

## Symposium

### Measuring Migration in Latin America: Leveraging digital traces, registers, censuses, and surveys

Date: February 25-26, 2025

Location: Facultad de Ciencias Sociales, Universidad de la República (Montevideo, Uruguay)

This two-day symposium fosters an interdisciplinary exchange among researchers in data science, demography, sociology, geography, and migration studies, focusing on the measurement and analysis of human mobility. It highlights innovative approaches that integrate traditional data sources and digital traces to study migration, with a focus on Latin America.

The symposium contributes to the development of the scientific community in migration studies, demography, and data science by bringing together leading experts to discuss the applicability of new methods and data sources—particularly administrative records and big data—in the study of South-South migration in Latin America. The program includes high-quality presentations from ten invited speakers and selected contributions, which were chosen from an open call for papers, combining diverse data sources and methods.

Through interdisciplinary dialogue and collaboration among researchers from different regions, the event encourages reflection on the feasibility of leveraging digital traces alongside more traditional sources such as censuses, surveys, and administrative records. This event also marks the conclusion of a five-year collaboration between the Department of Digital and Computational Demography at the Max Planck Institute for Demographic Research (MPIDR) and the Programa de Población at the Universidad de la República, a partnership funded by the program Independent Research Groups by the Agencia Nacional de Investigación e Innovación and the MPIDR. Additionally, it celebrates the launch of the Group on Human Mobility and Digital Demography at the Universidad de la República. Funded by the R+D Groups program of the Research Council of the Universidad de la República (CSIC, by its acronym in Spanish), this interdisciplinary group unites researchers from the Facultad de Ciencias Sociales, the Facultad de Ingeniería, and the Facultad de Arquitectura, Diseño y Urbanismo at the Universidad de la República.

## Program - Detailed version

**FEBRUARY 25th**

8:30 - 9:30 **Welcome and Introduction** [Language of the session: Spanish]

Victoria Prieto, Programa de Población, Facultad de Ciencias Sociales, UDELAR

Carmen Midaglia, Dean of the Facultad de Ciencias Sociales, UDELAR

Pablo Ezzati, Dean of the Facultad de Ingeniería, UDELAR

Tobías Renghart, Research Policy and External Relations Department, Max Planck Society

Ana Vásquez, Agencia Nacional de Investigación e Innovación

Virginia Bertolotti, Research Provost, UDELAR

9:30 - 10:00 Coffee break

10:00 - 11:00 **Session I Invited speakers: Recent trends, analytical focus, and data demands in the assessment of international migration in Latin America** [Language of the session: English and Spanish]

Victoria Prieto (Chair)

*Las tendencias recientes de la migración internacional en América Latina y el Caribe*  
[Presentation in Spanish] **Julieta Bengochea**

*Bridging data, concepts, and theories for understanding migration dynamics in the Americas* [Presentation in English] **Claudia Masferrer**

11:00 - 12:30 **Session I Contributed papers: Survey data sources to study migration** [Language of the session: English and Spanish]

Julieta Bengochea (Chair)

*Going back to basic: Migration estimates from the Mexican Labor Force Survey*  
[Presentation in English] **Andrea Miranda Gonzalez**

*Recent Migration: A profile reported by Venezuelan Households in the Living Conditions Survey (ENCOVI)* [Presentation in Spanish] **Constanza Lydee Armas Acosta**

*La Patria Grande? Anti-immigrant attitudes in Latin America* [Presentation in English]  
**Marcela Cerrutti**

12:30 - 14:00 Lunch break

14:00 - 15:30 **Session II Contributed papers:** *Digital trace data sources to study migration* [Language of the session: English]  
Carolina Coimbra (Chair)

*Patterns in migration coverage: examining large-scale media trends across Latin America and the Caribbean* [Presentation in English] **Eynel Pilatowsky**

*Detecting trends in the sociodemographic composition of Venezuelan migrants in Colombia using digital trace data* [Presentation in English] **Jackson Mason-Mackay**

*Gender and regional differences in internal and international migration of scholars* [Presentation in English] **Thiago Zordan Malaguth**

15:30 - 16:00 Coffee break

16:00 - 17:00 **Session II Invited speakers:** *New data sources in the assessment of international and internal migration* [Language of the session: English]  
Carolina Coimbra (Chair)

*Leveraging digital data streams for human mobility and migration research: Current landscape, opportunities, and challenges* [Presentation in English] **Francisco Rowe**

*Making sense of non-representative data for migration research* [Presentation in English]  
**Emilio Zagheni**

