

JUNE 1-2, 2022  
FAWCETT CENTER



# QUANTITATIVE METHODOLOGY CENTER 2022 CONFERENCE

## WHY DOES QUANTITATIVE RESEARCH MATTER?



THE OHIO STATE UNIVERSITY

COLLEGE OF  
EDUCATION AND HUMAN ECOLOGY

**Welcome Letter—Dean Don Pope Davis**  
**College of Education and Human Ecology**  
**The Ohio State University**

Dear Conference Participants:

On behalf of the faculty, staff, and students of the College of Education and Human Ecology, our Office of Research, Innovation, and Collaboration, and the Quantitative Methodology Center, I would like to extend our warmest welcome to all participants of the inaugural QMC22: *Why Quantitative Research Matters: An Interdisciplinary Approach Toward Equity and Capacity Building from Local to International Reach*.

QMC22 centers the importance of quality research and the development of quantitative methodologies that advance our scholarship and shared understandings. This conference also gives us an opportunity to forge new partnerships and encourage collaboration between research institutions both within the country and with international partners.

The broad scope of this event is to provide opportunities to engage attendees and presenters in dialogue on quantitative research and its role in addressing issues of inequity. QMC22 will showcase sessions for you to learn how quantitative, interdisciplinary work is being done locally and globally to address disparities in education, health, technological access, and other important topics. This forum also provides a glimpse into future possibilities of how we might construct a future where collaboration across public, private, and non-profit sectors become the norm.

I would like to express my gratitude to Dr. Beverly Vandiver for her leadership and to the conference planning committee for their efforts in putting together an excellent program with many distinguished presenters, engaging sessions, and opportunities for participants to network and connect.

Over the next two days, your active participation will be needed to ensure that this conference is a success. I encourage you to use this time to engage in rich discussions, ask questions, and gain new insights to apply to your own scholarship.

Thank you for joining us.

Sincerely,



Dean Don Pope Davis

## QMC22 Conference: Why Quantitative Research Matters

**Welcome Letter—Natasha Slesnick**  
**Associate Dean for Research**  
**College of Education and Human Ecology,**  
**The Ohio State University**

Dear Colleagues,

On behalf of the Office of Research, Innovation and Collaboration (ORIC) in the College of Education and Human Ecology at The Ohio State University, we wish to welcome you - the esteemed speakers, researchers, and students - from across the country and world, to the inaugural Quantitative Methodology Center 2022 Conference (QMC 2022).

We have observed a long-overdue increase in federal and local scientific calls for research focused on reversing health and social justice inequities in our society. The need for multi-level and multi-disciplinary discussions with the scientific community has never been higher. QMC22 uniquely offers multiple contexts for discussion of innovative methods and ideas for how quantitative methodologies can be employed to further equity and justice in our times. Multiple contexts for exchange are available, including symposia, flash talk presentations, panel sessions, poster presentations, and roundtable discussions. Networking opportunities are also offered with the hope that new connections and ideas can percolate and grow into impactful scientific efforts to change our communities for the better.

Enjoy the conference!

Best,



Natasha Slesnick

## QMC22 Conference: Why Quantitative Research Matters

### **Welcome from the Co-Chairs, Beverly Vandiver & Brian Timm**

Hello Everyone,

Welcome to our inaugural conference on quantitative methodology.

What would our world look like without quantitative research? Quantitative research is woven into the fabric of humanity, and the lifestyle of nearly every human being on the planet. Would we have the tools to address major societal issues, from hunger to housing insecurity? How might our understanding of diseases and vaccines be radically shifted without the knowledge derived from quantitative research?

Sound quantitative research has the capacity to address systemic inequalities and better our world.

Yet, the messaging about quantitative research needs improvement. Despite its benefit to daily living, skepticism and lack of confidence in science have been documented both among college students and the general public alike (Murtonen, 2015; Pew Research Center, 2020). Suspicion about quantitative research is warranted, evidenced from infamous studies such as the American Tuskegee Experiment to the continued underrepresentation of Black and Hispanic scholars within quantitative research. Despite these historic and persistent concerns now more than ever, it is critical that the public understand the importance of quantitative research, science, and social sciences.

Thus, the key goal of the QMC22 Conference is to highlight why quantitative research matters. The QMC22 is designed to provide opportunities to engage attendees and presenters in research and dialogue on how quantitative research can address issues of equity within and across disciplines and methods alike. Furthermore, the QMC22 will showcase opportunities to learn how quantitative, interdisciplinary work is being done from a local to international level to address disparities in education, health, technological access, and beyond. Finally, the QMC22 offers a chance to discuss how our future can look with regards to collaboration between the public, private, and non-profit sectors to better our world.

