a Visiting Scholar with the Interdisciplinary Telecommunications Program, University of Colorado, Boulder, CO

**Richard E. Wiley**, Chairman Emeritus, Wiley

# **Leadership Team**

Johannes M. Bauer, Director

**Keith N. Hampton,** Director of Academic Research

Jean Hardy, Associate Director

**Ashley Wilson,** Event & Project Coordinator

## **Quello Center Scholars, Research Fellows, and Associates**

#### Senior Scholar

**Sandra Braman,** Scholar and Professor, Department of Media and Information, MSU

#### Research Fellows

**Nelly Aghaei,** Doctoral Student, Information and Media Ph.D. program, MSU

Young Anna Argyris, Assistant Professor, Department of Media and Information, MSU

Ava Francesca Battocchio, Assistant Professor, Northwestern University

**Grant Blank,** Survey Research Fellow at the Oxford Internet Institute and Senior Research Fellow of Harris Manchester College, UK

**Adam D. Candeub,** Professor, College of Law, MSU (on leave to serve as General Counsel, Federal Communications Commission)

Shelia R. Cotten, Associate Vice President for Research Development, Clemson University, Clemson, SC

**Pierrette Renée Dagg,** Director of Research, Merit Network, Inc.

**Thomas J. Holt,** Professor, School of Criminal Justice, MSU

**Megan L. Knittel,** *Digital Equity Manager, Merit Network Inc* 

**Elizabeth Mack**, *Professor*, *Department of Geography*, *MSU* 

Angie Nam, Doctoral Student, Information and Media Ph.D. program, MSU

**Ganchimeg Namsrai,** Fulbright Scholar and Graduate Student, Department of Media and Information, MSU

**Jonathan A. Obar,** Associate Professor, Department of Communication & Media Studies, York University, Toronto, Canada

Tiago S. Prado, Consultant, Digital Development, Inter-American Development Bank, Washington, DC

**Bianca C. Reisdorf,** Associate Professor, Department of Communication Studies University of North Carolina at Charlotte, NC

**Colin Rhinesmith,** Associate Professor, School of Information Sciences, University of Illinois Urbana-Champaign

**Arun Ross,** Professor; John and Eva Cillag Endowed Chair in Science and Engineering; Site Director, Center for Identification Technology Research, MSU

**Ruth J. Shillair,** Assistant Professor and Director of MA Studies, Department of Media and Information, MSU

**Volker Stocker**, Head of Research Group, Weizenbaum Institute for the Networked Society, Berlin

Morgan Vigil-Hayes, Associate Professor, Department of Media and Information, MSU

#### **Research Associates**

Natascha Just, Professor of Communication, University of Zurich, Switzerland

Tai-Quan "Winson" Peng, Professor, Department of Communication, MSU

**Arnold Weinfeld,** Associate Director of the Institute for Public Policy and Social Research (IPPSR); Workforce and Economic Development Partnerships for University Outreach and Engagement, MSU

Valeta Wensloff, Director of Undergraduate Studies, Department of Media and Information, MSU

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#### **SUMMARY**

Research conducted by the Center and its affiliates during the past academic year focused on three main thrusts: the interactions between socio-demographic factors, digital connectivity, educational outcomes, and psychological well-being; critical analyses of federal and state programs supporting universal high-speed Internet access; and the governance of artificial intelligence (AI), with an emphasis on AI-enabled innovation.

We are excited that Dr. Jean Hardy accepted the role of associate director. He researches the role of digital technologies in rural development, policy interventions that can positively affect rural development, and the effects of digital technologies on rural LGBTQ communities. In addition, Dr. Morgan Vigil-Hayes, a computer scientist studying how communities build, use, and care for networked information systems, who recently joined MSU, is associated with the Center.

As in previous years, work from Center-related projects have been published in peer-reviewed venues, presented at professional conferences, in workshops, and shared online. We also published several technical reports and policy briefs for practitioners working on the implementation of the Infrastructure Act. Findings from our work are cited regularly in national and local media, in federal regulatory proceedings, and referenced on state government websites.

After the successful completion of the MOON-Light project, supported by an NTIA grant of \$10.5 million, our digital connectivity work focused on the development of evaluation and planning tools for State Broadband Offices. We are coordinating two national working groups on broadband policy evaluation and another one on data availability for researchers and practitioners. The next phase of this work will examine future infrastructure needs as more services will be AI-enabled.

A research grant obtained in the spring of 2022 allowed conducting a follow-up study with two of the schools that participated in our 2019-2020 study of broadband and educational outcomes and expanding the research to the psychological wellbeing of youth. Possibly the only longitudinal dataset of its kind, this project has yielded several high-quality publications and supports a dissertation. It also will contribute to ongoing policy discussion on the governance of digital platforms.

Our speaker series continued with several visible events. The panel discussion on digital sovereignty attracted more than 200 participants. Several talks dealt with emerging issues related to AI in the workplace and the governance of AI across the full stack. We conducted more than ten webinars for professionals from the private sector, federal and state government agencies, and advocacy groups who were interested in learning more about the evaluation framework for digital connectivity.

As in past years, we use the Quello Center *SSRN E-Journal* to disseminate working papers and penultimate versions of publications online. One of our goals is to translate rigorous research into actionable insights. In pursuit of that goal, we gave presentations at practitioner workshops and training programs at the local, national, and international levels.

Like other universities, MSU is affected by the changes in the federal funding landscape, and the Center was asked to contribute to finding a more sustainable financial model for the department and college. Our funding greatly benefits from the Center endowment, but the new fiscal reality will require additional efforts to obtain external resources.

