

Curriculum Vitae
Emerson Augusto Baptista

Mailing Address: Office 4465, El Colegio de Mexico
Carretera Picacho Ajusco 20
Col. Ampliación Fuentes del Pedregal
C.P. 14110 Tlalpan, Mexico City, Mexico

Phone: +52 55 5449 3000 (ext 4367)
Email: ebaptista@colmex.mx
emersonaug@gmail.com

ACADEMIC POSITIONS

- 2021- Researcher and Professor at the Center for Demographic, Urban and Environmental Studies. El Colegio de Mexico, Mexico.
- 2017-2021. Researcher and Professor at the Asian Demographic Research Institute (ADRI). School of Sociology and Political Science, Shanghai University, China.
- 2015-2017. Post-Doc at Brown University, United States. Institute at Brown for Environment and Society (IBES).
- Research: “Biome Restoration of Brazil’s Mata Atlântica: can we promote equitable socioeconomic development while saving the world’s most threatened tropical forest?” (Leah VanWey, PI).

EDUCATION

2015. Ph.D. in Demography. Universidade Federal de Minas Gerais (CEDEPLAR/UFMG), Brazil.
Dissertation: “Mortality from cardiovascular diseases in adults: a spatio-temporal and demographic study for Brazilian micro-regions between 1996 and 2010” (Bernardo Lanza Queiroz, advisor).
2009. M.Sc. in Geography. Pontifícia Universidade Católica de Minas Gerais, Brazil.
Thesis: “Disabled people in the state of Minas Gerais, Brazil: an approach spatial and demographic using the data of census 2000” (José Irineu Rangel Rigotti, advisor).
2006. BA in Geography. Pontifícia Universidade Católica de Minas Gerais, Brazil.

ADDITIONAL EDUCATION

2019. Methods and Models for Spatial Analysis on Population and Climate Change – Asian Demographic Research Institute (ADRI).
2017. Winter 2017 GIS Institute – Brown University.
2016. Spatial Data Analysis Techniques in Social Sciences – Brown University (Prof. Luc Anselin).
2012. IPUMS Latin America IV Workshop – V Latin American Conference of Population (ALAP)
2012. Spatial Analysis of Demographic Data (workshop) – V Latin American Conference of Population (ALAP).

2012. Using microdata from the Census 2010 to subsidize demographic analyses (workshop) – XVIII National Meeting of Population Studies (ABEP).

ARTICLES AND BOOKS PUBLISHED

2024. BAPTISTA, E.A. (2024). Cardiovascular diseases mortality in Mexican municipalities: a spatio-temporal approach. *Applied Spatial Analysis and Policy*. DOI: 10.1007/s12061-023-09562-7
2023. KUNDU, S., SHAW, S., KHAN, J., CHATTOPADHYAY, A.*, BAPTISTA, E.A., PASWAN, B. (2023). Age, gender and socioeconomic patterns of awareness and usage of e-cigarettes across selected WHO region countries: evidence from the Global Adult Tobacco Survey. *BMJ Open* 2023;13:e070419. DOI: 10.1136/bmjopen-2022-070419
2022. XIA, H., QINGCHUN, L., BAPTISTA, E.A.* (2022). Spatial heterogeneity of internal migration in China: The role of economic, social and environmental characteristics. *PLoS ONE* 17(11): e0276992. DOI: 10.1371/journal.pone.0276992
2022. BAPTISTA, E.A.*, QUEIROZ, B.L. (2022). Spatial analysis of cardiovascular mortality and associated factors around the world. *BMC Public Health* 22, 1556 (2022). DOI: 10.1186/s12889-022-13955-7
2022. BAPTISTA, E.A. (2022). Blindness and vision loss in Japan: A spatio-temporal analysis. *Transactions in GIS*, 26, 2326-2340. DOI: 10.1111/tgis.12961
2022. BAPTISTA, E.A.*, QUEIROZ, B.L., LIMA, E.E.C.d. (2022). Regional COVID-19 mortality in Brazil by age. *Vienna Yearbook of Population Research* 20(1), TBA-OLF. DOI: 10.1553/populationyearbook2022.res2.3
2021. BAPTISTA, E.A.*, QUEIROZ, B.L., PINHEIRO, P.C. (2021). Regional distribution of causes of death for small areas in Brazil, 1998-2017. *Frontiers in Public Health* 9:601980. DOI: 10.3389/fpubh.2021.601980
2021. LIMA, E.E.C.d., GAYAWAN, E., BAPTISTA, E.A.*, QUEIROZ, B.L. (2021). Spatial pattern of COVID-19 deaths and infections in small areas of Brazil. *PLoS ONE* 16(2): e0246808. DOI: 10.1371/journal.pone.0246808
2021. BAPTISTA, E.A.*, DEY, S., PAL, S. (2021). Chronic respiratory disease mortality and its associated factors in selected Asian countries: evidence from panel error correction model. *BMC Public Health* 21, 53. DOI: 10.1186/s12889-020-10042-7
2020. ROTH, G.A., MENSAH, G.A.,..., BAPTISTA, E.A. (2020). Global burden of cardiovascular diseases and risk factors, 1990-2019: update from the GBD 2019 Study. *Journal of the American College of Cardiology*. 2020 Dec, 76 (25) 2982–3021. DOI: 10.1016/j.jacc.2020.11.010
2020. QUEIROZ, B.L., FREIRE, F., LIMA, E.E.C., GONZAGA, M., BAPTISTA, E.A.* (2020). Patterns of geographic variation of mortality by causes of death for small areas in Brazil, 2010. In:

- Jivetti, B., Hoque M.N. (eds) Population Change and Public Policy. Applied Demography Series, vol 11. Springer, Cham. DOI: 10.1007/978-3-030-57069-9_20
2020. KAKINUMA, K., PUMA, M.J., HIRABAYASHI, Y., TANOUYE, M., BAPTISTA, E.A., KANAE, S. (2020). Flood-induced population displacements in the world. *Environmental Research Letters*, 2020, 15 124029. DOI: 10.1088/1748-9326/abc586
2020. CAMPOS, J., RIGOTTI, J.I.R., BAPTISTA, E.A.*, MONTEIRO, A.M.V., REIS, I.A. (2020). Population Estimates from Orbital Data of Medium Spatial Resolution: Applications for a Brazilian Municipality. *Sustainability*, 2020, 12(9), 3565. DOI: 10.3390/su12093565
2020. BAPTISTA, E.A., KAKINUMA, K. & QUEIROZ, B.L. (2020). Association between Cardiovascular Mortality and Economic Development: A Spatio-temporal Study for Prefectures in Japan. *International Journal of Environmental Research and Public Health*, 17(4), 1311. DOI: 10.3390/ijerph17041311
2019. BAPTISTA, E.A. & QUEIROZ, B.L. (2019). The relation between cardiovascular mortality and development: Study for small areas in Brazil, 2001–2015. *Demographic Research*, 41, 1437-1452. DOI: 10.4054/DemRes.2019.41.51
2019. BAPTISTA, E.A. & QUEIROZ, B.L. (2019). Spatial Analysis of Mortality by Cardiovascular Disease in the Adult Population: A Study for Brazilian Micro-Regions Between 1996 and 2015. *Spatial Demography*, 7, 83-101. DOI: 10.1007/s40980-019-00050-6
2018. BAPTISTA, E.A., ABEL, G.J. & CAMPOS, J. (2018). Internal migration in Brazil using circular visualization. *Regional Studies, Regional Science*. DOI: 10.1080/21681376.2018.1526649
2018. BAPTISTA, E.A., QUEIROZ, B.L. & RIGOTTI, J.I.R. (2018). Decomposition of mortality rates from cardiovascular disease in the adult population: a study for Brazilian micro-regions between 1996 and 2015. *Revista Brasileira de Estudos de População*, 35(2). DOI: 10.20947/S102-3098a0050
2017. BAPTISTA, E.A. (2017). Detection of clusters migratory in Brazil. *Revista da ANPEGE*, v.13, p.40-56. DOI: 10.5418/RA2017.1322.0002
2017. BAPTISTA, E.A., CAMPOS, J. & RIGOTTI, J.I.R. (2017). Return migration in Brazil. *Mercator*, v.16, p.1-18. DOI: 10.4215/rm2017.e16010
2015. ANDRADE, R.L.M. & BAPTISTA, E.A. (2015). Focusing public health policies in the state of Minas Gerais between 2011 and 2014: a study using application of geospatial intelligence. *Revista da ANPEGE*, v.11, p.123-149. DOI: 10.5418/RA2015.1116.0006
2014. BAPTISTA, E.A. & RIGOTTI, J.I.R. (2014). Minas Gerais and its disabled population: a study from the Demographic Censuses of 2000 and 2010. *Caderno de Geografia* (PUCMG. Impresso), v. 24, p. 98-118. DOI: 10.5752/P.2318-2962.2014v24n41p98