We hope you will join us for this ambitious event.

With Warm Regards,



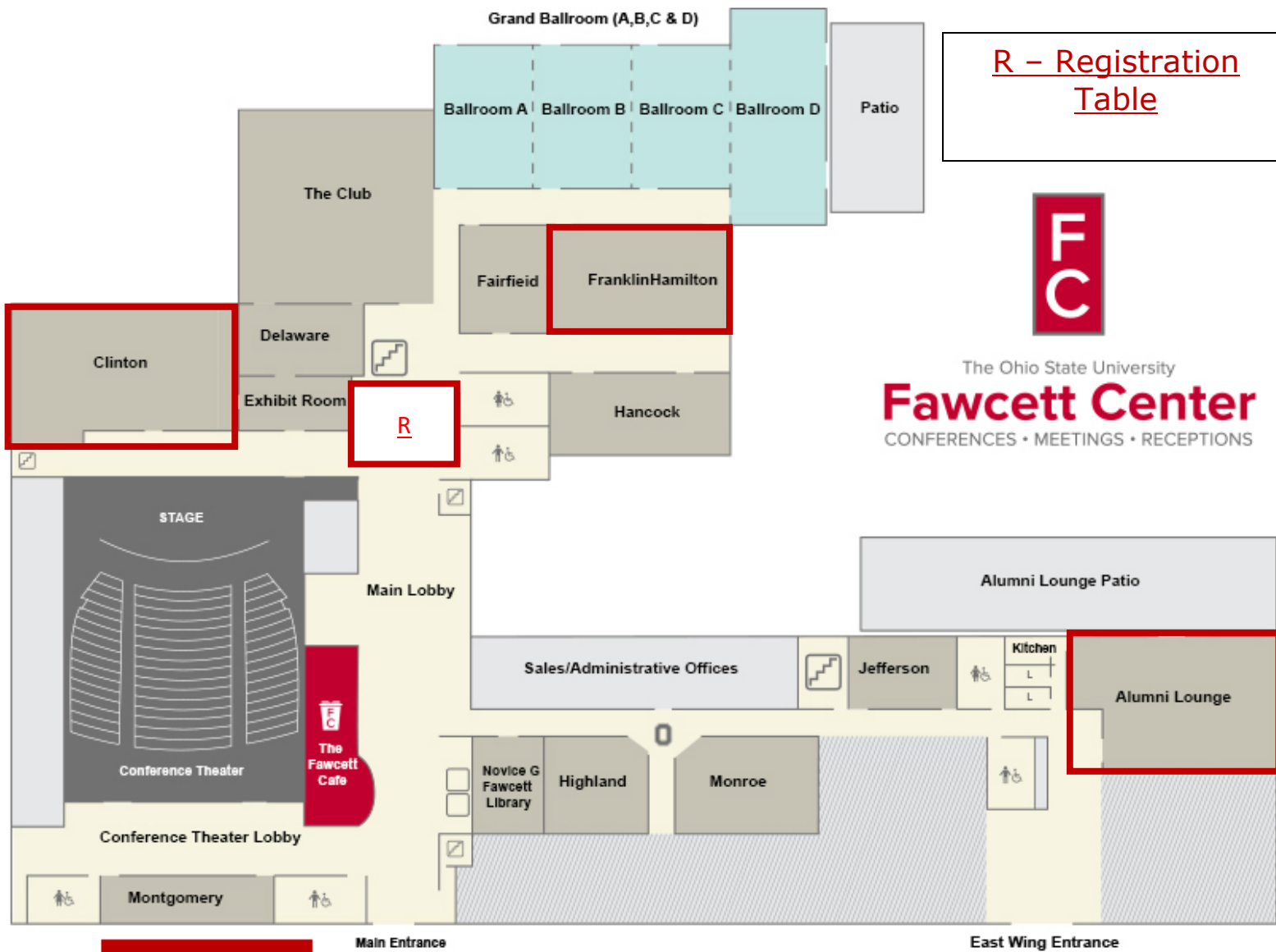
Beverly J. Vandiver, PhD  
Director



Brian J. Timm, PhD  
Associate Director

Quantitative Methodology Center

## Conference Location (Breakout Rooms in Red)



	<b>Wednesday, June 1, 2022</b> *In-Person **Virtual	
AM 7:45	<b>Registration Opens</b>	Lobby
8:00 9:00	<b>Breakfast</b>	The Club Room
9:00 10:15	<b>Welcome</b> Beverly J. Vandiver* & Brian Timm* Dean Don Pope Davis*, Phillip T. K. Daniel*, Professor Emeritus of Educational Studies The Ohio State University  <b>Keynote Address</b> Freeman A. Hrabowski III*, President University of Maryland, Baltimore County	Ballroom
10:30 11:30	<b>Invited Talk</b> <i>Tableau's Data Equity Hub</i> Channing Nesbitt** & Owen Mattison* Tableau Foundation	Clinton Room
10:30 11:30	<b>Paper Session 1</b> 1. <i>Pervasive Measurement Bias</i> Paul De Boeck** & Selena Wang The Ohio State University  This research presents a new method to investigate measurement bias in tests, both cognitive tests and non-cognitive, including high-stakes tests of both kinds.  2. <i>Measurement Invariance and Intersectionality</i> Jingdan Zhu* & Paul De Boeck The Ohio State University  The current research proposes two possible statistical approaches for the equity assessment of construct measures, with variables such as gender, race/ethnicity, age, and socioeconomic status.	Alumni Lounge

	<p style="text-align: center;"><b>Wednesday, June 1, 2022</b></p> <p style="text-align: center;">*In-Person **Virtual</p>	
<p>AM 10:30 11:30</p>	<p style="text-align: center;"><b>Symposium 1</b></p> <p style="text-align: center;"><i>Applying Quantitative Methods in Research on One Health Ethics and Regulatory Procedures</i></p> <ol style="list-style-type: none"> <li>1. <i>Quantitative Research and Bioethics: The 'Is-Ought' Problem</i> Donal O'Mathuna* The Ohio State University</li> <li>2. <i>Application of Statistical Methods to Analyze Ethical Challenges and Opportunities in One Health Research in Africa</i> Jinjian Mu*, The Ohio State University Joseph Nguta, University of Nairobi, Kenya Kuastros Belaynehe, National Animal Health Diagnosis and Investigation Center, Ethiopia Getnet Yimer Ali, Global One Health initiative (GOHi) Andréia Arruda, The Ohio State University</li> <li>3. <i>Description of Ethical Challenges and Opportunities in Review of One Health Research in Africa</i> Joseph Nguta**, University of Nairobi, Kenya Kuastros Belaynehe Andréia Arruda Jinjian Mu Dónal O'Mathúna</li> <li>4. <i>Investigating the Effect of Demographic Factors on Perceptions of Challenges and Recommendations for Ethics Review of One Health Research in Africa</i> Kuastros Belaynehe**, National Animal Health Diagnosis &amp; Investigation Center, Ethiopia Joseph Nguta Getnet Yimer Ali Jinjian Mu Andréia Arruda</li> </ol> <p>Through the lens of One Health and its various projects, questions about ethnics and its applications in quantitative research will be explored as well as challenges and recommendations for improving ethics review systems and regulation.</p>	<p>Franklin-Hamilton Room</p>