#### 1. SPEAKER SERIES AND POLICY DISCUSSIONS

Part of our mission is to stimulate discussion of important and controversial issues, based on detailed examination of historical experiences and rigorous analyses of forward-looking policy options. Depending on the topic and the speaker, we conduct some discussions following Chatham House rules, record others for time-delayed release in our video archive (https://vimeo.com/quellocenter) or stream them live to a national and global audience (streamed talks are also placed in our video archive). Notable Center and co-sponsored events in the recent past include:

## 1.1. Speaker Series

Quello Center talks are typically archived at <a href="https://vimeo.com/quellocenter">https://vimeo.com/quellocenter</a>. Talks marked with an asterisk (\*) are not archived based upon request of the presenter(s).

- Françoise Daucé, EHESS (School for Advanced Studies in the Social Sciences in Paris),
   Benjamin Loveluck, Paris-Panthéon-Assas University and Francesca Musiani, French
   National Research Council (CNRS), Digital Authoritarianism in the Making? \*
- **Sandra Braman**, Quello Center, Department of Media and Information, MSU, *Facticity: Its Rise, Fall, and Misplacement* \*
- **Johan Söderberg,** Göteborg University, *Medicine hacking: Surviving late stage capitalism with DIY-medicine\**
- **Leland Glenna,** Penn State, Reforming Intellectual-Property Policies to Promote Agricultural Innovation
- Anupam Chander, legal expert on global regulation of new technologies, Julia Pohle, codirector of research group Politics of Digitalisation at the WZB Berlin Social Science Center, Marília Maciel, Director of Digital Trade and Economic Security at DiploFoundation, Milton Mueller, Director of the Internet Governance Project (IGP) at Georgia Tech. Min Jiang, UNC Charlotte, Digital Sovereignty and the Open Internet: Can they Coexist?
- Robert Gorwa, WZB Berlin Social Science Center and Michael Veale, University College London, Full Stack AI Governance \*
- Sarah Fox, Carnegie Mellon University, (Re) Working AI: Designing Workplace Technologies with and for Labor
- **Han Ei Chew,** Institute of Policy Studies (IPS) in Singapore, *Measuring Digital Trust: A Framework for Smart Societies\**
- Milton L. Mueller, Professor, Georgia Institute of Technology, Marília Maciel, Digital Policy Senior Researcher at Diplo Foundation, Bob Cannon, Internet Policy Analyst, Declaring Independence in Cyberspace: Internet Self-Governance and the End of US Control of ICANN
- **Han Ei Chew,** Institute of Policy Studies (IPS) in Singapore, *Borrowing Berlo: Singapore's Evolving Approach to Online Harms*
- **Shane Greenstein,** Harvard Business School, *The Digital Usage Divide: Evidence and New Measures from 40 Million Windows Devices*

 Chris Adami, Microbiology and Molecular Genetics & Physics and Astronomy, MSU, A Theory of the One Percent\*

# 2. ONGOING RESEARCH PROJECTS

## 2.1. AI Governance Working Group

This interdisciplinary working group, including faculty members and graduate students from the College of Communication Arts and Sciences, College of Business, College of Engineering, and College of Social Sciences, was brought together by the Quello Center to address issues related to the governance of AI-enabled innovation. Whereas there is a proliferation of national and international frameworks, developed by various stakeholders and very active legislative activity in U.S. states, much less attention is paid to the conditions required to harness the tremendous powers of AI in specific applications and services while mitigating potentially negative effects. This requires agile and flexible forms of governance that are aligned with the specific technological, economic, and social conditions of a use case. The goal of this initiative is twofold, to develop specific applied research projects in areas such as the personalization of services, and the development of more general insights into the design of an effective approach to AI governance.

#### Publications, Presentations, Policy Reports

Bauer, J. M., Braman, S., Namsrai, G., & Shillair, R. (2025). (How) Can Artificial Intelligence be Governed? Proposal for the 76<sup>th</sup> Annual Conference of the International Communications Association.

Bauer, J. M. (2005). Ethics in AI, Workshop on Exploring the Intersection Between AI, Infrastructure, and Public Trust, AnchorNets 2025, Crystal City, VA, October 29-31, 2025.

Namsrai, G. (2025). Mapping AI Governance in U.S. States: Policymakers' Priorities. Presented at the 48th Annual Fulbright Association Conference, Miami, FL, October 24-28, 2025.

# 2.2. Broadband Policy Assessment and Design

The Quello Center obtained funding for Phase I and Phase II of a grant from the Pew Charitable Trusts to develop a framework for practitioners and researchers to evaluate the programs authorized by the 2021 Infrastructure Investment and Jobs Act (IIJA). The outcomes of this research project will assist the federal government, states, and communities in developing timely data collection and measurement steps to design and evaluate short-, medium-, and long-term improvements of digital connectivity and its impacts. The scale and diversity of current federal, state, and local broadband and digital equity policy initiatives also entail a responsibility to the public to ensure the responsible use of public funds.

Our project documents utilize the similarities and differences between state plans and uses this variation to better understand the effectiveness of initiatives.. This will allow us to learn from successes and failures and adopt course corrections during the multi-year initiative. It will facilitate learning from experience in various locations, allow improvements of ongoing initiatives, and assist

in the development of sustainable, forward-looking programs that can harness the benefits of advanced digital technologies more fully.

Specific research questions pursued in this effort include: (1) What is the impact of the subsidy programs authorized by IIJA 2021 on broadband development at a national, state, and community level? (2) How are the programs established by the IIJA affecting digital equity at a national, state, and community level as well as for specific populations and groups? (3) How are the programs adopted at the national, state, and local levels contributing to community social and economic development? (4) What lessons can be drawn from the early experience with IIJA and from prior broadband policy programs to improve the overall effectiveness of current and future initiatives?

