

JOE BREW

joebrew@gmail.com
+36 666 66 80 86
www.economicsofmalaria.com

Carrer de Cienfuegos
Entresol 2da
Barcelona, 08027 (Spain)

Languages

Native: English
Fluent: Spanish, French, Catalan
Proficient: Portuguese

Expert: R, SAS
Professional: Python, Stata
Proficient: Javascript, SPSS

Education

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|---|----------------------|
| PhD (in progress) | <i>January 2016-</i> |
| <i>Institut de Salut Global (host institution)</i> | BARCELONA, SPAIN |
| <i>Vrije Universiteit (secondary institution)</i> | AMSTERDAM, HOLLAND |
| <i>Centro de Investigação em Saúde de Manhiça (research site)</i> | MANHIÇA, MOZAMBIQUE |

- Research on the cost effectiveness and efficacy of malaria control interventions

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| Master of Public Health | <i>September 2011 - July 2013</i> |
| <i>Københavns Universitet (year 2)</i> | COPENHAGEN, DENMARK |
| <i>Escuela Andaluza de Salud Pública (year 1)</i> | GRANADA, SPAIN |

- Coursework in epidemiology, economic evaluation, demography, advanced biostatistics, management, health policy, health promotion

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| Master of Arts | <i>September 2009-June 2010</i> |
| <i>Institut Catholique de Paris</i> | PARIS, FRANCE |

- MA in Contemporary Diplomatic History, fieldwork on negotiations leading to Paris Peace Accords

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| Bachelor of Arts | <i>August 2004-May 2008</i> |
| <i>Sewanee: The University of the South</i> | SEWANEE, TN, USA |

- Triple major in Contemporary Non-Western History, Spanish, French

Publications

Peer-reviewed papers

Tran C, **Brew J**, Johnson N, Ryan K, Martin B, Cornett C, Caron B, Duncan R, Small P, Myers P, Morris J. *Sustainability of School-located Influenza Vaccination Programs in Florida*. Vaccine.

DOI: 10.1016/j.vaccine.2016.04.017 (2016)

Lednicky J, Iovine N, **Brew J**, Loeb J, Sugimoto J, Rand K, Morris J. *Hemagglutinin Gene Clade 3C.2a Influenza A(H3N2) Viruses, Alachua County, Florida, USA, 2014–15*. Emerging Infectious Diseases

DOI: 10.3201/eid2201.151019 (2016)

Potash E, **Brew J**, Loewi A, Majumdar S, Reece A, Walsh J, Rozier E, Jorgenson E, Mansour R, Ghani R. *Predictive Modeling for Public Health: Preventing Childhood Lead Poisoning*. ACM SIGKDD International Conference on Knowledge Discovery and Data Mining

DOI: 10.1145/2783258.2788629 (2015)

Iovine M, Morris JG, Fedenburg K, Rand K, Alnuaimat H, Lipori G, **Brew J**, Lednicky JA. *Increased severity of H1N1 influenza in the 2013-14 season and emergence of the D225G variant*. Emerging Infectious Diseases

DOI: 10.3201/eid2104.141375 (2015)

Brew J. *(Mis)measurement in the study of food environment: we need better methods to solve the puzzle*. Journal of Epidemiology and Community Health

DOI:10.1136/jech-2014-205163 (2015)

Tran CH, Sugimoto JD, Pulliam JR, Ryan KA, Myers PD, Castleman JB, Doty R, Johnson J, Stringfellow J, Kovacevich N, **Brew J**, Cheung LL, Caron B, Lipori G, Harle CA, Alexander C, Yang Y, Longini IM Jr, Halloran ME, Morris JG, Small PA Jr. *School-Located Influenza Vaccination Reduces Community Risk for Influenza and Influenza-Like Illness Emergency Care Visits*. PLOS ONE

DOI: 10.1371/journal.pone.0114479 (2014)

Academic theses

Youth overweight in Denmark: prevalence, ethnicity and other risk factors. Kobenhavns Universitet (MPH dissertation) 2013

Estrés laboral en trabajadoras domésticas en Andalucía. Escuela Andaluza de Salud Pública 2012

La Presse comme arme politique: le rôle des journaux américains dans les négociations des accords de Paris. Institut Catholique de Paris (MA dissertation) 2009

Religion and Counterrevolution: Fundamentalist Evangelicalism and the Dictatorship of Efraín Ríos Montt. Sewanee: The University of the South (BA thesis) 2008

Non-academic

BCN Data: the numbers behind Europe's most vibrant city
www.bcndata.cat 2015 - ongoing

Control Flu Data Insights: Immunization, consent and vaccine hesitance
Florida Department of Health, Alachua County 2015

Community Health Improvement Plan: Evaluation Reports
Florida Department of Health, Alachua County (internal) 2014

Quantifying capacity at Health Posts in Tigray, Ethiopia
Tigray Regional Health Bureau (internal) 2013