<p>11:45 1:00 PM</p>	<p style="text-align: center;"><b>Lunch &amp; Keynote Address</b></p> <p style="text-align: center;">Dean Don Pope-Davis* College of Education and Human Ecology, The Ohio State University</p>	<p>Ballroom</p>

	<p style="text-align: center;"><b>Wednesday, June 1, 2022</b></p> <p style="text-align: center;">*In-Person **Virtual</p>	
<p>PM 1:15 2:15</p>	<p style="text-align: center;"><b>Paper Session 2</b></p> <p style="text-align: center;"><i>Community-Engaged Research and the Digital Divide: What We Learned Working with the Bhutanese Refugee Community, Columbus, OH</i></p> <p style="text-align: center;">Jeffrey Cohen*, Arati Maleku, &amp; Shambika Raut The Ohio State University</p> <p style="text-align: center;">Sudarshan Pyakurel, The Bhutanese Community of Central Ohio Francisco Montiel-Ishino, National Institute on Minority Health and Health Disparities Taku Suzuki, Denison University</p> <p>Mixed methods were used to map the local expression of the digital divide, its inherent inequalities, and to develop a series of collaborative interventions to define the dynamics of the digital divide to with refugees and at-risk communities.</p>	<p>Franklin-Hamilton Room</p>
<p>1:15 2:15</p>	<p style="text-align: center;"><b>Roundtable Discussions</b></p> <p>1. <i>Chicago Alliance For Equity in Computer Science (CAFECS): Supporting Equitable Access and Outcomes in Computer Science Coursework</i></p> <p style="text-align: center;">Kristi Donaldson*, Raisa Blazquez, &amp; Steven McGee The Learning Partnership Lucia Dettori, DePaul University Erin Henrick, Partner to Improve Andrew Rasmussen, Chicago Public Schools</p> <p>The Exploring Computer Science (ECS) curriculum was found to increase student interest in pursuing additional computer science courses and was effective preparation for the Advanced Placement computer science courses but specific equity gaps were also observed. The problem-solving cycle used to address this problem of practice.</p> <p>2. <i>Experiences of Graduate Women of Color During COVID-19: A Mixed Methods Study Using Critical Quantitative Methods</i></p> <p style="text-align: center;">Tori Rehr*, Association of Independent Colleges &amp; Universities of Ohio Ruth Lu* &amp; LaVada Washington*, The Ohio State University</p> <p>The purpose of this roundtable is discuss using a more congruent mixed methods approach via critical quantitative theory to shape a survey project on the experiences of graduate women of color during COVID-19.</p>	<p>Alumni Lounge</p> <p>No Live Stream</p> <p>No Live Stream</p>



