## **EDUCATION**

## Master of Public Administration Dual Degree Program (MPA, 2012):

- International Economic Policy at School of International & Public Affairs, Columbia University (2011-12)
- International Development at London School of Economics (2010-11): Distinction

# Statistical and Mathematical Modeling (PhD, MSc, BSc):

- Dr. rer. nat. (PhD, 2008): summa cum laude at Free University of Berlin (Dept. for Mathematics) and International Max-Planck Research School for Scientific Computing.
- Master of Science (M. Sc., 2004), Free University of Berlin
- Bachelor of Science (B. Sc., 2003), Free University of Berlin

Philosophy: Magister Artium (M.A., 2009), Free University of Berlin

WORK EXPERIENCE	
Feb. 2013 – to date	Senior Economist at World Bank, (Juba, South Sudan; Nairobi, Kenya; Washington, USA): Country poverty economist for selected countries mainly in East Africa, including (1) preparation and implementation support for operational statistical capacity building projects; (2) design, implementation and analysis of household surveys; (3) production of analytical work including Poverty Assessments, Poverty and Social Impact Analyses, Systematic Country Diagnostics, Impact Evaluations, Youth Employment Analysis, Displacement Profiling and other analytical products; (4) participation in policy dialogue; and (5) development of new methodologies to measure poverty, especially in fragile countries.
May 2012 – Jan. 2013	Economist at International Growth Centre, (Juba, South Sudan): Focal point for policy advice to the Government of South Sudan in economic growth drawn from evidence-based research offered through a research network. Management of projects on (1) macroeconomic policy, (2) fiscal management, (3) natural resource management, (4) regional integration, (5) labor markets and regulation, (6) economic diversification.
Mar. 2011 – Apr. 2012 (part-time: avg. 0.5 FTE)	Research Assistant at London School of Economics, Centre for Economic Performance: Statistical analysis and computational support for the 'Economics of Density: Evidence from the Berlin Wall', <i>Econometrica, Vol. 83, No. 6</i> .
Apr. 2011 – Dec. 2011 (part-time: avg. 0.5 FTE)	Research Assistant (STC) at World Bank, Development Research Group, Poverty Cluster: (1) Impact evaluation of a program from the Tanzanian government to support businesses of disadvantaged groups with grants and trainings. The consultancy included statistical analysis of economic and health survey data, interpreting results and communication with the Tanzanian data collectors. (2) Statistical analysis for an HIV / HSV project in Malawi.
Oct. 2010 – Apr. 2012 (part-time: avg. 0.5 FTE)	Statistician at Imperial College London, School of Public Health: (1) Impact evaluation of a strategy to reduce salt intake in England. (2) Evaluation of a payfor-performance scheme in the UK to improve care & health. (3) Statistical analysis of the association between practice size and quality of diabetes management. (4) Systematic review for effectiveness of integrated perinatal prevention of mother-to-child HIV transmission programs in low- and middle-income countries. (5) Impact of publication of hospital investigation reports on public opinion.

Oct. 2009 - Sept. 2010

Researcher (PostDoc) at Harvard University, School of Public Health:

Statistical analysis and mathematical modeling for functional studies to decipher genomic modifications; published in two Nature articles.

## **SKILLS**

Languages	German (mother tongue), English (fluent), Portuguese (fluent), Spanish & Italian (beginner).
-----------	--

IT World Bank Tools: Adept, Buddy, Boost, LDP, RMSM-X, WITS Computational software: ArcGIS, R, STATA, Matlab, Maple.

Interests Traveling, scuba diving, soccer, drums.

#### REFERENCES

- Ana Revenga, World Bank, Deputy Chief Economist: arevenga@worldbank.org
- Pablo Fajnzylber, World Bank, Practice Manager: pfajnzylber@worldbank.org
- Richard Newfarmer, International Growth Centre, Country Director: richard.newfarmer@theigc.org
- Daniel Sturm, London School of Economics, Lecturer: d.m.sturm@lse.ac.uk