Ciudad Quetzal: A Guatemalan City Grapples with Gang Terrorism
Tico Times, Costa Rica 2011

Heart of the sky, heart of the earth: religious division and its sociopolitical causes and consequences in San Juan Sacatepequez, Guatemala
Biehl Fellowship Paper 2007

Experience

Data scientist OAKLAND, CA, USA
Lendable January 2015 - present

- Work to expand access to financial products to the developing world (East Africa, India)
- Program machine learning algorithms to predict financial risk
- Develop and implement stochastic simulation methods
- Devise creative means for extracting and generating features in a low-data context
- Create internal and client-facing visualization tools

Analyst WASHINGTON, DC, USA
Analyst Institute April 2014 - April 2015

- Analyze voter data from controlled experiments
- Create tools for statistical analysis
- Design tools for data visualization

Surveillance Epidemiologist GAINESVILLE, FL, USA
Florida Department of Health, Alachua County July 2013 - December 2015

- Write programs to detect clusters/abnormalities for ER data stream

- Analyze mosquito trap data to prevent arbovirus transmission
- Coordinate flu surveillance operations through school system
- Oversee program evaluation, billing, revenue modeling activities

"Data Science for Social Good" Fellow

University of Chicago

CHICAGO, IL, USA

June 2014 - August 2014

- Analyzed large datasets to predict pediatric lead poisoning
- Worked in close collaboration with the Chicago Dept. of Public Health
- Used tools like R, Python and D3
- Worked closely with industry experts like Rayid Ghani and Ben Yuhas
- Designed tools for data exploration

Erasmus Mundus Researcher

Skolesundhed

COPENHAGEN, DENMARK

February 2012-June 2013

- Redesigned school health screening system to bring to digital platform
- Analyzed 3 years of youth health data on immigration and overweight

Health Systems Researcher

Agència de Salut Pública de Barcelona

BARCELONA, SPAIN

November 2012-February 2013

- Worked on SOPHIE project on immigration and health disparities

Maternal Health Epidemiologist

Tigray Regional Health Bureau

MEKELLE, ETHIOPIA

May 2012-August 2012

- Collected, analyzed and reported on data from rural regional Health Posts near the Eritrean border

Teacher

St. Andrew's-Sewanee School

SEWANEE, TN, USA

January 2010-June 2011

- Taught middle and high school Spanish and Technology

Assistant Coach

The University of the South

SEWANEE, TN, USA

August 2009-December 2010

- Coached men and women's cross country and track and field

Health Educator

Promotion et Développement Humain

AVEDJI CITÉ, TOGO

May 2009-August 2009

- Lead sexual health education workshops for teens
- Assessed medication adherence among HIV/AIDS patients through visits/interviews
- Assisted in accounting, data organization, process improvement

Recreation Coordinator / Teacher

Instituto Experimental de Ciudad Quetzal

CIUDAD QUETZAL, GUATEMALA

2006-2008 (summers)

- Organized youth recreation clinics for the *Cases Interculturales* program
- Taught English and Spanish in impoverished and violence-stricken area

Honors and Awards

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| Data Science for Social Good Fellowship Funded by the University of Chicago to spend 3 months tackling big problems with big data | 2014 |
| Erasmus Mundus Fellowship European Commission award for full MPH funding | 2011 |
| Highest honors ("mention très bien") on MA thesis <i>La Presse comme arme politique: le role des journaux américains dans les négociations des accords de Paris</i> | 2009 |
| Highest honors ("summa cum laude") and Phi Beta Kappa Top 5% of graduating class at Sewanee | 2008 |
| Linda Wheat Fellowship Full funding for graduate studies at the Institut Catholique de Paris | 2008 |
| Fulbright ETA (Andorra) Awarded, but I declined in order to pursue graduate studies | 2008 |
| Algernon Sydney Sullivan Award Granted to one graduate annually, Sewanee's "most prestigious prize" | 2008 |
| Joseph Cushman Scholarship Highest award given to History major at Sewanee | 2007 |
| Gessell Fellowship Funding to carry out research on African-American history at Sewanee | 2007 |
| Biehl Social Science Fellowship Full funding to investigate the religious roots of social division in Guatemala | 2007 |
| Lilly Grant Full funding for vocational institute and internship in Guatemala | 2006 |
| Wright-Bentley Scholarship For strong academic skills and service to the community | 2005 |
| Wilkins Scholarship Merit and community award | 2004 |

Community Service

Translator

Physicians for Haiti

PORT-AU-PRINCE, HAITI

2010-present

- Translated medical education documents between French and English

Founder

Weekend English for Migrants

SEWANEE, TN, USA

2009-2011

- Organized language exchanges between high-schoolers and undocumented immigrants

Co-founder

ABRE

SEWANEE, TN, USA

2006-2008

- Co-founded and presided over social awareness organization

Personal

Happily married, father, likes to fix and ride bikes, enjoys travel, doesn't enjoy airplanes, loves running, hates sitting, morning person.