	<p style="text-align: center;"><b>Wednesday, June 1, 2022</b></p> <p style="text-align: center;">*In-Person **Virtual</p>	
PM 1:15 2:15	<p style="text-align: center;"><b>Symposium 2</b></p> <p style="text-align: center;"><i>Local Context, Local Data – Part I: How Data at the Local Level can Advance Equity</i></p> <ol style="list-style-type: none"> <li>1. <i>An Equity Lens on Assessment for and of Learning</i> Aarti Bellara*, The Ohio State University</li> <li>2. <i>Data Walks for Multiple Stakeholder Engagement</i> Tracey Stuckey*, The Ohio State University</li> <li>3. <i>Variation in Data Engagement within Local School Districts</i> Minjung Kim**, The Ohio State University Iksang Yoon*, The Ohio State University</li> </ol> <p>Part I of this two-part symposium series focuses on (1) equity lens on assessment for and of learning, (2) data walks for multiple stakeholder engagement, and (3) variation in data engagement within local schools and districts.</p>	Clinton Room
2:30 3:30	<p style="text-align: center;"><b>Invited Panel</b></p> <p style="text-align: center;"><i>Disparity, Disease, and Data: What Two Years of Monitoring, Modeling, and Mitigating COVID-19 Taught Us</i></p> <p>Mikkel Quam**, Joseph Tien*, Tanya Berger-Wolf**, Ayaz Hyder*, Translational Data Analytics Institute, The Ohio State University Jamie Carmichael, Ohio Department of Health</p>	Alumni Lounge
2:30 3:30	<p style="text-align: center;"><b>Invited Panel</b></p> <p style="text-align: center;"><i>Equity in Quantitative Research – Part I: Graduate Student Experiences</i></p> <p>Abena Anyidoho*, Mark Jones*, Saetbyul Kim**, Victoria Olivo**, Krista Scott**, &amp; Paul Whalen* The Ohio State University</p> <p><b>Moderator:</b> Wu Xie*, The Ohio State University</p> <p>What does equity in quantitative research mean for graduate students, and are there equity barriers to quantitative research? Graduate students will share their different experiences in learning about and engaging in quantitative research.</p>	Franklin-Hamilton Room

	<b>Wednesday, June 1, 2022</b> *In-Person **Virtual	
PM 2:30 3:30	<p align="center"><b>Symposium 3</b>  <i>Local Context, Local Data – Part II:  How Data at the Local Level Can Advance Equity</i></p> <ol style="list-style-type: none"> <li><i>Practical Approaches for School Leadership in their Use of Statewide Data</i>  Dustin Miller*, The Ohio State University  Jaime Stewart, Dublin City Schools</li> <li><i>A Simple Disparity Calculator for Quantifying Racial Disparities in Discipline Decisions</i>  Natasha Bowen*, The Ohio State University</li> <li><i>Building Capacity for Data Use through Partnerships and Training Opportunities</i>  Ann O’Connell*, The Ohio State University</li> </ol> <p>Part II of this two-part symposium series focuses on (1) practical approaches for school leadership in their use of statewide data, (2) use of a Disparity Calculator for quantifying racial disparities in discipline decisions, and (3) building capacity for data use through partnerships and training opportunities.</p>	Clinton Room
3:30 3:45	<b>Snack Break</b>	Exhibit Room
3:45 4:45	<p align="center"><b>Keynote Address</b>  Vivian OTA WANG**, Lead,  Policy and COVID Activities, National Institutes of Health</p>	Ballroom
5:00 7:00	<b>Reception &amp; Poster Session</b>	Ballroom D
5:00 6:00	<p align="center"><b>List of Posters</b>  (Numbered in order of poster placement)  Posters with author’s name and * are in person &amp; also posted in CVENT.  Those with ** are online and their posters will be presented  on a designated monitor in the Ballroom</p> <ol style="list-style-type: none"> <li><i>Advancing Equity in Quantitative Research Through Community Partnerships</i>  Annette Ponnock*, Yale University</li> </ol> <p>This presentation examines an example of community-based participatory research that centers the voices and experiences of Black and Latino educators during the COVID-19 pandemic.</p>	Ballroom D  No Live Stream

