

Isabel Ferraz Musse

Ph.D. in Economics

(217) 904-2299 | isabel.musse@gmail.com | linkedin.com/in/isabelmusse | Chicago, IL

PROFESSIONAL SUMMARY

Ph.D. economist applying rigorous causal inference, predictive modeling, and other econometric methodologies to complex issues in workforce policy, resource allocation, and healthcare economics.

PROFESSIONAL EXPERIENCE

Cornerstone Research, Chicago | *Senior Economist* | 2025–PRESENT

Mathematica, Chicago | *Researcher* | 2020–2025

- Conducted high-value impact evaluations using advanced causal inference methods to assess workforce development, disability policy, and healthcare policy interventions
- Led cross-disciplinary teams and coordinated with stakeholders to ensure high-quality delivery of complex projects
- Translated complex data analyses into clear, actionable findings through policy briefs, technical memos, and reports for non-technical audiences

Selected projects:

- Task leader, workforce retention program evaluation for 10,000+ injured workers
 - Co-designed comprehensive evaluations, applying experimental and other evaluation methods to survey and administrative data
 - Led a cross-disciplinary team to test predictive models identifying the individuals most likely to benefit from program participation and optimize resource allocation
- Project director, employment program evaluation for refugees with health impairments in Northern Virginia
 - Led evaluation activities to design a sustainability plan for the pilot program
 - Engaged program stakeholders to optimize pilot implementation, adapting deliverables to changing project needs and budget constraints
- Task leader, national federal employment and financial independence program evaluation for social security beneficiaries with health impairments
 - Oversaw the design of nationwide service provider surveys to complement administrative data for program evaluation
 - Co-developed the evaluation design report, identifying methods and data sources to generate evidence-based insights for key client's questions

The World Bank, Washington D.C. | *Researcher and Field Coordinator, Development Impact Evaluation Unit* | 2013–2016 (seasonal)

- Directed multi-stakeholder impact evaluations, aligning research methodologies with strategic policy objectives across partner organizations
- Managed field operation, including randomization and primary data collection

Itaú-Unibanco, Brazil | *Economic Research Analyst* | 2012–2013

- Evaluated impact and cost-benefit of projects using quasi-experimental methods
- Managed primary data collection, analysis, reporting, and presentation of results

EDUCATION

University of Illinois at Urbana-Champaign | *PhD in Economics* | 2014–2020

- Dissertation focus on causal inference applications in health economics
- Robert W. Harbeson Memorial Dissertation Fellowship (2019)

Fundação Getúlio Vargas (FGV-EESP) | *M.Phil., Economics* | 2010–2012

Universidade Federal de Minas Gerais (UFMG) | *B.A., Economics* | 2006–2009

PUBLICATIONS AND REPORTS

Publications

- Musse, I. (2025). "Employment shocks and demand for pain medication: Understanding the channels that drive opioid use." *Health Economics*, 34(2), 316-344.
- Musse, I., Honeycutt, T., & Hemmeter, J. (2024). "The Effects of the Workforce Innovation and Opportunity Act of 2014 on Vocational Rehabilitation Engagement, Employment, and Work Incentive Use among Supplemental Security Income Recipients Aged 14-24." *Soc. Sec. Bull.*, 84, 27.
- Keshaviah, A., et al. (2023). "Separating Signal from Noise in Wastewater Data: An Algorithm to Identify Community-Level COVID-19 Surges in Real Time." *Proceedings of the National Academy of Sciences*, 120(31).
- Musse, I., & Schneider, R. (2023). "The Effect of Presidential Election Outcomes on Alcohol Drinking." *Economics & Politics* 35, no. 1: 146-162.
- Musse, I., Ghimire, D., & Thornton, R. (2022). "When Do Women Learn They Are Pregnant? The Introduction of Clinics and Pregnancy Uncertainty in Nepal." *Studies in Family Planning*, 53(1).
- Piza, C., Cravo, T. A., Taylor, L., Gonzalez, L., Musse, I., Furtado, I., Sierra, A. C., & Abdelnour, S. (2016). "The Impacts of Business Support Services for Small and Medium Enterprises on Firm Performance in Low-and Middle-Income Countries: A Systematic Review." *Campbell Systematic Reviews*, 12(1).
- Musse, I., & Machado, A. F. (2013). "The Profile of Individuals Seeking Professional Qualification in Brazil." *Economia e Sociedade*, 22(1).

Reports

- Musse, I., Dorsey, N. & Patnaik, A. “Vocational Training and Employment Demonstration Project for Refugees with Disabilities: Early Evaluation Findings.” Washington, DC: Mathematica, August 2024.
- Harrison, E., Musse, I., & Honeycutt, T. “How Did Access to Job Services Affect Youth with Disabilities?” Washington, DC, Mathematica, 2024. Available online
- Ben-Shalom, Y., & Musse, I. “Can Existing Employment Programs Help Autistic Young Adults Achieve Employment Goals? Four Ideas to Expand the Evidence Base.” Washington, DC: Mathematica, March 2024.
- Ben-Shalom, Y., Musse, I., Harnack-Eber, A., Shattuck, P., & Patnaik, A. “Evaluation Design Options for Programs to Improve Employment Outcomes for Young Adults on the Autism Spectrum.” Washington, DC: Mathematica, March 2024.
- Musse, I., Ben-Shalom, Y., Patnaik, A., & Shattuck, P. “Sources of Data on Employment Outcomes for Young Adults on the Autism Spectrum.” The Research Support Services for Employment of Young Adults Data Inventory Brief. Washington, DC: Mathematica, October 2022.
- Patnaik, A., Harrati, A., & Musse, I. “Promoting Readiness of Minors in Supplemental Security Income (PROMISE): Youth’s Pathways to Education and Employment.” Washington, DC: Mathematica, 2022. Available online.
- Patnaik, A., Dale, S., Farid, M., Harrati, A., Hill, A., Honeycutt, T., Katz, K., Livermore, G., Musse, I., Potamites, L., & Sevak, P. “Promoting Readiness of Minors in Supplemental Security Income (PROMISE): Youth and Family Outcomes Five Years After Enrollment.” Washington, DC: Mathematica, 2022.
- Patnaik, A., Dale, S., Farid, M., Harrati, A., Hill, A., Honeycutt, T., Katz, K., Livermore, G., Musse, I., Potamites, L., & Sevak, P. “Promoting Readiness of Minors in Supplemental Security Income (PROMISE): Technical Appendix to the Five-Year Evaluation Report.” Washington, DC: Mathematica, 2022.
- Hill, A., Patnaik, A., & Musse, I. “How Did the COVID-19 Pandemic Affect the Education and Employment of Young People with Disabilities? Findings from the Promoting Readiness of Minors in Supplemental Security Income (PROMISE) Evaluation.” Washington, DC: Mathematica, 2022.
- Hill, A., Musse, I., Ben-Shalom, Y., & Shaw, W. Mathematica. “The Impact of Local Labor Market Conditions on Opioid Transactions: Evidence from the COVID-19 Pandemic.” Chief Evaluation Office, U.S. Department of Labor. 2021.
- Mann, D. R., & Musse, I. “Promoting Opportunity Demonstration: Trends in Demonstration Outcomes and the COVID-19 Pandemic.” POD Issue Brief. Washington, DC: Social Security Administration, October 29, 2021.

SKILLS & PROFICIENCIES

- Advanced causal inference and econometric analysis
- Machine learning and predictive modeling
- Software: R, Stata
- Cross-disciplinary team leadership
- Stakeholder engagement
- Technical and accessible reporting
- Languages: Portuguese, English, Spanish, French, Danish