The project has generated several reports, checklists for practitioners on the ground, and several research papers, some presented at national conferences, others under peer review. The team made more than two dozen presentations to professionals from states, federal organizations, researchers, and advocates. The framework developed by the team is currently field tested. The project also spawned two national networks of professionals and researchers coordinated by the Quello Center, one related to the evaluation and design of large-scale infrastructure programs and one on the development of a digital connectivity data commons.

#### Publications, Presentations, Policy Reports

- Bauer, J.M. (2025). Federal-state realignment of broadband and digital equity policy in the United States, in: M. E. Warner, N. A. Bravo, & D. Shen (eds.), Bridging the digital divide in the US: Planning innovative state and local approaches (pp. 27-42), Routledge.
- Bauer, J.M. (2025). An Assessment of Proposals to Reform the Broadband Equity Access and Deployment Program (BEAD). Quello Center Working Paper 01-25, June 5, 2025. Available at SSRN: <a href="https://ssrn.com/abstract=5296353">https://ssrn.com/abstract=5296353</a>
- Bauer, J.M., Mack, E., Nam, A., Lee, Boram, & Knittel, M. (2025). Assessing the Effects of the Infrastructure Investment and Jobs Act on High-Speed Internet Access, Digital Equity, and Community Development. Revised and Updated, East Lansing, Michigan: Quello Center at Michigan State University.
- Mack, E., Bauer, J. M., Knittel, M., Nam, A., Lee, B., & Bhattacharya, D. (2025). The State of Bead: Assessing Progress Toward Universal Broadband Connectivity. Paper presented at TPRC53, Washington, D.C. September 19-20, 2025. Available at SSRN: <a href="https://ssrn.com/abstract=5376286">https://ssrn.com/abstract=5376286</a>.
- Quello Center (2025). Data Requirements for the Effective Evaluation of the Restructured BEAD Program. A Guide and Checklist for Practitioners. East Lansing, Michigan: Quello Center at Michigan State University.
- Knittel, M., Mack, E., Nam, A., & Bauer, J.M., (2024). Assessing the Effects of the Infrastructure Investment and Jobs Act on High-Speed Internet Access, Digital Equity, and Community Development. Opportunities and Challenges of Measuring the Impact of Broadband Policy. East Lansing, Michigan: Quello Center at Michigan State University, October 2024.

# 2.3. Rural Digital Inequities in Academic Achievement Psychological Wellbeing

This research effort, led by Keith N. Hampton, studies the role of digital inequality on change in rural students' academic performance, educational aspirations, and psychological wellbeing, before, during and due to the COVID-19 pandemic. Utilizing survey data collected from a sample of students in grades 8-12 collected in 2019 and again in 2022 from 14 rural, Michigan school districts paired with student records from standardized exams (2019-2022). This work addresses the question of whether students with no or poor Internet access, and those with lower digital skills, experienced declines in academic performance, educational aspirations, or psychological wellbeing? And if initiatives by schools to "fill the gap" in the missing infrastructure for rural Internet access (e.g., deploying cell phone hotspots) was successful at preventing negative consequences to student performance, educational aspirations, and psychological wellbeing due to preexisting digital inequalities?

#### **Publications and Reports**

- Hales, Gabriel & Keith Hampton (2025). Rethinking screen time and academic achievement: gender differences and the hidden benefit of online leisure through digital skills. *Information, Communication & Society*. <a href="https://doi.org/10.1080/1369118X.2025.2516542">https://doi.org/10.1080/1369118X.2025.2516542</a>.
- Hampton, Keith & Inyoung Shin (2023). Disconnection More Problematic for Adolescent Self-Esteem than Heavy Social Media Use: Evidence from Access Inequalities and Restrictive Media Parenting in Rural America. Social Science Computer Review. 41(2), 626-647. https://doi.org/10.1177/089443932211174
- Hampton, K. N., Hales, G.E., & Bauer, J.M. (2023). Broadband and Student Performance Gaps After the COVID-19 Pandemic. James H. and Mary B. Quello Center, Michigan State University. <a href="https://doi.org/10.25335/r71b-c922">https://doi.org/10.25335/r71b-c922</a>.
- Hampton, Keith Craig T. Robertson, Laleah Fernandez, Inyoung Shin, Johannes M. Bauer (2021).
   How variation in internet access, digital skills, and media use are related to rural student outcomes: GPA, SAT, and educational aspirations. *Telematics and Informatics* 63, 101666.
   <a href="https://doi.org/10.1016/j.tele.2021.101666">https://doi.org/10.1016/j.tele.2021.101666</a>
- Hampton, Keith, Laleah Fernandez, Craig Robertson, and Johannes Bauer (2020). Broadband and Student Performance Gaps. Quello Center, Michigan State University. East Lansing, MI. <a href="https://doi.org/10.25335/BZGY-3V91">https://doi.org/10.25335/BZGY-3V91</a>

# 3. RECENTLY COMPLETED PROJECTS

# 3.1. MOON-Light

In 2022, Merit Network and Michigan State University received a \$10.5 million National Telecommunications and Information Administration (NTIA) Broadband Infrastructure Program Grant to connect Michigan's many disparate Internet pathways. Despite constraints in the advanced



technology supply-chain, the project was completed at the end of May 2024. A ribbon-cutting celbration was held on September 10, 2024 on the campus of Michigan State University in East Lansing, Michigan.