## SELECTED PUBLICATIONS

## World Bank Papers, Books and Reports:

#### Working Papers

- Broken Promises: Evaluating an incomplete Cash Transfer (forthcoming). <u>Policy Research working paper</u>. World Bank.
- A novel approach to the automatic designation of pre-defined census Enumeration Areas and population sampling frames: A case study in Somalia (forthcoming). Policy Research working paper. World Bank.
- Collecting Robust Real-Time High Frequency Price Data in Fragile Settings (2019). <u>Poverty & Equity Notes</u>; no. 12. World Bank.
- Estimation of Poverty in Somalia Using Innovative Methodologies (2019). <u>Policy Research working paper</u>; no. WPS 8735. World Bank.
- Estimating Poverty in a Fragile Context The High Frequency Survey in South Sudan (2019). <u>Policy Research</u> working paper; no. WPS 8722. World Bank.
- Impact of Drought on Poverty in Somalia (2019). Policy Research working paper; no. WPS 8698. World Bank.
- Eliciting Accurate Responses to Consumption Questions among IDPs in South Sudan Using 'Honesty Primes' (2018). Policy Research working paper; no. WPS 8541. World Bank.
- Small Area Estimation of Poverty under Structural Change (2018). <u>Policy Research working paper</u>; no. WPS 8472. World Bank.
- Impact of Conflict on Adolescent Girls in South Sudan (2018). <u>Policy Research working paper</u>; no. WPS 8520.
   World Bank.
- Household expenditure and poverty measures in 60 minutes: a new approach with results from Mogadishu (2018). Policy Research working paper; no. WPS 8430. World Bank.
- Market Integration and Poverty: Evidence from South Sudan (2016). <u>Policy Research working paper</u>; no. WPS 7564. World Bank.

## Books Edited and Chapter Contributions:

- Data Collection in Fragile Countries (forthcoming). Edited with Johannes Hoogeveen.
- The Challenges of Macroeconomic Stabilisation and Poverty Alleviation in South Sudan. In: The Struggle of South Sudan: Challenges of Security and State Formation (2019), edited by Luka Biong Deng Kuol and Sarah Logan. London, UK: IB Tauris.

## World Bank Reports:

- Kenya Social Protection and Jobs Public Expenditure Review (forthcoming) with Ramya Sundaram.
- Using Micro-Data to Inform Durable Solutions for IDPs (2019).
- Angola Systematic Country Diagnostic Creating Assets for the Poor (2018).
- Kenya Economic Update In Search of Fiscal Space (2018) with Allen Dennis.
- Kenya Poverty and Gender Assessment (2018) with Carolina Mejia-Mantilla.
- A Fiscal Incidence Analysis for Kenya (2018) with Simon Lange.
- Kenya Economic Update Policy Options to Advance the Big Four (2018) with Allen Dennis.
- Somali Poverty and Vulnerability Assessment (2018) with Wendy Karamba.
- Somalia Systematic Country Diagnostic (2018) with Harun Dogo and Kevin Carey.
- Impact of Shocks and Conflict on Poverty in South Sudan A Poverty Assessment (2018).
- South Sudan Economic Update Special Topic: Hyperinflation (2017) with Nora Dihel.
- Somali Poverty Profile 2016 Findings from Wave 1 of the Somali High Frequency Survey (2017).
- South Sudan: Poverty, livelihoods, and perception in a high inflation environment (2017).

- South Sudan: Reducing Poverty through Improved Agro-Logistics in a Fragile Country (2017).
- South Sudan Inclusive Growth Country Economic Memorandum Background Papers (2017).
- Sudan IDP Profiling Preparation Report (2017).
- Revising Sudan's System of National Accounts (2017).
- Angola Poverty and Social Impact Analysis: subsidy reform and extension of social protection program (2016).
- South Sudan Poverty Profile 2015 (2016).
- Utilizing mobile technology to innovate CAPI data collection in fragile contexts (2015) with Johan Mistiaen.
- South Sudan Youth Startup Business Grant Program: program rationale, design and implementation (2015) with Nicola Pontara.
- Alternative social safety nets in South Sudan: costing and impact on welfare indicators (2015) with Nicola Pontara.
- Welfare and Perception in South Sudan 2012 to 2014 (2015).
- The Fiscal Impact of Declining Oil Prices on South Sudan (2015) with Sheikh Diop.
- Jobs & Livelihoods in South Sudan (2014) with Paolo Zacchia.
- Regional Integration Strategy for South Sudan (2014) with Luca Bandiera.
- Challenges and Opportunities of High Frequency Data Collection in Fragile States (2014).
- South Sudan: Impact of a Continued Internal Conflict on Food Security and Poverty (2014).