	<b>Wednesday, June 1, 2022</b> *In-Person **Virtual	
PM 5:00 6:00	<p style="text-align: center;"><b>List of Posters (cont.)</b> (Numbered in order of poster placement)</p> <p>Posters with author's name and * are in person &amp; also posted in CVENT. Those with ** are online and their posters will be presented on a designated monitor in the Ballroom</p> <p><i>2. Characterization of Carbapenem Resistant Enterobacteriaceae from Nairobi River, Wastewater Treatment Plant and Slaughterhouse in Nairobi, Kenya</i> Rael Too**, The University of Nairobi, Kenya Dixie Mollenkopf, The Ohio State University George Gitao &amp; Lilly Bebor, The University of Nairobi, Kenya Sam Kariuki, Kenya Medical Research Institute, Kenya</p> <p>This study focused on the examining the presence of Carbapenemase-producing Enterobacteriaceae (CPE), a rare and highly multidrug resistant bacteria often associated with hospitalized patients in wastewater (Nairobi River and Dagoretti Slaughterhouse) and its impact on public health.</p> <p><i>3. Learning to Speak [My] Parents' Language: A Quasi-Experimental Design</i> Mai Zaru*, Southern Methodist University</p> <p>The focus of this study was on Peer Assisted Learning Strategies (PALS) and its use to partner Arab American children with their parents to explore the promising effects of PALS in Arabic and demonstrate the feasibility of its implementation.</p> <p><i>4. DEI Self-Efficacy Scale: Pilot Validation with Educators</i> Heather Price* &amp; Meiko Lin, Loyola University Chicago Kelly Ferguson, Equality &amp; Equity Group Candace Kyles &amp; Malik Henfield, Loyola University Chicago</p> <p>This study reports the pilot results from a new Diversity, Equity, and Inclusion (DEI) self-efficacy index developed as part of an all-day "DEI 101" workshop with K-12 educators.</p> <p><i>5. Designing Regression Discontinuity Studies to Detect Multilevel Mediation Effects</i> Fangxing Bai*, Benjamin Kelcey, &amp; Yanli Xie University of Cincinnati Kyle Cox, University of North Carolina at Charlotte</p> <p>Researchers developed closed-form expressions to estimate the statistical power to detect the indirect/mediation effects in multilevel (2 levels) clustered RDD.</p>	<p>Ballroom D</p> <p>No Live Stream</p>

	<b>Wednesday, June 1, 2022</b> *In-Person **Virtual	
PM 5:00 6:00	<p style="text-align: center;"><b>List of Posters (cont.)</b> (Numbered in order of poster placement)</p> <p>Posters with author's name and * are in person &amp; also posted in CVENT. Those with ** are online and their posters will be presented on a designated monitor in the Ballroom</p> <p style="text-align: center;"><i>6. From Personal Experience to Deductive Qualitative Research: Racial Minorities' Routine Activities and Crime Victimization</i> Hyunjung Shim*, University of Cincinnati</p> <p>This poster proposes a study design that utilizes the pattern matching method, a deductive qualitative research approach, to examine whether racial minorities, particularly Asians, have distinctive routine activities to protect themselves from crime victimization.</p> <p style="text-align: center;"><i>7. Hidden Gems: Exploring Underrepresented Girls' STEM Identities and Career Interests in Informal STEM Learning Environments</i> Marc Sager*&amp; Saki Milton, Southern Methodist University</p> <p>This mixed-methods research design aims to disclose the design, execution, and evaluation of a potentially scalable and sustainable informal STEM learning program intervention designed for underserved and underrepresented (UUG) middle school girls.</p> <p style="text-align: center;"><i>8. How Housing Diversity Helped and Hindered COVID-19 Spread Among Students: A Hazard Model Study Proposal</i> Maria Krantz**, The Ohio State University</p> <p>This study aims to quantify factors that influenced SARS-CoV-2 infection risk among undergraduate students at a large, public university during the unique 2020-2021 academic year when such mitigation strategies were utilized.</p> <p style="text-align: center;"><i>9. Identifying Factors Contributing to Student Thriving at a Public University in Benin</i> Oumarou Abdoulaye Balarabe**, Ohio University</p> <p>Using the theory of thriving, this study examined the activities, practices, or experiences that contribute to students' thriving at a public university in Benin.</p>	Ballroom D  No Live Stream