MOON-Light "Lighting Ceremony", September 10, 2024, at Michigan State University,

From Left to Right: Johannes M. Bauer, MSU Professor; Charlotte Bewersdorff, VP Community Engagement, Merit Network; Roger Blake, CEO, Merit Network; Kevin Guskiewicz, MSU President; Keith Hampton, Director of Academic Research, Quello Center

Unlike closed (private) infrastructure networks that offer services from a single service provider to residents, the MOON-Light network will provide regional connectivity through an open-access network approach. Open-access networks (OANs) are high-performance networks that are open to multiple providers that leverage the infrastructure to offer high-capacity broadband services to residents and businesses.

The recording of the event is available here.

# 3.2. Information Seeking, Misinformation, Disinformation

This project, partially funded by a grant from the *John S. and James L. Knight Foundation*, started with an emphasis on information seeking during the COVIE-19 pandemic. It continues as a generalized program of research on how sources of information affect how individuals make sense of complex phenomena. The team continues to mine data collected in three waves of surveys to shed light on information seeking and how different practices influence knowledge about matters of public importance during periods of dynamic change. Such situations, exemplified but not limited to the coronavirus pandemic, necessitate that individuals and organizations make decisions based on incomplete and changing information, often complicated by deliberately misleading information.

Using the unfolding coronavirus pandemic as a case to study the broader phenomenon of information seeking and verification under conditions of uncertainty and rapidly changing information, the research project examines the interplay between political and health information seeking. Controlling socioeconomic and other factors, we are particularly interested in how sources and channels used to obtain, verify, and update information influence individuals' mental models and factual knowledge about the pandemic and appropriate responses.

A team of researchers from Michigan State University, University of North Carolina Charlotte, Oxford University, and Clemson University conducted two nationally representative surveys in the United States and the United Kingdom. We are currently examining four research questions pertaining to theories of information seeking, information verification, and trust in different information sources: (1) What online media, offline media, and other information sources do American and British Internet users rely on and trust during the COVID-19 pandemic, and how do socio-demographic factors influence these choices? (2) (How) Do people update and verify information to deal with incomplete information and uncertain knowledge? (3) How do socio-demographic factors, information sources, and the updating rules used by individuals relate to their perceptions and knowledge about political and health topics related to COVID-19? (4) How do socio-demographic factors, information sources, and the updating rules used by individuals influence behavioral intentions?

#### Publications, Conference Papers, and Policy Briefs

- Blank, G., Bauer, J.M., Knittel M., Ma, W., & Shillair, R. (2023). Formation and Fragmentation of Mental Models in Heterogeneous Media Ecosystems During Times of Complex Crisis. 73rd Annual Conference of the International Communication Association- Media Sociology Post-Conference, Toronto, May 31.
- Blank, G. & Reisdorf, B. (2023), Digital inequalities and public health during COVID-19: Media dependency and vaccination, *Information Communications and Society*, 26(5): 1045-1065. https://doi.org/10.1080/1369118X.2023.2166356.
- Reisdorf, B.C., Blank, G., Bauer, J. M., Cotten, S., Robertson, C.T., & Knittel, M. (2021). Information Seeking Patterns and COVID-19 in the United States. *Journal of Quantitative Description: Digital Media*, 1. https://doi.org/10.51685/jqd.2021.003
- Reisdorf, B.C., Blank, G., Cotten, S., Argyris, A., Robertson, C.T., Knittel, M., & Bauer, J.M. (2021).
   Overcoming COVID-19 Vaccine Hesitancy. Quello Center Policy Brief 02/21,
   <a href="https://quello.msu.edu/wp-content/uploads/2021/03/Quello-Center-COVID-19-Policy-Brief-15-March-2021.pdf">https://quello.msu.edu/wp-content/uploads/2021/03/Quello-Center-COVID-19-Policy-Brief-15-March-2021.pdf</a>.

# 3.3. Governance of Emerging Technologies

This multi-year research initiative seeks to inform policies toward advanced ICT service and applications in the United States, with a current emphasis on 5G wireless services, platform ecosystems, and systemic types of innovation (e.g., smart mobility). Many of the topics addressed will also apply to emergent technologies, including 6G and sub-THz services as well as the Internet of Intelligence (IoI). 5G, 6G and sub-THz wireless services will constitute an integral part of the future gigabit communication network infrastructure. Platform ecosystems have been the focus of much criticism but the drivers of innovation in these markets, and positive and negative effects of digital platforms, are only poorly understood.

Projects in this area will examine how policy choices affect innovation outcomes. The \$100,000 gift from Facebook has helped launch work in this family of projects. Additional proposals are in preparation.

#### **Publications and Working Papers**

- Bauer, J.M. & Prado, T.S. (2024). Digital Innovation: An Information-Economic Perspective. In D. R. Raban & J. Włodarczyk (Eds.), *The Elgar companion to information economics*. Edward Elgar.
- Bauer, J.M., Stocker, V., & Pourdamghani, A. (2023). Innovation Dynamics in the Internet Ecosystem and Digital Economy Policy. Prepared for presentation at the European Conference of the International Telecommunications Society, Madrid, Spain, June 18-19, 2023.
- Prado, T.S. (2022). Emerging Policy and Regulatory Regimes for Digital Platforms: Lessons for U.S. Competition Policy. Paper to be presented at the 31st European Regional Conference of the International Telecommunications Society (ITS) and the 50th Research Conference on Communication, Information, and Internet Policy (TPRC50).
- Prado, T.S., & Bauer, J.M. (2022). Big Tech Platform Acquisitions of Start-ups and Venture Capital Funding for Innovation. *Information Economics and Policy*. <a href="https://doi.org/10.1016/j.infoecopol.2022.100973">https://doi.org/10.1016/j.infoecopol.2022.100973</a>.
- Bauer, J.M. (2022). Toward new guardrails for the information society. *Telecommunications Policy*, 102350. Published online April 6, 2022. <a href="https://doi.org/10.1016/j.telpol.2022.102350">https://doi.org/10.1016/j.telpol.2022.102350</a>.
- Bauer, J.M. & Bohlin, E. (2021). Regulation and innovation in 5G markets. *Telecommunications Policy*, 102260, <a href="https://doi.org/10.1016/j.telpol.2021.102260">https://doi.org/10.1016/j.telpol.2021.102260</a>.
- Knieps, G. & Bauer, J.M. (2021). Internet of things and the economics of 5G-based local industrial networks. *Telecommunications Policy*, 102261, https://doi.org/10.1016/j.telpol.2021.102261.
- Bauer, J.M. and Prado, T.S., Digital Platforms and Innovation: Lessons for Innovation Policy and Regulation (December 15, 2020). Available at: SSRN or DOI.