## FEBRUARY 26th

9:00 - 10:00 **Session III Invited speakers:** *Leveraging register, census, and survey data in assessing international and internal migration* [Language of the session: English and Spanish]  
Victoria Prieto (Chair)

*Fuentes de datos para medir y analizar la migración interna en América Latina y patrones y tendencias clave según censos de población* [Presentation in Spanish] **Jorge Rodríguez**

*The Human Migration Database (HMigD)* [Presentation in English] **Maciej Danko**

10:00 - 10:30 Coffee break

10:30 - 12:00 **Session III Contributed papers:** *Administrative and census data to study migration* [Language of the session: English]  
Emilio Zagheni (Chair)

*Measuring internal and international migration flows in Brazil from the implicit data within the official population projections to migration estimates* [Presentation in English] **Cesar Marques**

*Complementary administrative data for the understanding of international migration, dual nationality and naturalization in Mexico* [Presentation in English] **Víctor M. García-Guerrero**

*Using genealogical data to measure migration and inter-ethnic marriage in Latin America: evidence from Uruguay* [Presentation in English] **Joseph Price**

12:00 - 13:00 **Session IV Invited speakers:** *Assessing culture, migration, and climate change leveraging digital data sources* [Language of the session: English]  
Victoria Prieto (Chair)

*The value of cultural similarity for predicting migration: evidence from food and drink interests in digital trace data* [Presentation in English] **Carolina Coimbra Vieira**

*Climate change and migration: leveraging novel data to understand a complex relationship* [Presentation in English] **Roman Hoffman**

13:00 - 14:30 Lunch break

14:30 - 15:30 **Session V Invited speakers:** *Embracing digital data for the assessment of International migration in Latin America* [Language of the session: English]  
Emilio Zagheni (Chair)

*Lessons learned in five years of data extraction. Using Facebook for examining international migration in LAC* [Presentation in English] **Martín Pedemonte**

*Limits and opportunities of digital traces for measuring international migration in Latin America* [Presentation in English] **Victoria Prieto**

15:30 - 16:00 Coffee break

16:00 - 17:00 **Closing remark**  
[Language of the session: English]  
Emilio Zagheni and Victoria Prieto

## More information about the invited speakers:

**Juliet Bengochea** (Programa de Población, Universidad de la República): Associate Professor at the Programa de Población at the Facultad de Ciencias Sociales. She holds a PhD in Population Studies (COLMEX), a Master's degree in Demography and Population Studies, and a degree in Anthropological Sciences, all from the University of the Republic. Her research focuses on international and intra-regional migration in Latin America and the Caribbean, particularly in Uruguay, examining migrant social inclusion, residential segregation, housing access, and the use of big data to estimate migration stocks and urban mobility.

**Carolina Coimbra Vieira** (MPIDR): PhD Student in Computer Science at Universität des Saarlandes (UdS) also affiliated to the Max Planck Institute for Software Systems (MPIDR) and the Max Planck Institute for Software Systems (MPI-SWS). She received her B.Sc. and M.Sc. in Computer Science from Federal University of Minas Gerais (UFMG) in Brazil. Carolina's research focuses on interdisciplinary topics at the intersection of computer science and the use of digital trace data to study culture, migration, and algorithmically-mediated user engagement on social media platforms.

**Maciej Danko** (MPIDR): researcher at the Max Planck Institute for Demographic Research, and he holds a PhD in Environmental Sciences (2008) and an MSc in Mathematics and Natural Sciences (2003) from Jagiellonian University, Krakow. His work integrates traditional and digital data sources to improve migration measurement, applying Bayesian methods to address biases and inconsistencies. He developed the Human Migration Database (HMigD), a harmonized resource on global migration flows. Additionally, he creates interactive tools for data visualization, supporting evidence-based policymaking and advancing demographic research.

**Roman Hoffmann** (IIASA): he leads the Migration and Sustainable Development Research Group at the International Institute for Applied Systems Analysis (IIASA) in Austria. He holds a PhD in economics from the University of Vienna, Austria, and degrees in sociology and economics from the University of Munich, Germany. In his applied research, he studies the relationship between climate change and population dynamics and the resulting implications for sustainable development. In particular, his work focuses on investigating the underlying causes, patterns, and consequences of different types of migration, with an emphasis on the links between environmental factors and human mobility.