	<p style="text-align: center;"><b>Wednesday, June 1, 2022</b></p> <p style="text-align: center;">*In-Person **Virtual</p>	
<p>PM 5:00 6:00</p>	<p style="text-align: center;"><b>List of Posters (cont.)</b> (Numbered in order of poster placement)</p> <p>Posters with author's name and * are in person &amp; also posted in CVENT. Those with ** are online and their posters will be presented on a designated monitor in the Ballroom</p> <p><i>10. Culturally Inclusive Coding Manual for Quantifying the Relationship Between Socialization Goals and Sources</i> Shanvanth Arnipalli*, The Ohio State University Meingold Hiu-Ming Chan, The University of British Columbia Xin Feng, The Ohio State University</p> <p>This study focuses on parental socialization goals shaped by the environmental sociological imagination theoretical framework between Beijing and Hong Kong in China, and the United States. A culturally inclusive quantitative coding manual to analyze the qualitative interviews was developed.</p> <p><i>11. Validation of Extracellular Glucose Depletion as a Mock Measurement of Its Uptake in Cells and Tissues Ex Vivo</i> Shanvanth Arnipalli*, Shashi Kumar, &amp; Ouliana Ziouzenkova The Ohio State University</p> <p>This study describes a method for measuring extracellular fluorescently labeled glucose (FD-glucose) depletion and validate its correlation with intracellular FD glucose uptake in cells and tissues ex vivo, with completed data collection, to guide development of safe therapies to address glucose metabolism in specific tissues.</p>	<p>Ballroom D</p> <p>No Live Stream</p>

	<b>Thursday, June 2, 2022</b> *In-Person **Virtual	
AM 7:45	<b>Registration Opens</b>	Lobby
8:00 9:00	<b>Breakfast</b>	The Club Room
9:00 10:15	<b>Keynote Session</b> <i>International Perspectives on Quantitative Research in Health</i> Sam Kariuki**, Kenya Medical Research Institute Getnet Yimer Ali* & Shu-Hua Wang*, Global One Health initiative	Ballroom
10:30 11:30	<b>Invited Symposium</b> <i>International Education Research &amp; Capacity Building</i> Shingo Nahatame**, University of Tsukuba, Japan Zheng Chen**, Wuhan University, China Kassa Michael**, Addis Ababa University, Ethiopia	Clinton Room
10:30 11:30	<b>Paper Session 3</b> 1. <i>Enacting Critical Quantitative Methodology: Leveraging IRT to Advance Critical Consciousness Measurement</i> Matthew Diemer*, Michael Frisby, Andres Pinedo, Emanuele Bardelli, & Erin Elliot, University of Michigan Elise Harris & Sara McAlister, New York University Adam Voight, Cleveland State University  This presentation will leverage item response theory methods to advance the measurement of critical consciousness for minoritized youths, with focus on equity and praxis to challenge racial and other forms of inequality.  2. <i>Being in the Schools Where it Happens: A QuantCrit Analysis of Referrals to Law Enforcement in American High Schools</i> Sarah Beach**, Theresa Pfister**, Lindsay Carlisle**, & Jesse Fleming University of Virginia  Utilizing Critical Quantitative Analysis (QuantCrit), as a framework and analyzing the data via negative binomial regressions, researchers explored how the disciplinary outcome of referrals to law enforcement are impacted by students' intersectional identities, school support staff, and school law enforcement.  3. <i>QuantCrit: Bridging the Gap in Social Justice</i> Christine Lancaster**, Eastern Michigan University  This presentation will discuss specific empirical results that help us think about how to make QuantCrit a bridge and effectively address social justice.	Franklin-Hamilton Room