#### Other Contributions:

- Kenya Economic Update Transforming Agricultural Productivity & Linkages to Poverty Reduction (2019).
- Systematic Country Diagnostic for South Sudan (2016) by Preeti Arora and Paolo Zacchia.
- The Welfare of Syrian Refugees: Evidence from Jordan and Lebanon (2016) by Paolo Verme et al.
- Ethiopia Poverty Assessment (1st chapter, 2014) by Ruth Hill.

#### 1<sup>st</sup> Author Peer-Reviewed Articles:

- Impact of 'stretch' targets for cardiovascular disease management within a local pay-for-performance programme. <u>Plos One</u>, 2015.
- Disentangling Secular Trends and Policy Impacts in Health Studies. <u>Journal of the Royal Society of Medicine</u>, 2012.
- Embracing the Crisis: German Power Politics. Journal of Public and International Affairs, 2012.
- Interventions against a Dictator. Journal of International Affairs, 2011.
- Genome-wide mapping of 5-hydroxymethylcytosine in embryonic stem cells. Nature, 2011 (shared first-author).
- Statistical detection of co-operative transcription factors with similarity adjustment, Bioinformatics, 2009.
- Compound Poisson approximation of DNA motif counts on both strands, <u>Journal of Computational Biology</u>, 2008.
- Natural Similarity Measures between Position Frequency Matrices with an Application to Clustering, Bioinformatics, 2008.
- A new statistical model to select target sequences bound by transcription factors, Genome Informatics, 2006.

# **Co-Author Peer-Reviewed Articles:**

- Effectiveness of the influenza vaccine in preventing admission to hospital and death in people with type 2 diabetes. Canadian Medical Association Journal, 2016.
- Performance of new alternative providers of primary care services in England: an observational study. <u>Journal of</u> the Royal Society of Medicine, 2015.
- Rural, urban and migrant differences in non-communicable disease risk-factors in middle income countries: a cross-sectional study of WHO-SAGE data. <u>Plos One</u>, 2015.
- Primary care competition and the effect of new providers on quality of care in England. The Lancet, 2014.
- Variation in the prevalence of chronic bronchitis among smokers: a cross-sectional study. <u>Tuberculosis and Lung Disease</u>, 2014.
- Impact of ethnic-specific guidelines for anti-hypertensive prescribing in primary care in England: a longitudinal study. <u>BMC Health Services Research</u>, 2014.
- Distinct roles of the methylcytosine oxidases Tet1 and Tet2 in mouse embryonic stem cells. PNAS, 2014.

- The Uptake of Integrated Perinatal Prevention of Mother-to-Child HIV Transmission Programs in Low- and Middle-Income Countries: A Systematic Review. PLOS One, 2013.
- Association of Systolic and diastolic blood pressure levels and all-cause mortality in people with newly diagnosed Type 2 diabetes: a retrospective cohort study. <u>British Medical Journal</u>, 2012.
- Patients' ratings of family physician practices on the internet: usage and associations with conventional measures of quality in the English NHS. <u>Journal of Medical Internet Research</u>, 2012.
- Associations between Internet-based patient ratings and conventional surveys of patient experience in the English NHS: an observational study. <u>British Medical Journal Quality & Safety</u>, 2012.
- High-Profile Investigations Into Hospital Safety Problems In England Did Not Prompt Patients To Switch Providers. Health Affairs, 2012.
- Impacts of a national strategy to reduce population salt intake in England: Serial Cross Sectional Study. <u>Plos One</u>, 2012.
- Associations between web-based patient ratings and objective measures of hospital quality. <u>Journal of the</u> American Medical Association Archives, 2012.
- Heterogeneous nuclear ribonucleoprotein L-like (hnRNPLL) and elongation factor, RNA polymerase II, 2 (ELL2) are regulators of mRNA processing in plasma cells. PNAS, 2012.
- Association between primary care organisation population size and quality of commissioning in England: an observational study. <u>British Journal of General Practice</u>, 2011.
- Association between practice size and quality of diabetes management in primary care: database study. <u>Canadian Medical Association Journal</u>, 2011.
- Cistrome: an integrative platform for transcriptional regulation studies. Genome Biology, 2011.
- Impaired hydroxylation of 5-methylcytosine in myeloid cancers with mutant TET2. Nature, 2010.
- Systematic investigation of global coordination among mRNA and protein in cellular society. <u>BMC Genomics</u>, 2010.
- Prediction of cardiac transcription networks based on molecular data and complex clinical phenotypes, <u>Molecular BioSystems</u>, 2008.
- A gene expression map of Arabidopsis development, Nature Genetics, 2005.