#### 3.4. Broadband and Educational Achievements

Initiated in 2019, this study was designed to understand the repercussions of absent or poor home Internet connectivity on student performance and the associated costs to society. The focus was on Internet connectivity outside of school among middle and high school students enrolled in rural and small-town schools. Inequalities related to income and race are often used to explain why some people still do not have Internet or broadband access at home. Often overlooked in this discussion is the role of geography and varying levels of infrastructure access. Our study allowed us to disentangle these factors.

The report published in March 2020 was widely read by policymakers and stakeholders. Building on the experience with the Broadband Gap project, we helped Merit Network to develop a toolkit that facilitates a highly granular assessment of the availability and quality of broadband connectivity. During the past year, the approach has been used by several counties across Michigan, including Washtenaw County, Berrien County, and Ottawa County, to assess the state of connectivity among their residents and to develop appropriate responses to overcome gaps and discrepancies. It was also used by several large organizations, including Wayne State University, to identify and help overcome connectivity gaps among students and faculty. The approach is scalable and applicable to state and national level information collection.

#### **Publications and Working Papers**

- Hampton, K.N. & Shin, I. (2023). Disconnection More Problematic for Adolescent Self-Esteem
  than Heavy Social Media Use: Evidence from Access Inequalities and Restrictive Media
  Parenting in Rural America, Social Science Computer Review, 41(2): 626-647. Download at
  https://doi.org/10.1177/08944393221117466.
- Hampton, K.N., Robertson, C.T., Fernandez, L., Shin, I., & Bauer, J.M. (2021). How variation in internet access, digital skills, and media use are related to rural student outcomes: GPA, SAT, and educational aspirations. *Telematics and Informatics*, 101666, https://doi.org/10.1016/j.tele.2021.101666.

#### 4. COMMUNITY AND OUTREACH

#### 4.1. Outreach and Public Service

We were involved in numerous outreach activities at the local, state, and national level, including more than two dozen presentations to practitioners working on BEAD implementation, have given talks at events on the translation of AI research into applications and services, and on the role of AI ethics in safeguarding the benefits of AI.

#### 4.2. In the Media

In response to increasing coverage in news and other online events, we added a new page to our website. See <a href="https://quello.msu.edu/in-the-media/">https://quello.msu.edu/in-the-media/</a>.

# 4.3. Video Library

We have steadily grown our library of archived talks and short interviews with our speakers, archived on Vimeo (see <a href="https://vimeo.com/quellocenter">https://vimeo.com/quellocenter</a>) and YouTube (<a href="https://www.youtube.com/channel/UCeGcOFBPA0wb-OmoYwgUfEQ">https://www.youtube.com/channel/UCeGcOFBPA0wb-OmoYwgUfEQ</a>).

#### 4.4. Online Presence

If you have not already done so, please:

- Check out the Quello Center website at <a href="https://quello.msu.edu/">https://quello.msu.edu/</a>.
- Like our Facebook page at <a href="https://www.facebook.com/QuelloCenter/">https://www.facebook.com/QuelloCenter/</a>.
- Follow our LinkedIn page at <a href="https://www.linkedin.com/company/quellocenter/">https://www.linkedin.com/company/quellocenter/</a>.

# 4.5. SSRN E-Journal

In addition, we have an online working paper archive on the Social Science Research Network (SSRN), currently featuring more than 100 working papers and reports. See: <a href="https://www.ssrn.com/link/Quello-Center-PUB.html">https://www.ssrn.com/link/Quello-Center-PUB.html</a>