* Corresponding author

FORTHCOMING AND UNDER REVIEW PAPERS

RESEARCH

- 2021-2024. Direct and indirect impacts of the COVID-19 pandemic on mortality and life expectancy among subnational population in Brazil and Mexico (Marcos Gonzaga, PI). Universidade Federal do Rio Grande do Norte, Brazil. CNPq grant (Number 406432/2021-0).
- 2018-2021. Estimating Mortality by causes in small areas in Brazil (Bernardo Lanza Queiroz, PI). Universidade Federal de Minas Gerais / Cedeplar, Brazil. CNPq grant (Number 421183/2018-7).
- 2017-2020. How can we understand the function and response of the Earth's system in the face of demographic changes? (Emerson Baptista, PI). Asian Demographic Research Institute, Shanghai University.
- 2015-2017. Biome Restoration of Brazil's Mata Atlântica: can we promote equitable socioeconomic development while saving the world's most threatened tropical forest?" (Leah VanWey, coordinator). Brown University.
- 2012-2013. Population estimates for small areas to answer social demands (Laura Lídia Wong, coordinator). Universidade Federal de Minas Gerais, 2012-2013.

FUNDING & AWARDS

- 2021-2024 . CNPq – Brazil (Grant number 406432/2021-0)
- 2018-2021 . CNPq – Brazil (Grant number 421183/2018-7)
- 2017-2020 . Oriental Young Scholar Program – China

CONFERENCE PRESENTATIONS

2023. BAPTISTA, Emerson Augusto; CANUDAS-ROMO, Vladimir. Disability and its Impact on Life Expectancy: Heterogeneity Across Mexican States. In: PAA 2023 Annual Meeting, New Orleans, US.
2023. ZENG, Ming; KAKINUMA, Kaoru; BAPTISTA, Emerson Augusto. Heat Impacts on an Aging Society: Spatiotemporal Analysis of Heatstroke Risk in Japan. In: PAA 2023 Annual Meeting, New Orleans, US.
2022. MASFERRER, Claudia; BAPTISTA, Emerson Augusto; GARCIA-GUERRERO, Victor. Migration from the United States: spatio-temporal variation within Mexican municipalities. In: X Congreso de la Asociación Latinoamericana de Población, Valparaíso, Chile
2022. MASFERRER, Claudia; BAPTISTA, Emerson Augusto; GARCIA-GUERRERO, Victor. Migration from the United States: spatio-temporal variation within Mexican municipalities. In: PAA 2022 Annual Meeting, Atlanta, US.
2021. KAKINUMA, Kaoru; PUMA, Michael; HIRABAYASHI, Yukiko; TANOUE, Masahiro; BAPTISTA, Emerson Augusto; KANAE, Shinjiro. Global risk of flood-induced population displacement. In: International Population Conference 2021, Hyderabad, India.

2021. LI, Xueting; JIANG, Leiwen; BAPTISTA, Emerson Augusto. Spatial Analysis of Social Vulnerability to Environmental Risks: A Study for China Prefectures in 2000 and 2010. In: PAA 2021 Annual Meeting, Online, US.
2021. BAPTISTA, Emerson Augusto; QUEIROZ, Bernardo Lanza. Spatial Analysis of Cardiovascular Mortality and Associated Factors around the world. In: PAA 2021 Annual Meeting, Online, US.
2019. QUEIROZ, Bernardo Lanza; FREIRE, F. H. M. A.; GONZAGA, M.; LIMA, E. E. C.; BAPTISTA, Emerson Augusto. Trends and Patterns of Geographic Variation of Mortality by Causes of Death for Small Areas in Brazil, 1996–2016. In: PAA 2019 Annual Meeting, Austin, US.
2019. BAPTISTA, Emerson Augusto; CAMPOS, Járvis; ABEL, Guy. Internal Migration Flows in Brazil Using Circular Visualization. In: PAA 2019 Annual Meeting, Austin, US.
2019. BAPTISTA, Emerson Augusto; KC, Samir. Spatial Variations of Dengue Fever in Brazil. In: PAA 2019 Annual Meeting, Austin, US.
2018. CAMPOS, Járvis; RIGOTTI, José Irineu Rigotti; MONTEIRO, Antônio Miguel Vieira; REIS, Ilka Afonso; BAPTISTA, Emerson Augusto. Population estimates from satellite data of medium spatial resolution: applications in municipalities of the Metropolitan Region of Belo Horizonte. In: National Meeting of Population Studies (ABEP) 2018, Poços de Caldas, Brazil.
2018. BAPTISTA, Emerson Augusto; QUEIROZ, Bernardo Lanza; RIGOTTI, José Irineu Rigotti. Decomposition of mortality rates from cardiovascular disease in the adult population: a study for Brazilian micro-regions between 1996 and 2015. In: European Population Conference (EAPS) 2018, Brussel, Belgium.
2018. BAPTISTA, Emerson Augusto; QUEIROZ, Bernardo Lanza. Spatial Analysis of mortality by cardiovascular disease in the adult population: a study for Brazilian micro-regions between 1996 and 2015. In: PAA 2018 Annual Meeting, Denver, US.
2017. BAPTISTA, Emerson Augusto; VANWEY, Leah; NELSON, Jon. Migratory dynamics in the cocoa region of Brazil. In: PAA 2017 Annual Meeting, Chicago, US.
2017. BAPTISTA, Emerson Augusto; VANWEY, Leah; NELSON, Jon. Property Size and Land Use in the Brazilian Atlantic Forest. In: PAA 2017 Annual Meeting, Chicago, US.
2015. BAPTISTA, Emerson Augusto. The rain erosion process in the region of Buritis neighborhood, BH/MG. In: V Congresso Brasileiro de Gestão Ambiental, 2015, Belo Horizonte, Brazil.
2013. BAPTISTA, Emerson Augusto; CAMPOS, Járvis. Return migration in Brazil over five-years periods 1986/1991, 1995/2000 and 2005/2010. In: XXVII IUSSP International Population Conference, 2013, Busan, South Korea.
2012. BAPTISTA, Emerson Augusto; RIGOTTI, José Irineu Rigotti; CAMPOS, Járvis. Spatial and demographic approach to the disabled population in the State of Minas Gerais from the Demographic Census of 2000 and 2010. In: V Congreso de la Asociación Latinoamericana de Población, 2012, Montevideo, Uruguay.

