

JOE BREW

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

Education

PhD (in progress)

Institut de Salut Global (host institution)

Vrije Universiteit (secondary institution)

January 2016-

BARCELONA, SPAIN

AMSTERDAM, HOLLAND

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

Master of Public Health

Kobenhavns Universitet (year 2)

Escuela Andaluza de Salud Pública (year 1)

September 2011 - July 2013

COPENHAGEN, DENMARK

GRANADA, SPAIN

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

Master of Arts

Institut Catholique de Paris

September 2009-June 2010

PARIS, FRANCE

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

Bachelor of Arts

Sewanee: The University of the South

August 2004-May 2008

SEWANEE, TN, USA

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

Publications

Peer-reviewed papers

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 role 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

Control Flu Data Insights: Consent form return and vaccine hesitance
Florida Department of Health, Alachua County (internal) 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

CHICAGO, IL, USA

University of Chicago

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

COPENHAGEN, DENMARK

Skolesundhed

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

BARCELONA, SPAIN

Agència de Salut Pública de Barcelona

November 2012-February 2013

- Worked on SOPHIE project on immigration and health disparities

Maternal Health Epidemiologist

MEKELLE, ETHIOPIA

Tigray Regional Health Bureau

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

Data Science for Social Good Fellowship

2014

Funded by the University of Chicago to spend 3 months tackling big problems with big data

Erasmus Mundus Fellowship

2011

European Commission award for full MPH funding

Highest honors ("mention très bien") on MA thesis

2009

La Presse comme arme politique: le role des journaux américains dans les négociations des accords de Paris

Highest honors ("summa cum laude") and Phi Beta Kappa

2008

Top 5% of graduating class at Sewanee

Linda Wheat Fellowship

2008

Full funding for graduate studies at the Institut Catholique de Paris

Fulbright ETA (Andorra)

2008

Awarded, but I declined in order to pursue graduate studies

Algernon Sydney Sullivan Award

2008

Granted to one graduate annually, Sewanee's "most prestigious prize"

Joseph Cushman Scholarship 2007
Highest award given to History major at Sewanee

Gessell Fellowship 2007
Funding to carry out research on African-American history at Sewanee

Biehl Social Science Fellowship 2007
Full funding to investigate the religious roots of social division in Guatemala

Lilly Grant 2006
Full funding for vocational institute and internship in Guatemala

Wright-Bentley Scholarship 2005
For strong academic skills and service to the community

Wilkins Scholarship 2004
Merit and community award

Community Service

Translator PORT-AU-PRINCE, HAITI
Physicians for Haiti 2010-present

- Translated medical education documents between French and English

Founder SEWANEE, TN, USA
Weekend English for Migrants 2009-2011

- Organized language exchanges between high-schoolers and undocumented immigrants

Co-founder SEWANEE, TN, USA
ABRE 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.