#### 5. SELECTED PUBLICATIONS AND PRESENTATIONS<sup>1</sup>

# 5.1. Journal Articles and Conference Proceedings

- **Hales, G. & Hampton, K.** (2025). Rethinking screen time and academic achievement: gender differences and the hidden benefit of online leisure through digital skills. *Information, Communication & Society.* https://doi.org/10.1080/1369118X.2025.2516542.
- Mack, E., Bauer, J. M., Knittel, M., Nam, A., Lee, B., & Bhattacharya, D. (2025). The State of Bead: Assessing Progress Toward Universal Broadband Connectivity. Paper presented at TPRC53, Washington, D.C. September 19-20, 2025. Available at SSRN: <a href="https://ssrn.com/abstract=5376286">https://ssrn.com/abstract=5376286</a>.
- **Hales, Gabriel, and Keith Hampton** (2025). Gender Differences and the Hidden Benefit of Online Leisure Through Digital Skills. *Information, Communication & Society.*
- **Hampton, Keith** and Kelley Cotter (2025). Disrupting Echo Chambers? How Social Media is Related to Social Tolerance Through Network Diversity: Linked Lives Over a Major Life Course Event. *Information, Communication & Society 28*(1), 150-168.
- **Hardy, J.,** Gleason, M., & Battocchio, A. F. (2025). Playing with Rural Design: Design Probe Failure & Community Disconnections. *Proceedings of the 12th International Conference on Communities & Technologies*, 339–355. <a href="https://doi.org/10.1145/3742800.3742830">https://doi.org/10.1145/3742800.3742830</a>
- **Hardy, J.** (2024). Transforming the Rural Asset: Advancing Rural Place through Cultural Assets in the American High-Tech Economy. *Community Development*, 55(6), 823-841, https://doi.org/10.1080/15575330.2023.2301704
- **Hardy, J.**, & Thebault-Spieker, J. (2024). A Turn to Assets in Community-Based Computing Research: Tradeoffs, Deficits, and Neoliberalism in Technological Development. *Proceedings of the ACM on Human-Computer Interaction*, 8(CSCW1), 14:1-14:20. <a href="https://doi.org/10.1145/3637291">https://doi.org/10.1145/3637291</a>
- **Bauer, J.M.** (2023). Federal-Local Realignment of Broadband Policy and Digital Equity in the United States. 2023 Urban Affairs Association Conference, Nashville, TN, April 26-29, 2023.
- **Blank, G., & Reisdorf, B.** (2023), Digital inequalities and public health during COVID-19: Media dependency and vaccination, published online on 12 January 2023, Information Communications and Society. <a href="https://doi.org/10.1080/1369118X.2023.2166356">https://doi.org/10.1080/1369118X.2023.2166356</a>.
- **Bauer, J.M.** (2022). Toward new guardrails for the information society. *Telecommunications Policy*, 102350. Published online April 6, 2022. <a href="https://doi.org/10.1016/j.telpol.2022.102350">https://doi.org/10.1016/j.telpol.2022.102350</a>.
- **Hampton, K.N.** & **Shin, I.** (2022). Disconnection More Problematic for Adolescent Self-Esteem than Heavy Social Media Use: Evidence from Access Inequalities and Restrictive Media Parenting in Rural America, *Social Science Computer Review*, published online August 5, 2022. Download at https://doi.org/10.1177/08944393221117466.

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<sup>&</sup>lt;sup>1</sup> In reverse chronological order within each subsection.

- **Prado, T.S.** & **Bauer, J.M.** (2022). Big Tech Platform Acquisitions of Start-ups and Venture Capital Funding for Innovation. *Information Economics and Policy*. 59, June, 100973. <a href="https://doi.org/10.1016/j.infoecopol.2022.100973">https://doi.org/10.1016/j.infoecopol.2022.100973</a>.
- Shillair, R., Esteve-González, P., Dutton, W.H., Creese, S., Nagyfejeo, E., Von Solms, B. (2022). National Level Evidence-Based Results, Challenges, and Promise, *Computers & Security*, <a href="https://doi.org/10.1016/j.cose.2022.102756.">https://doi.org/10.1016/j.cose.2022.102756.</a>
- Creese, S., **Dutton, W.H.**, Esteve-Gonzalez, P. & **Shillair, R.** (2021). Cybersecurity Capacity Building: Cross-National Benefits and International Divides. Forthcoming in the *Journal of Cyber Policy*. <a href="https://doi-org.proxy1.cl.msu.edu/10.1080/23738871.2021.1979617">https://doi-org.proxy1.cl.msu.edu/10.1080/23738871.2021.1979617</a>.
- **Bauer, J.M.** & Bohlin, E. (2021). Regulation and Innovation in 5G Markets. Telecommunications Policy, 102260, <a href="https://doi.org/10.1016/j.telpol.2021.102260">https://doi.org/10.1016/j.telpol.2021.102260</a>.
- Knieps, G. & **Bauer, J.M.** (2021). Internet of Things and the Economics of 5G-based Local Industrial Networks. *Telecommunications Policy*, 102261, <a href="https://doi.org/10.1016/j.telpol.2021.102261">https://doi.org/10.1016/j.telpol.2021.102261</a>.
- **Shin, I.,** & **Hampton, K.N.** (2021). New Media Use and the Belief in a Just World: Awareness of Life Events and the Perception of Fairness for Self and Injustice for Others. *Information, Communication & Society,* 1-17. <a href="https://doi.org/10.1080/1369118X.2021.1950804">https://doi.org/10.1080/1369118X.2021.1950804</a>.
- **Hampton, K.N., Robertson, C.T., Fernandez, L., Shin, I.** & **Bauer, J.M.** (2021). How variation in Internet access, digital skills, and media use are related to rural student outcomes: GPA, SAT, and educational aspirations. *Telematics and Informatics* 63, 101666, <a href="https://doi.org/10.1016/j.tele.2021.101666">https://doi.org/10.1016/j.tele.2021.101666</a>.
- Reisdorf, B.C., Blank, G., Bauer, J. M., Cotten, S., Robertson, C.T., & Knittel, M. (2021). Information Seeking Patterns and COVID-19 in the United States. *Journal of Quantitative Description: Digital Media*, 1. <a href="https://doi.org/10.51685/jqd.2021.003">https://doi.org/10.51685/jqd.2021.003</a>
- **Prado, T.S.** & **Bauer, J.M.** (2021). Improving broadband policy design using market data: A general framework and application to Brazil, *Telecommunications Policy*, 45(5), 102111, <u>DOI</u>.
- Banerjee, S.; Swearingen, T.; **Shillair, R.; Bauer, J.M.**; Holt, T.J.; & Ross, A. (2021). Using machine learning to examine cyberattack motivations on web defacement data. *Social Science Computer Review*. Published online on 23 February 2021, <u>DOI</u>.
- Holt, T.J.; Lee, J.R.; Freilich, J.D.; Chermak, S.M.; **Bauer, J.M.**; **Shillair, R.** & Ross, A. (2020) An exploratory analysis of the characteristics of ideologically motivated cyberattacks, *Terrorism and Political Violence*, <a href="https://doi.org/10.1080/09546553.2020.1777987">https://doi.org/10.1080/09546553.2020.1777987</a>.
- Feijóo, C.; Kwon, Y.; **Bauer, J.M.**; Bohlin, E; Howell, B.; Jain, R.; Potgieter, P.; Vu, K.; Whalley, J.; & Xia, J. (2020). Harnessing AI to increase wellbeing for all: The case for a new technology diplomacy, *Telecommunications Policy*, 44(6), 101988, <a href="https://doi.org/10.1016/j.telpol.2020.101988">https://doi.org/10.1016/j.telpol.2020.101988</a>.
- Hong, S.J.; **Bauer, J.M.**; Lee, K.; Granados, N.F. (2020). Drivers of supplier participation in ridehailing services, *Journal of Management Information Systems*, 37(3), 602-630. https://doi.org/10.1080/07421222.2020.1790177

