

AMANUEL ZIMAM MELEKIN, PHD

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SUMMARY

Experienced researcher/analyst with broad training and strong mathematical/statistical background, seeking a challenging research analyst position to use my analytical, statistical, and scientific training/experience to understand systems, solve problems and alleviate bottlenecks in order to improve system performance.

CORE COMPETENCIES

- Applied Statistics (Multiple Regression, Logistic Regression, Multivariate Modeling, Structural Equation Modeling, Multilevel Regression, Generalized Linear Modeling, Longitudinal Modeling), Data Mining, Machine Learning
- Research Methods, Research Protocol & Research Design, Experimental Design
- Data Collection, Data Cleaning, Validation, Modeling,
- R, SQL, Mplus, STATA, SAS, SPSS, Simulation
- Health Systems, Health Policy, Healthcare Services Research, Epidemiology, Public Health
- Working Knowledge of Python, Linux, AWS (EC2)

RESEARCH/WORK EXPERIENCE

Statistical Consultant

Jun 16, 2014–Aug 31, 2017

OHSU-PSU School of Public Health (with Dr. Ana Quiñones)

- Analysis of multilevel multi-group longitudinal data of chronic disease inconsistencies between racially and ethnically diverse older adults (using **Stata & Mplus**)
- Presented preliminary research results, “Racial and Ethnic Differences in Self-Reported Chronic Disease Inconsistencies over Time” at the 68th Annual Scientific Meeting for the Gerontological Society of America in Orlando, Florida, November 18-22, 2015.
- Co-authorship of manuscript currently under review

Graduate Research Assistant

Dec 16, 2009 – Dec 31, 2016

Portland State University, Portland, OR

Oregon DHS Funded Projects

- Data analyst/Statistician (using **SPSS** and **Stata**)
- Participated in developing survey instrument for Community-Based Care Settings in Oregon
- Created database, entered data and provided undergraduate students guidelines for entering data
- Cleaned and analyzed data for “Oregon Community-Based Care Reports: Characteristics of Medicaid Clients in Assisted Living, Residential Care, Memory Care, and Adult Foster Homes” projects in 2015 and 2016.
- Analyzed administrative data (Oregon Medicaid Data) examining factors associated with multiple hospitalizations
- Presented preliminary results at the 68th Annual Scientific Meeting for the Gerontological Society of America in Orlando, Florida, November 18-22, 2015.
- Co-authorship of manuscript under preparation for this project
- Analyzed other Community-Based Care data as requested

NIH Funded Projects

- Conducted thorough review of literature on Nonmedical use of Pharmaceutical Opioids
- Categorized and indexed National Data Sources on the Nonmedical use of Pharmaceutical Opioids

- Presented results at the College on Problems of Drug Dependence at the 75th Annual Meeting in San Diego, CA.
- Co-authorship of a paper on this project
- Collaborated on System Dynamics model development to simulate the initiation and Nonmedical use of Pharmaceutical Opioids as well as simulate policy interventions
- Presented results of System Dynamics model at the Addiction Health Services Research Conference, Portland, Oregon, October 23-25, 2013
- Co-authorship of a paper on this project

Office of Institutional Research and Planning

- Generated quarterly summary reports for internal and external clients (using **SAS & Excel**)
- Edited and created html code to update website with quarterly summary reports
- Extracted data from data warehouse as requested by various Academic Departments
- Provided summary reports to departments as requested

Graduate Student worker

Jun 01, 2014–Jun 15, 2015

Prof. Jason Newsom (Portland State University)

- Converted **Mplus** codes to **lavaan R** code for a book:
“Longitudinal Structural Equation Modeling: A Comprehensive Introduction”
<http://www.longitudinalsem.com/>
- Proof read all book chapters, pointed out typos and suggested edits

Research Assistant

Jan 1, 2007–Sep. 24, 2009

United States International University, Nairobi, Kenya

- Interviewed government officials on public-private partnerships
- Transcribed and coded qualitative data
- Analyzed qualitative data & assisted in drafting final research report

ACCOMPLISHMENTS

- Three peer reviewed journal publications, one under review
- Several annual research reports presented to the State of Oregon
- Oral/poster presentations of research findings at scientific conferences
- Several quarterly & annual reports/“factbooks” regarding Portland State enrollment
- Support for publication of Methods/Statistics book (for Prof. Jason Newsom)
- Oral presentation of research findings at various colloquia at Portland State University

TEACHING EXPERIENCE

Adjunct Instructor

Sept 16, 2013–Dec 31, 2013

Portland State University, Portland, OR

BST/INTL/UNST-211A/233A – African Studies/Global Perspectives

PROFESSIONAL WORKSHOPS

- **Applied missing data analysis.** Two-day workshop taught by **Dr. Craig Enders**, Portland, OR, June, 2015
- **Longitudinal structural equation modeling.** Two-day workshop taught by **Dr. Jason Newsom**, Portland, OR, June, 2015
- **Latent Growth Curve Modeling with R.** Two-day workshop taught by **Dr. Alexander Beaujean**, Portland, OR, June, 2015

- **Longitudinal Structural Equation Modeling.** Two-day workshop taught by **Dr. Jack McArdle**, Portland, OR, June, 2014
- **Structural Equation Modeling.** Two-day workshop taught by **Dr. Rex Kline**, Portland, OR, June, 2014.
- **Data Analysis with lessR (R package).** Two-day workshop taught by **Dr. David Gerbing**, Portland, OR, June, 2014
- **Statistical Mediation Analysis.** Two-day workshop taught by **Dr. David MacKinnon**, Portland, OR, June, 2013

PROFESSIONAL CERTIFICATE

Programming with R for Data Science

edX, Online Education Program

OTHER PROFESSIONAL COURSES

R for Data Science

Udemy, Online Education Program

Querying with Transact-SQL

edX, Online Education Program

EDUCATION

PhD, Systems Science

Portland State University, Oregon, USA

MS, Systems Science

Portland State University, Oregon, USA

MBA, International Business

United States International University, Nairobi, Kenya

Bachelor of Science, Education, Mathematics

Christ the Teacher Institute for Education, Nairobi, Kenya.

Institute of St. Mary's University of Minnesota, Minnesota, USA

REFERENCES

Martin Zwick, Ph.D.

Professor, Systems Science Ph.D. Program, Portland State University
(503)725-4987, zwick@pdx.edu

Jason Newsom, Ph.D.

Professor, Department of Psychology, Portland State University
(503)725-5136, newsomj@pdx.edu

Paula Carder, Ph.D.

Associate Professor, Institute on Aging, School of Community Health, Portland State University
(503)725-5144, carderp@pdx.edu

Ana Quiñones, Ph.D.

Associate Professor, Family Medicine, Oregon Health and Science University
(503)494-5889, quinones@ohsu.edu