# Thomas Uchiyama Aguilar

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Information	Brooklyn, NY	

#### **OVERVIEW**

- Data @Vericred, formerly @UCSF and @earthinstitute. Working on automation and analytics to improve the healthcare system through data, technology, and transparency. Fueled by coffee.
- Tools: R, git, Postgresql, SAS
- STATA, WinBUGS, Jags, C/C++, M-Plus, Python

## **EDUCATION**

## Columbia University, New York, NY

M.S. Biostatistics, May 2012

## University of California, Santa Cruz, Santa Cruz, CA

B.A. Mathematics and Economics (Double Major), Dec. 2009

## WORK Experience

# Data Analyst

February 2016 to Present

Vericred, Inc., New York, NY

 Analyzing and visualizing data to provide greater transparency into the health insurance market

# Programmer Analyst II November 2014 to February 2016 University of California, San Francisco, San Francisco, CA

- Lead data analyst and programmer for **CAHealthcareCompare.org**, a price and quality transparency tool for health care in California.
- Statistical analysis for clinical and policy research using large commercial/medicare claims and EHR data
- Writing and contributing to manuscripts and technical documents.
- Provide analytical and programming support and training to address needs of internal and external researchers

### Analyst

June 2014 to November 2014

OnPoint Analytics, Emeryville, CA

- Applying statistical and econometric methods to financial and economic data in R and STATA
- Managing large proprietary datasets using SAS and STATA in linux environment
- Preparing expert reports, trial exhibits and other presentation materials for the court in ongoing legal proceedings

## Data Analyst/Data Manager

March 2012 to June 2014

## Earth Institute, Columbia University, New York, NY

- Providing statistical expertise for study design and sample size calculations, data analysis, technical document preparation for hypothesis-driven research projects
- Performing regression analysis, Bayesian hierarchical modeling and predictive analysis, EFA/CFA factor analysis and structural equation modeling, multiple imputation of missing data in R, WinBUGS and STATA
- Building data infrastructure for remote data collection and automate daily and weekly reports of ongoing survey and test results for quality assurance using SQL

#### Statistical Consultant

July 2013 to March 2014

Columbia University

- Simulating egocentric network data using Exponential Random Graph Models in R to test sensitivity of measurement error, analyzing results and comparing them to observed network data
- Building Bayesian hierarchical models in R/WinBUGS to investigate the influence of violence exposure on post-traumatic stress symptoms using complex-survey data of 900 Rwandan children within orphanages who experienced the 1994 genocide
- Providing ad-hoc support for statistical analysis and graphics, study design and manuscript writing

#### Research Assistant

May 2011 to June 2012

Department of Population and Family Health, Columbia University

- Developing a R program to decompose the trends of Malaria prevention and treatment among children in Sub-Saharan countries working with clustered survey data and incorporating bootstrap sampling weights to produce unbiased confidence intervals of non-linear functions
- Performing survival analysis of national insurance uptake of pregnant women in Ghana to determine the effects of the location healthcare and antenatal services were provided. Responsible for developing the statistical analysis in STATA and reporting on the findings

# RESEARCH PUBLICATIONS

- 1. Dejong C\*, **Aguilar T**\*, Lin GA, Tseng CW, Boscardin J, Dudley RA. Pharmaceutical Industry-Sponsored Meals and Physician Prescribing Patterns for Medicare Patients. *JAMA Internal Medicine*, (June 2016). doi:10.1001/jamainternmed.2016.2765
- Sing DC, Barry JJ, Aguilar T, Theologis AA, Patterson JT, Tay B, Vail TP, Hansen EN. Prior Lumbar Spinal Arthrodesis Increases Risk of Prosthetic-Related Complication in Total Hip Arthroplasty. The Journal of Arthroplasty, (March 2016). doi:10.1016/j.arth.2016.02.069
- 3. Sing DC, Ding DY, **Aguilar T**, Luan T, Ma CB, Feeley BT. The Effects of Patient Obesity on Early Post-operative Complications after Shoulder

- Arthroscopy. under review at Arthroscopy: The Journal of Arthroscopic and Related Surgery
- 4. Frimpong JA, Helleringer S, Awoonor-Williams JK, **Aguilar T**, Phillips JF, Yeji F. The complex association of health insurance and maternal health services in the context of a premium exemption for pregnant women: a case study in Northern Ghana. *Health Policy and Management*, (December 2014)
- 5. Sing DC, **Aguilar T**, ... Use of Bone Morphogenetic Protein Reduces 1-Year Revision After Multi-level Lumbar Interbody Fusion *under review at Spine*

<sup>\*</sup> co-first authors