TEACHING

Center for Demographic, Urban and Environmental Studies, El Colegio de Mexico

Graduate:

Spatial Analysis, 2021/2022 – 1

Basic Statistics, 2022/2023 – 1

Spatial Analysis, 2023/2024 – 1

Spatial Analysis, 2023/2024 – 2

Asian Demographic Research Institute, School of Sociology and Political Science

Graduate:

Spatial Analysis for Population Studies, Spring 2018; Winter 2018, 2019, 2020, 2021, 2022

Population, Environment and Climate Change, Fall 2018

Undergraduate:

Introduction to GIS for Social Sciences, Summer 2019, 2020; Spring 2021

Pontifícia Universidade Católica de Minas Gerais

Graduate:

Geodatabase, Summer 2017

Universidade Federal de Minas Gerais (UFMG)

Undergraduate:

Spatial distribution of the population, Spring 2014

Centro Universitário de Belo Horizonte (UniBH)

Undergraduate:

GIS, Spring 2014, Fall 2015

Quantification in Geography, Fall 2015

Geoeconomy, Spring 2014

Cartography, Fall 2014

SUPERVISION OF GRADUATE STUDENTS

2022-2026. **Marcela Avitia Maldonado.** *Desigualdades socioespaciales en la mortalidad por COVID-19 en México, 2020-2023.* Ph.D. in Demography at the Center for Demographic, Urban and Environmental Studies, El Colegio de Mexico, Mexico.

2022-2024. **Marcial Yangali Orihuuela.** *Desigualdad en las prisiones mexicanas, una aproximación demográfica a las cohortes sintéticas de 2016 y 2021.* M.Sc. in Demography at the Center for Demographic, Urban and Environmental Studies, El Colegio de Mexico, Mexico.

2022-2024. **Nancy Karina Morales Contreras.** *Cambios en la estructura de parentesco de niños y adolescentes debido al Covid-19.* M.Sc. in Demography at the Center for Demographic, Urban and Environmental Studies, El Colegio de Mexico, Mexico.

2020-2022. **Karen Andrea Robles Rodríguez.** *Uso de técnicas demográficas y espaciales para el análisis de mortalidad por homicidios: Estado de México entre 2000-2020.* M.Sc. in Demography at the Center for Demographic, Urban and Environmental Studies, El Colegio de Mexico, Mexico.

2019-2022. **Du Yuxia.** *The role of age structure, urbanization, and food supply in the global rising prevalence of type 2 diabetes: evidence from GBD data 1990-2014.* M.Sc. in Demography at the Asian Demographic Research Institute, Shanghai University, China.

ADVISORY ROLES

Journal Reviewer: BMC Medicine

Brazilian Journal of Population Studies (REBEP)

Demographic Research

Genus

International Journal of Health Geographics

PLOS ONE

Population Health Metrics

Population Review

Quality of Life Research

Scientific Reports

Vienna Yearbook of Population Research

PROFESSIONAL ASSOCIATIONS:

- Brazilian Association of Population Studies (ABEP)
- International Union for the Scientific Study of Population (IUSSP)
- Latin American Association of Population (ALAP)
- Population Association of America (PAA)