**Claudia Masferrer** (El Colegio de México): Associate Professor at the Centre for Demographic, Urban, and Environmental Studies, Coordinator of the Seminar Migration, Inequality and Public Policies, and Member of the Research Group on Demographic Dynamics at El Colegio de México. Claudia holds a PhD in Sociology from McGill University and an MSc in Statistics from the University of Texas at Austin. Her research focuses on internal and international migration, reintegration of returnees, immigrant integration, demographic dynamics, inequality, and how policy mediates these processes. She is an Associate Editor of International Migration Review.

**Martín Pedemonte** (INCO, Universidad de la República): Associate Professor at the Computer Science Institute (INCO) at Universidad de la República. He holds M.Sc. and Ph.D. in Computer Science from PEDECIBA Informática-Universidad de la Republica (Uruguay) and is co-leader of the Research Group on Human Mobility and Digital Demography. His research interests include high-performance computing, computational intelligence, big data, and data science. He is a founding member of the Task Force on Computational Intelligence in Latin American Conference on Computational Intelligence (LA CCI), as well as a member of the Institute of Electrical and Electronics Engineers and the Association for Computing Machinery.

**Victoria Prieto** (Programa de Población, Universidad de la República): Associate Professor at the Programa de Población. She holds a PhD and an M.Sc. in Demography from the Autonomous University of Barcelona. She co-leads the Research Group on Human Mobility and Digital Demography, coordinates the Observatory of Mobility, Childhood, and Family (OMIF), and is a founding member of CAMINAR. She also co-led a tandem group on international migration and digital traces in collaboration with MPIDR. Her research examines migrant inclusion and exclusion in Uruguay and the region, using primary data, administrative records, migration surveys, and social media data.

**Jorge Rodríguez Vignoli** (CELADE-CEPAL): Sociologist from the University of Chile and holds a PhD in Demography from the National University of Córdoba, Argentina. He completed postgraduate studies at CELADE and doctoral studies in American Studies, specializing in Economic and Social History, at the University of Santiago de Chile. A former ALAP Executive Board member, he has worked at CELADE's Population and Development Area since 1994. His research covers adolescent fertility, sexual and reproductive health, migration, urban systems, and demographic dynamics. He has authored numerous publications and provided technical assistance on demography and development across Latin America and the Caribbean. He has also taught courses, lectures, and conferences at CELADE and various academic and public institutions.

**Francisco Rowe** (University of Liverpool): Professor in Population Data Science and the Lead of the Geographic Data Science Lab at the Department of Geography and Planning within the University of Liverpool. He is the co-Chair of the United Nations Committee of Experts on Big Data and Data Science for Official Statistics (UN-CEBD) Task Team on Mobile Phone Data (TT-MPD). He leads the Migration Statistics sub-group within the TT-MPD and is the Chair of the Quantitative Methods Research Group of the Royal Geographical Society since 2023. His areas of expertise are: human mobility and migration; geographic data science; and spatial inequalities.

**Emilio Zagheni** (MPIDR): Director of the Max Planck Institute for Demographic Research (MPIDR) and affiliate faculty of the Department of Sociology at the University of Washington, Seattle, where he served as Training Director of the Center for Studies in Demography and Ecology. He received his Ph.D. in Demography (2010) and M.A. in Statistics (2008) from U.C. Berkeley. Zagheni is currently President of the European Association for Population Studies (EAPS). His research combines digital trace data, traditional sources, and new forms of data collection, within solid statistical and formal demographic frameworks, in order to advance population science.

**More information about the contributed papers:**

**SESSION I: Survey data sources to study migration:**

*Going back to basics: Migration estimates from the Mexican Labor Force Survey* [Presentation in English]

**Andrea Miranda Gonzalez**

**Abstract:** I show that an underused high-quality dataset from Mexico, the *Encuesta Nacional de Ocupación y Empleo* (ENOE), can be used to understand migration in Mexico. The ENOE is the Mexican Labor Force Survey. Although it does not track migration directly, its survey structure allows it to identify migrants (both emigrants and immigrants) along with a rich set of covariates. I validate the ENOE by carefully comparing it to gold-standard data such as the Census and the *Encuesta Nacional de la Dinámica Demográfica* (ENADID), a demographic survey. My results find that immigrants and emigrants from the ENOE match standard data across key demographic characteristics. Moreover, in the aggregate, the ENOE produces migration rates comparable to official demographic estimates. The ENOE may be preferred over other data because it has economic and demographic variables of migrants before they leave or after they enter Mexico. Also, it is a frequent and ongoing panel survey, which allows for timely estimates. This chapter also provides guidelines for the practical use of the ENOE for research on migration. Using the ENOE, in addition to official estimates, can provide researchers with an updated view of migration trends and identify areas of research.