- **Robertson, C.T.,** & Mourão, R. (2020). Faking alternative journalism? An analysis of self-presentations of "fake news" sites. *Digital Journalism*, published online 25 March 2020, DOI: 10.1080/21670811.2020.1743193.
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- Astorne-Figari, C., López, J.J., & **Yankelevich, A.** (2019). Advertising for consideration. *Journal of Economic Behavior & Organization, 157*, 653-669.
- **Dutton, W.H.**, and **Fernandez, L.** (2018/19), 'How Susceptible Are Internet Users?', *InterMEDIA*, December/January 2018/19 46(4): 36-40.
- **Dutton, W.H.**, Creese, S., **Shillair, R.**, & Bada, M. (2019). Cybersecurity Capacity: Does It Matter? *Journal of Information Policy*, 9, 280-306.
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- **Hampton, K.N.** (2019). Social Media and Change in Psychological Distress over Time: The Role of Social Causation. *Journal of Computer-Mediated Communication*.
- Mack, E.A., **Dutton, W.H.,** Rikard, R.V., & **Yankelevich,** A. (2019). Mapping and measuring the information society: A social science perspective on the opportunities, problems, and prospects of broadband Internet data in the United States. *The Information Society, 35*(2), 57–68.
- Marin, A., & **Hampton, K.N.** (2019). Network Instability in Times of Stability. *Sociological Forum,* 34(2): 313-336.
- **Reisdorf, B.C., Yankelevich, A., Shapiro, M., & Dutton, W.H.** (2019). Wirelessly bridging the homework gap: Technical options and social challenges in getting broadband to disconnected students. *Education and Information Technology,* 24, 3803–3821. <a href="https://doi.org/10.1007/s10639-019-09953-9">https://doi.org/10.1007/s10639-019-09953-9</a>
- **Robertson, C.T., Dutton, W.H.,** Ackland, R., & Peng, T.-Q. (2019). The democratic role of social media in political debates: The use of Twitter in the first televised US presidential debate of 2016. *Journal of Information Technology & Politics*, 1–14.

# 5.2. Books and Chapters

**Bauer, J.M.** (2025). Federal-state realignment of broadband and digital equity policy in the United States, in: M. E. Warner, N. A. Bravo, & D. Shen (eds.), *Bridging the digital divide in the US: Planning innovative state and local approaches* (pp. 27-42), Routledge.

- **Hardy, J.** (2025). Rural Expertise & the Sewer. In M. Gugganig, K. Bronson, and V. Mirza (Eds.), *The Smartification of Everything: Critical Analyses of a Ubiquitous Reality across Social Sciences, Humanities and the Arts.* University of Toronto Press.
- **Bauer, J.M.** & Latzer, M. (2024). Co-evolution: Applications and Implications for Governance Research in Media and Communication Studies. In: R. Mansell, M. Puppis, & H. van der Bulck (eds.), *Handbook of Media and Communication Governance*. Cheltenham, UK & Northampton, MA: Edward Elgar.
- **Bauer, J.M., & Prado, T.S.** (2024). Digital innovation: An Information-Economic Perspective. In D. R. Raban & J. Włodarczyk (eds.), *The Elgar Companion to Information Economics*. Edward Elgar
- **Bauer, J.M.** (2022). A framework for 5G and 6G market design. In E. Bohlin & F. Cappelletti (eds.), *Europe's future connected: Policies and challenges for 5G and 6G networks* (pp. 20-30), Brussels, Belgium: European Liberal Forum.
- **Bauer, J.M.** (2022). Agile Regulation: Towards Flexible Governance of the Digital Economy. In: F. Birke, G. Brunekreeft, V. Stocker, & H.-J. Weiß (eds.), *Perspektiven der Netzökonomie*. Baden-Baden: Nomos Verlag.
- **Bauer, J.M.** & **Dutton, W.H.** (2021). "A nova agenda de cibersegurança: desafios econômicos e sociais para uma Internet segura," in: NIC.br (ed.), *Segurança Digital: uma análise de gestão de risco em empresa brasileiras*, Sao Pãulo, Brazil: Cadernos NIC.br Estudos Setoriais.
- **Hampton, K.N.** and Wellman, B. (2021). All the Lonely People? The Continuing Lament about the Loss of Community. In L. Lievrouw and B. Loader (Eds.), *Routledge Handbook of Digital Media and Communication*. Abingdon, UK. Routledge. 281-296.
- **Fernandez, L.** (2020). Digital Advertising in Political Campaigns and Elections. In W. H. Dutton (Ed.), A Research Agenda for Digital Politics. Edward Elgar Publishing.
- Creese, S., **Shillair, R.**, Bada, M., **Reisdorf, B.C.**, Roberts, T., & **Dutton, W.H.** (2019). The Cybersecurity Capacity of Nations. In M. Graham & W.H. Dutton (Eds.), *Society and the Internet: How Networks of Information and Communication are Changing our Lives* (2nd ed.). Oxford: Oxford University Press.
- **Dutton, W.H.** (2019). Wired City. In A.M. Orum (Ed.), *The Wiley Blackwell Encyclopedia of Urban and Regional Studies* (1st ed.).
- **Dutton, W.H., Reisdorf, B.C.,** Blank, G., Dubois, E., & **Fernandez, L.** (2019). The Role of Search and social media in Shaping Public Opinion. In M. Graham & W. H. Dutton (Eds.), *Society and the Internet: How Networks of Information and Communication are Changing our Lives* (2nd ed.). Oxford: Oxford University Press.
- Graham, M., and **Dutton, W.H.** with a foreword by Manuel Castells (2019) (eds), *Society and the Internet, 2nd Edition: How Networks of Information and Communication are Changing our Lives.* Oxford: Oxford University Press.
- **Reisdorf, B.C.,** Blank, G., & **Dutton, W.H.** (2019). Internet Cultures and Digital Inequalities. In M Graham & W. H. Dutton (Eds.), *Society and the Internet: How Networks of Information and Communication are Changing our Lives* (2nd ed.). Oxford: Oxford University Press.