	<p style="text-align: center;"><b>Thursday, June 2, 2022</b></p> <p style="text-align: center;">*In-Person **Virtual</p>	
<p>AM 10:30 11:30</p>	<p style="text-align: center;"><b>Paper Session 4</b></p> <p style="text-align: center;">1. <i>Using Administrative Data to Build the Capacity of Ohio's Adult Protective Services System</i> Kenneth Steinman*, The Ohio State University</p> <p>This presentation describes how a team from the Ohio State University worked with the Ohio Department of Job and Family Services (ODJFS) to organize, analyze, and disseminate data to help local APS programs build their capacity.</p> <p style="text-align: center;">2. <i>Do Women Belong in Law Enforcement? Officer Characteristics and Beliefs About Female Police Officers</i> Jill Davis*, The Ohio State University</p> <p>This research assesses how gender and social dominance orientation in individuals and group gender compositions are related to officers' beliefs about the suitability of women in law enforcement.</p>	<p>Alumni Lounge</p>
<p>11:45 1:00 PM</p>	<p style="text-align: center;"><b>Lunch &amp; Keynote Speakers</b></p> <p style="text-align: center;"><i>Reconsidering Approaches to Race and Ethnicity Quantitative Research</i> Mark Hugo Lopez*, Director of Race and Ethnicity Research, Pew Research Center</p> <p style="text-align: center;"><i>Privacy, Proprietary Data and Simulation: Revealing What's Hidden About Data-Driven Policymaking in Education</i> William Doyle*, Professor of Public Policy and Higher Education, Vanderbilt University</p>	<p>Ballroom</p>
<p>1:05 2:05</p>	<p style="text-align: center;"><b>Invited Panel</b></p> <p style="text-align: center;"><i>The Ohio State University Student Leadership Research Collaborative</i> Keith Bell*, The Ohio State University Precious Okoroafor*, Olentangy High School Braylan James*, Groveport Madison High School Abigail Thompson* &amp; James McCann*, Bexley High School Andrew Huffman*, St. Charles High School Harini Subramanian*, Thomas Worthington High School Katie Shaughnessy*, New Albany High School</p> <p>Engaging in leadership and research, students present their experiences on identifying social justice issues within their respective communities and/or school and advocating for social change to school district administrators.</p>	<p>Alumni Lounge</p>

	<p style="text-align: center;"><b>Thursday, June 2, 2022</b></p> <p style="text-align: center;">*In-Person **Virtual</p>	
<p>PM 1:05 2:05</p>	<p style="text-align: center;"><b>Invited Panel</b></p> <p style="text-align: center;"><i>Translational Research: The Integration of Equity, Quantitative Research and Efforts to Address Issues in Schools, Communities and Other Organizations</i></p> <p style="text-align: center;">David Julian*, Melissa Ross*, Kenyona Walker*, Gabrielle Hicks*, &amp; Ana-Paula Correia**</p> <p style="text-align: center;">Center on Education and Training for Employment The Ohio State University</p> <p>Presenters will explore the concepts of quantitative research, translational research, and the processes a modern, democratic society relies upon to address complex social issues in response to the question, does quantitative research matter?</p>	<p>Clinton Room</p>
<p>1:05 2:05</p>	<p style="text-align: center;"><b>Paper Session 5</b></p> <p style="text-align: center;">1. <i>Where are the California BIPOC School Leaders? Using Quantitative Data for Educational Leadership Equity</i></p> <p style="text-align: center;">Elizabeth Reilly**, California State University, Channel Islands Franca Dell'Olio**, Loyola Marymount University Krissy Wong, Loyola Marymount University</p> <p>Using large, administrative data sets from CDE, researchers examined longitudinal data to document race/ethnicity trends in employed and credentialed school leaders. Practical solutions to address this equity problem are offered.</p> <p style="text-align: center;">2. <i>The Potential of Quantitative Data to Improve Teachers' Judgment Accuracy</i></p> <p style="text-align: center;">Esther Kaufmann**, University of Konstanz, Germany</p> <p>In this meta-analytic study, researchers will demonstrate how accurate teachers judge and how teacher judgement accuracy can be improved using expert models as an advice source.</p> <p style="text-align: center;">3. <i>Social Connection and Student Engagement in Online Learning</i></p> <p style="text-align: center;">Shuqi Wang**, University of Wisconsin-Madison</p> <p>This study utilized a sample of kindergarten and primary school students enrolled in informal online classes in China to investigate possible relationships among social connection variables (with teacher, peers, and caregivers) and student engagement.</p>	<p>Franklin-Hamilton Room</p>
<p>2:10 2:20</p>	<p style="text-align: center;"><b>Snack Break</b></p>	<p>Exhibit Room</p>