**Bio:** Andrea focuses on the measurement of migration from Mexico and changes in the characteristics of migrants over time. She holds a PhD in Demography from UC Berkeley and a BS in Economics from Centro de Investigación y Docencia Económicas (CIDE) in Mexico City. She is a Researcher at the Economics Research Division of the Bank of Mexico, where she continues her work on migration patterns and remittances.

*Recent Migration: A profile reported by Venezuelan Households in the Living Conditions Survey (ENCOVI)* [Presentation in Castellano]

**Constanza Lydee Armas Acosta**

**Abstract:** The scale of the Venezuelan migratory phenomenon and its impact on Latin America have necessitated collaborative efforts among the institutions of major destination countries, international and social organizations, aimed at producing the information needed to monitor Venezuelan migration. In this regard, the R4V platform has become a key point of reference. In Venezuela, similar efforts have also been undertaken by non-governmental sectors. Thus, from academia, the collection of information on the migratory process has been promoted, relying on reports from households of origin. In this context, since 2017, the Universidad Católica Andrés Bello incorporated a module for the investigation of international emigration into the National Survey of Living Conditions (ENCOVI). This has enabled the monitoring of the migratory process, revealing changes in the profile of emigrants in the recent period as the Venezuelan

crisis escalated into a complex humanitarian emergency. To date, there are seven editions of ENCOVI that include migration data. Consequently, this presentation aims to: I) describe the ENCOVI household survey in Venezuela and II) analyze the forced migration process from Venezuela. The second objective will be achieved by contextualizing the exodus that occurred beginning in 2015 and by characterizing the sociodemographic of migrants, revealing the observed changes in relation to: the transition towards a less youthful profile; a predominance of the male component; a more diverse composition in terms of educational capital and social background; the search for work as the primary reason for leaving the country; the situation with respect to migratory status; and the perceptions of economic aid through remittances. Similarly, the results of the analysis of household vulnerabilities and migration status will be presented, to demonstrate whether the presence of various risk situations among household members in the economic, social, health and socio-familial spheres differs according to the migratory status of households. In some instances, this would suggest that the migratory event could be operated as a protective factor.

**Bio:** Constanza is a Research Associate at the Institute of Social and Economic Research (IIES UCAB) at the Andrés Bello Catholic University in Venezuela, is a psychologist specializing in Migration and Asylum from a human rights perspective, with a degree from the National University of Lanús. She is currently a doctoral candidate in Demography at the National University of Córdoba, Argentina.

*La Patria Grande? Anti-immigrant attitudes in Latin America* [Presentation in English]

**Marcela Cerrutti**

**Abstract:** Growing migration flows, changing origin and destinations, and transit migration have made intraregional migration in Latin America a salient political and social concern. In this context, attitudes towards immigrants occupy a prominent role as they connect with experiences of discrimination and incorporation. While most research focuses on South-North migration, less is known about anti-immigrant sentiments within Latin America, a region with shared historical and cultural background. Drawing on group-threat theories we investigate anti-immigrant sentiment across 17 Latin American countries. Data comes from the 2023 Latinobarometro. Using latent class analysis, we identify four attitudinal groups: tolerant, labor/crime, cultural, and pervasive threat. We model membership into these groups according to individual absolute and relative socioeconomic position and ideological orientation. At the country-level, we investigate the roles of socioeconomic conditions and migration prevalence and change. We show that individual characteristics affect attitudes differently depending on whether we focus on perceptions of personal or broader socio-cultural threat. The most salient factor explaining cross-country variation in anti-immigrant sentiments is the sudden growth of the foreign-born population. We stress that even though Latin American countries share similar

historical and cultural backgrounds, immigration still generates strong anti-immigrant sentiments.

**Bio:** Marcela is Senior Researcher of the Argentina National Council of Scientific and Technical Research at the Center for Population Studies and Full Professor in the Sociology Department at San Martín National University, Argentina. She holds a Ph.D. in Sociology from the University of Texas at Austin and degree in Sociology from the Universidad de Buenos Aires. She has led numerous projects on South-South migration and contributed to key studies on mobility patterns in Argentina and beyond. Cerrutti has collaborated with international organizations such as the IOM and UNFPA and has published extensively on migration and social change in Latin America.