# **5.3. Technical Reports**

- **Bauer, J.M.** (2025). An Assessment of Proposals to Reform the Broadband Equity Access and Deployment Program (BEAD). Quello Center Working Paper 01-25, June 5, 2025. Available at SSRN: https://ssrn.com/abstract=5296353
- Bauer, J.M., Mack, E., Nam, A., Lee, Boram, & Knittel, M. (2025). Assessing the Effects of the Infrastructure Investment and Jobs Act on High-Speed Internet Access, Digital Equity, and Community Development. Revised and Updated, East Lansing, Michigan: Quello Center at Michigan State University.
- Mack, E., Bauer, J. M., Knittel, M., Nam, A., Lee, B., & Bhattacharya, D. (2025). The State of Bead: Assessing Progress Toward Universal Broadband Connectivity. Paper presented at TPRC53, Washington, D.C. September 19-20, 2025. Available at SSRN: https://ssrn.com/abstract=5376286.
- **Quello Center** (2025). Data Requirements for the Effective Evaluation of the Restructured BEAD Program. A Guide and Checklist for Practitioners. East Lansing, Michigan: Quello Center at Michigan State University.
- Knittel, M., Mack, E., Nam, A., & Bauer, J.M., (2024). Assessing the Effects of the Infrastructure Investment and Jobs Act on High-Speed Internet Access, Digital Equity, and Community Development. Opportunities and Challenges of Measuring the Impact of Broadband Policy. East Lansing, Michigan: Quello Center at Michigan State University, October 2024.
- Rhinesmith, C., Dagg, P.R., Bauer, J.M., Byrum, G., & Schill, A. (2023). Digital opportunities compass: Metrics to monitor, evaluate, and guide broadband and digital equity policy. Working paper, Ann Arbor, MI: Merit Network, Inc. and East Lansing, MI.
- **Bauer, J.M.** (2023). US leadership in digital platform policy. AEI Digital Platforms and American Life Project. Washington, DC, American Enterprise Institute. <a href="https://platforms.aei.org/author/jbauer/">https://platforms.aei.org/author/jbauer/</a>
- Reisdorf, B.C., Blank, G., Cotten, S., Argyris, A., Robertson, C.T., Knittel, M., & Bauer, J.M. (2021). Overcoming COVID-19 Vaccine Hesitancy. *Quello Center Policy Brief* 02/21.
- **Bauer, J.M., Hampton, K.N., Fernandez, L.H., & Robertson, C.T. (2020).** Overcoming Michigan's homework gap: The role of broadband Internet connectivity for student success and career outlooks. Quello Center Working Paper No. 06-20.
- Hampton, K. N., Fernandez, L.H., Robertson, C.T., & Bauer, J. M. (2020). Broadband and Student Performance Gaps. James H. and Mary B. Quello Center, Michigan State University. 3 March 2020, DOI.

#### 5.4. Selected Recent Conference Presentations

Quello Center-affiliated researchers presented papers at important national and international academic conferences and at professional meetings. Following is a small selection of a few recent ones.

- Mack, E., Bauer, J. M., Knittel, M., Nam, A., Lee, B., & Bhattacharya, D. (2025). The State of Bead: Assessing Progress Toward Universal Broadband Connectivity. Paper presented at TPRC53, Washington, D.C. September 19-20, 2025. Available at SSRN: <a href="https://ssrn.com/abstract=5376286">https://ssrn.com/abstract=5376286</a>.
- **Hardy, J.,** Gleason, M., & Battocchio, A. F. (2025). Playing with Rural Design: Design Probe Failure & Community Disconnections. *Proceedings of the 12th International Conference on Communities & Technologies*, 339–355. <a href="https://doi.org/10.1145/3742800.3742830">https://doi.org/10.1145/3742800.3742830</a>
- **Hampton, Keith & Gabriel Hales** (2025, August). Misplaced Harms and Gender Differences in Adolescent Self-Esteem and Social Media Use: A Longitudinal Study. American Sociological Association, Chicago, IL.
- **Hampton, Keith & Gabriel Hales** (2025, June). Social Media and Change in Adolescent Self-Esteem Over Time: Pathologizing Friendship and the Stand-in Theory of Informal Socializing. International Communication Association. Denver, CO.