	<p style="text-align: center;"><b>Thursday, June 2, 2022</b></p> <p style="text-align: center;">*In-Person **Virtual</p>	
PM 2:20 3:20	<p style="text-align: center;"><b>Invited Panel</b></p> <p style="text-align: center;"><i>Equity in Quantitative Research – Part II: Faculty Experiences</i> Dorinda Gallant*, Jessica Logan*, Jolynn Pek*, &amp; Anna Yocom* The Ohio State University</p> <p><b>Moderator:</b> Josh Peri*, The Ohio State University</p> <p>What does equity in quantitative research mean for faculty, and are there equity barriers to quantitative research? Faculty members will share their different experiences in learning about and engaging in quantitative research.</p>	Clinton Room
2:20 3:20	<p style="text-align: center;"><b>Paper Session 6</b></p> <p style="text-align: center;">1. <i>Building Institutional Capacity in Quantitative Research: A Caribbean Perspective</i> Talia Esnard**, Letetia Addison**, Fareena Alladin, Delia Brito, &amp; Keisha Samlal The University of the West Indies, Jamaica</p> <p>To address the status and challenge of building institutional capacity for the Caribbean, this research uses reflective journaling to deconstruct experiences of educators within institutional settings.</p> <p style="text-align: center;">2. <i>Becoming and Being a Scientist in Ethiopia: Motives, Challenges and Opportunities</i> Zemichael Gizaw** University of Gondar, Ethiopia</p> <p>A phenomenological qualitative study was consequently employed by interviewing academic staff at an Ethiopian University to discuss and explore various research pathways to prepare the next generation of scientists in Ethiopia.</p> <p style="text-align: center;">3. <i>Gauging Treatment Impact: The Development of Exposure Variables in a Large-Scale Evaluation Study</i> Nicole Maccalla**, Dawn Purnell, Heather McCreath, Robert Dennis, &amp; Teresa Seeman University of California, Los Angeles</p> <p>This presentation articulates rigorous evaluation methods employed in defining nationwide, student and faculty interventions, tracking nuanced participation in programs and activities.</p>	Franklin-Hamilton Room

	<p style="text-align: center;"><b>Thursday, June 2, 2022</b></p> <p style="text-align: center;">*In-Person **Virtual</p>	
PM 2:20 3:20	<p style="text-align: center;"><b>Paper Session 7</b></p> <p style="text-align: center;"><i>1. Challenges and Impacts of School Closures on Data Quality for the Ethiopian National Education Assessment and Examination Agency</i></p> <p style="text-align: center;">Ann O'Connell* &amp; Winnie Wilberforce, The Ohio State University Kassa Michael**, Addis Ababa University, Ethiopia Abiy Kefyalew, Addis Ababa University, National Educational Assessment and Examination, Ethiopia</p> <p>This presentation reviews the impact of school closures on data quality for national assessments with a particular focus on low- and middle-income countries, specifically in Ethiopia.</p> <p style="text-align: center;"><i>2. Confirming Social Determinants of Health: COVID-19 Vulnerability among University Students Varied by Discipline and Demographics</i></p> <p style="text-align: center;">Amanda Bleichrodt*, Maria Krantz, &amp; Mikkel Quam The Ohio State University</p> <p>Vulnerability to SARSCoV-2 infection parallels other disparities consistent with social determinants of health for communities. Using social determinants of health framework, presenters examine infection vulnerability and privilege of accessing frequent testing among undergraduate students at the same university.</p>	Alumni Lounge
3:25 4:25	<p style="text-align: center;"><b>Paper Session 8</b></p> <p style="text-align: center;"><i>1. Power Up: Exploring the Use of the Bootstrap in Power Calculations</i></p> <p style="text-align: center;">Jacob Coutts* &amp; Jolynn Pek The Ohio State University</p> <p>Many journal and grant guidelines require or suggest that researchers justify the sample size using power analyses. Performance of the bootstrap was evaluated relative to existing classical and modern approaches to power analysis.</p> <p style="text-align: center;"><i>2. Study Design and Sample Size Justification: The Disconnect between Statistical Conclusion Validity and Power Analysis</i></p> <p style="text-align: center;">Kathryn Hoisington-Shaw* &amp; Jolynn Pek The Ohio State University</p> <p>This study examines design elements and aspects of statistical analyses of previously published literature to identify gaps in both the practical and theoretical applications of power analysis.</p>	Franklin-Hamilton Room

	<b>Thursday, June 2, 2022</b> *In-Person **Virtual	
PM 3:25 4:25	<b>Paper Session 8 (cont.)</b> <i>3. Incorporating Anti-Racist Work into Statistics Courses</i> Jessica Logan*, The Ohio State University  Many of the founders of statistics were proponents of the eugenics movement, and many of the analytic methods we still use today were developed expressly to demonstrate the superiority of the White race. The goal of this presentation is to discuss one way to begin this process, by including this historical context within statistics and methods courses.	Franklin-Hamilton Room
3:25 4:45	<b>Invited Mentoring Session</b> Gregory Hancock*, University of Maryland	Clinton Room
4:20 4:40	<b>Snack Break</b>	Exhibit Room
4:45 6:00	<b>Closing Remarks</b> Beverly J. Vandiver  <b>Keynote Address</b> <i>Coding, Coded &amp; Counting</i> Fay Cobb Payton*, Chief Programs Officer, Kapoor Center	Ballroom

**Thank you for attending the QMC22 Conference.  
We hope you enjoyed the presentations.**

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