### **SESSION II: Digital trace data sources to study migration:**

*Patterns in migration coverage: Examining large-scale media trends Across Latin America and the Caribbean* [Presentation in English]

**Eynel Pilatowsky**

**Abstract:** In this report, we analyze how the media has represented migration in 1,593,565 digital news stories on human mobility published in 1,916 outlets in 25 countries in Latin America and the Caribbean between 2017 and 2024. For this analysis, we use the indicators developed by the Public Perceptions Laboratory on Migration of the Inter-American Development Bank, which measure: i) the salience of migration in news media, known as agenda setting; ii) the issue framing of the content; and iii) the tone and language pieces use when talking about migration, and the feelings they elicit in their audiences. The results show that the media agenda is shaped by current affairs and that specific events drive fluctuations in the volume of coverage about migration. Security and migration policy are the most frequent issues in news about migration, although stories about migrant journeys have gained ground in recent years, especially in coverage of migrant women, children, and LGBTQ+ people. Our analysis shows that only 10% of news uses alarmist or exaggerated language, which appears more often in stories framed around security and migration policies. Finally, the sentiment analysis finds that headlines and ledes often evoke negative sentiments, while the bodies of news articles tend to take a more neutral tone.

**Bio:** Eynel Pilatowsky holds a Ph.D. in Political Science from the Universidad Nacional Autónoma de México (UNAM). Her dissertation explored the relationship between migration policies and attitudes toward migrants in Mexico. Using a mixed-methods approach, she conducted focus groups and large-scale survey analysis to examine discrimination and xenophobia in Mexican society. She has extensive experience in qualitative and quantitative research and policy analysis. Her research focuses on discrimination, xenophobia, and their impact on migrant integration, as well as effective interventions to foster inclusion. She is the co-author of Beyond

the Headlines: How the Media Presents Migration in Latin America and the Caribbean, published by the Inter-American Development Bank (IDB).

*Detecting trends in the sociodemographic composition of Venezuelan migrants in Colombia using digital trace data* [Presentation in English]

**Jackson Mason-Mackay**

**Abstract:** Various studies have proven digital trace data to be a reliable information source to measure short-term displacement, but less evidence exists on the potential for longer-term monitoring of forced migrants. As one of the world's largest forcibly displaced populations, this paper explores whether data derived from Facebook can help identify trends in the sociodemographic composition of Venezuelan migrants living in Colombia (2018-24). This study uses audience size counts collected repeatedly from the Facebook Advertising Platform between 2018 and 2024 to measure the age, sex, and education of Facebook users who originate from Venezuela and live in Colombia. These trends are compared to a reference group of Facebook users who live in Colombia but have not previously lived in Venezuela. Using a beta regression, the study finds significant shifts among Venezuela-originating Facebook users, characterized by i) a greater share of female users, ii) a greater share of users aged 41-64 years and 65+ years, and iii) a falling share of university-educated users. These findings align with secondary sources and suggest that the migrant selection bias seen in the initial years of the crisis has gradually eroded.

**Bio:** Jackson is a student at the European Doctoral School of Demography, with research interests related to migration, displacement, and crisis-affected populations. I have a background in humanitarian response, having worked for the UN in Colombia, Afghanistan, and Mozambique. I hold an MSc in Sociology (University of Oxford) and an undergraduate degree in Economics (University of Waikato).

*Gender and regional differences in internal and international migration of scholars* [Presentation in English]

**Thiago Zordan Malaguth**

**Abstract:** The literature on international scholarly migration shows that women are less mobile and move over shorter distances. We extend this literature by using data from Scopus on over 28 million publications by over 8 million scholars worldwide and simultaneously focus on internal and international movements. While the gender gap in the internal migration rate is smaller than in the international rate, the internal gender gap in migration spread is bigger than the international in most regions and periods. However, regardless of the measure used, the gender gap is larger in countries in the Global South than in the Global North, although there is considerable variation across regions in the Global South. Our results suggest an intersection

between global regions and gender inequalities and have implications for promoting more equitable science at global and subnational levels.

**Bio:** Thiago Zordan Malaguth is a PhD student at the Department of Digital and Computational Demography at the Max Planck Institute for Demographic Research (MPIDR). His research interests include demographic methods and their application to new sources of digital trace data. He holds a Master's degree in Demography from the Center for Regional Development and Planning (Cedeplar) at the Federal University of Minas Gerais (UFMG). He also worked as a public policy specialist in the Minas Gerais state government and as a consultant for the Ministry of Education in Brazil.

### **SESSION III: Administrative and census data to study migration:**

*Measuring internal and international migration flows in Brazil from the implicit data within the official population projections to migration estimates* [Presentation in English]

**Cesar Marques**

**Abstract:** Since the early 2000s, Brazil has experienced significant shifts in migration trends, both internally and internationally. In recent years, the country has received large migratory flows, particularly from Haiti and, more prominently, Venezuela. At the same time, Brazilian emigration has increased, with substantial outflows to the United States, Western Europe, and other destinations. At the subnational level, migration turnover, losses, and gains have undergone notable changes, influenced by economic dynamics and structural transformations within the country. Measuring these shifts has become increasingly challenging due to the rapid pace and scale of migration, as well as the limited availability of high-quality data with sufficient temporal and spatial resolution. While international migration data in Brazil has improved through administrative records, internal migration data remains scarce. Additionally, migration data from the 2022 Demographic Census will not be available until mid-2025. In this scope, the official demographic projections produced by the Brazilian Institute of Geography and Statistics (IBGE) contain implicit data that can be used to estimate international and internal migration flows in Brazil from 2000 to 2070. In this study, we utilize these data, applying indirect estimation techniques to assess both internal and international migration balances from 2000 to 2025. We analyze key changes over the past 25 years and emerging migration trends shaping Brazil's demographic landscape.

**Bio:** César Marques holds a Ph.D. in Demography (2014) from the University of Campinas (UNICAMP) and completed a postdoctoral fellowship at the University of Vienna (2023). Since 2014, he has been a professor and researcher at the National School of Statistical Sciences (ENCE/IBGE), where he currently serves as Deputy General Coordinator. He has held leadership roles in the Brazilian Association for Population Studies (ABEP) and was part of the scientific

committee of the Population-Environment Research Network. His research bridges sociology and demography, focusing on population, environment, and urbanization.

*Complementary administrative data for the understanding of international migration, dual nationality and naturalization in Mexico* [Presentation in English]

**Víctor M. García-Guerrero**

**Abstract:** Studies have increasingly used administrative and digital data to complement census and surveys for estimating and nowcasting international migration, but its use for informing characteristics of migrant populations is still limited. In contexts of high mobility, populations might access multiple citizenships. Dual nationality is often challenging for collecting migration statistics, and as more people have more than one citizenship, these challenges could increase. How many foreign-born are also Mexican nationals? How many Mexicans born abroad and naturalized live in Mexico, and what are their socio-demographic characteristics? What do different data sources tell us? How could we overcome data limitations? We use vital statistics of births, administrative data on naturalizations, and restricted-access data from the General Catalogue of Voters from the National Electoral Institute and compare it to gold-standard census data to study naturalizations and dual nationality in Mexico. Findings stress the complementarity of data and potential avenues for demographic research.

**Bio:** Víctor M. García-Guerrero is Associate Professor at the Center for Demographic, Urban and Environmental Studies at El Colegio de Mexico (CEDUA-Colmex). He is Editor-in-Chief of the journal *Estudios Demográficos y Urbanos*, Associate Editor of *Demographic Research* and member of the editorial committee of the *Revista Brasileira de Estudos de População*. He holds a PhD in Population Studies by CEDUA-Colmex. He has been in charge of the official population projections of Mexico since 2015. He has been advisor and consultant on demographic methods for UNPF, CONAPO, SEDESOL, IDB, INE, and other consulting firms, banks, and insurance companies. His research interests include mathematical demography, applied demography, longevity, population estimates and forecasting, and population policies.

*Using genealogical data to measure migration and inter-ethnic marriage in Latin America: evidence from Uruguay* [Presentation in English]

**Joseph Price**

**Abstract:** Recent advances in computer vision are making it possible to extract detailed data from historical records in Latin America, including both civil and church records. Genealogical platforms (like FamilySearch) provide ways to combine AI and human effort to connect these newly digitized records into large, interconnected networks of individuals and families over time. In this paper, we construct a new dataset that includes 770,314 unique individuals who lived in Uruguay and were born between 1870 and 1930 (or were the parents of people that lived in Uruguay during that time). On average, the individuals in this dataset each include

information from 8.6 historical records and are connected to 11.2 immediate family members (parents, siblings, spouse, or children). These linkages across multiple records and across multiple generations allow me to document migration patterns in Uruguay during this time period and compare these patterns based on the original country the family came from in Europe.

**Bio:** Joe Price is a professor of economics at Brigham Young University and the Director of the BYU Record Linking. I'm working on large projects that combine machine learning and family history to create large individual-level longitudinal historical datasets for many countries.