

BENJAMIN D. CLARK
CURRICULUM VITAE
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EDUCATION

Oregon State University
Masters (coursework), 2003 in Rangeland Resources, GPA 3.70

Oregon State University
B.S. in General Agriculture, 2001 with emphasis on Animal Science and Rangeland Resources, *Suma Cum Laude*, GPA 3.87

RESEARCH INTERESTS

Tropical agriculture, land change, hydrology, demographic and environmental modeling, spatial methods, food security and health, data models for longitudinal studies, mobile data collection.

DATA ANALYSIS, MANAGEMENT AND PROGRAMMING SKILLS

Proficiency in Arc GIS, IDRISI, Microsoft SQL Server, STATA, VB.net, C#, Cloud Computing and Azure Development Working knowledge of Unix Platforms, DDI V3.1

AWARDS AND FELLOWSHIPS

2000-2001 Global Graduate Scholar to South Africa
1999-2000 American Society of Animal Science Scholarship Award
1992-1993 Rotary Exchange Fellowship to India

GRANTS

2009-2011 iShare Grant by the International Network for the Demographic Evaluation of Populations and Their Health in Developing Countries (INDEPTH) to enable Demographic Surveillance Sites (DSS) to share their data through the INDEPTH iShare Repository
2007-2008 Co-investigator on Pilot project grant for studying 'Temporary Female Labor Migration and Household Survival Strategies in Rural South Africa'

PAPERS PUBLISHED AND UNDER REVIEW

Singh, Gayatri., and Benjamin. D. Clark. 2012. "Creating a Frame: A Spatial Approach to Random Sampling of Immigrant Households in Inner City Johannesburg". *Journal of Refugee Studies*. no. 12.

Singh, Gayatri, **Clark, Benjamin D**, William, Jill and Collinson, Mark. *Submitted to Population Development Review*. "Onset of childbearing in Migrant Women in Rural South Africa."

Hoyle, Larry, Castillo, Fortunato, **Clark, Benjamin** and Kashyap, Neeraj Kumar and Perpich, Denise, Wackerow, Joachim and Wenzig. Knut. "Metadata for the Longitudinal Data Life Cycle: The Role and Benefit of Metadata Management and Reuse." *DDI Working Paper Series, Longitudinal Data Best Practices*, Number 3, 2011.

Xavier Gómez-Olivé, F, Thorogood, Margaret, **Clark, Benjamin D**, Kahn, Kathleen and Tollman, Stephen M. 2010. "Assessing health and well-being among older people in rural South Africa". *Global Health Action*. 3.

Williams, Jill, Schatz, Enid, **Clark, Benjamin D**, Collinson, Mark, Clark, Samuel, Menken, Jane, Kahn, Kathleen and Tollman, Stephen. 2010. "Improving public health training and research capacity in Africa: a replicable model for linking training to health and socio-demographic surveillance data". *Global Health Action*. 3.

Serwaa-Bonsu Adwoa, Herbst Abraham J, Reniers, Georges, **Clark, Benjamin D**. et al. 2010. "First experiences in the implementation of biometric technology to link data from Health and demographic surveillance systems with health facility data". *Global Health Action*. 3 (1).

Madhavan Sangeeta, Schatz Enid, and **Clark, Benjamin D**. 2009. "Effect of HIV/AIDS-related mortality on household dependency ratios in rural South Africa, 2000-2005". *Population Studies*. 63 (1): 37-51.

Kahn, Kathleen, Tollman, Stephen, Collinson, Mark, Clark, Samuel, Twine, Rhian, **Clark, Benjamin D**, Shabangu, Mildred, Gómez-Olivé, Francesc, Mokoena, Obed and Garenne, Michel. 2007. "Research into health, population and social transitions in rural South Africa: Data and methods of the Agincourt Health and Demographic Surveillance System". *Scandinavian Journal of Public Health*. 35 (3): 8-20.

Hendricks, Howard H, **Clark, Benjamin D**, Bond, William J, Midgley, Jeremy, J and Novellie, Peter A. 2005. "Movement response patterns of livestock to rainfall variability in the Richtersveld National Park." *African Journal of Range and Forage Science* 22 (2) : 117-125

Bolus, Cosaman, Hoffman, Timm, Todd, Simon W, Powell, Elsabe, Hendricks, Howard H and **Clark, Benjamin D**. 2004. "The distribution and population structure of *Aloe pillansii* in South Africa in relation to climate and elevation." *Transactions of the Royal Society of South Africa* 59(2): 103-110

Powell, Elsabe, Hendricks Howard H and **Clark, Benjamin D**, Pretorius L, Roderick J, Garrett D. 2003. "The plight of *Aloe pillansii* – investigating the startling decline of the bastard quiver tree of the Richtersveld." *Veld & Flora* 89: 150 – 151

Powell, Elsabe, Hendricks, Howard, H and **Clark, Benjamin D**. 2003. "Could *Aloe pillansii* be facing extinction?" *British Cactus and Succulent Society*. 21 (1)

MANUSCRIPTS IN PROGRESS

Clark, Benjamin D. and Samuel J. Clark. 2010. *Ready for submission*. "Performance Evaluation of

the Structured Population Event History Register (SPEHR) Relational Schema for Managing Longitudinal Health and Population Data.” **Publication type:** Journal Article.

Clark, Benjamin D. *In Preparation.* Harmonizing the data collection and data entry applications for longitudinal and cross-sectional surveys in social science: a metadata driven approach.

Collinson, Mark, Clark, Samuel, Tollman, Stephen, Kahn, Kathleen, White, Michael, Eaton, Jeff
Clark, Benjamin D, Gómez-Olivé, Xavier, Shabangu, Mildred and Mokoena, Obed. *In Preparation.* "Measuring change in absolute socio-economic status and linking it to contemporary migration patterns in a South African setting, using the Agincourt Health and Demographic Surveillance System, during a transitional period, from 2003-2005, in the former homeland rural area of Agincourt, Bushbuckridge." in *INDEPTH Monograph on Migration.*

PROFESSIONAL EXPERINECE

Past Positions

London School of Hygiene and Tropical Medicine (LSHTM)

Center for Population Studies, London United Kingdom.

2008-Present: **Technical Project Manager**, Tazama Project run in collaboration with the National Institute of Medical Research, Tanzania and based in Mwanza, Tanzania. Key responsibilities include oversight of the development of the Tazama Project’s data system, IT infrastructure and Geographic Information System (GIS). Other responsibilities include the maintenance and development of the Demographic Surveillance System (DSS) database and the geo-database; data entry software development; e-archiving development; dataset and data system documentation methods development using DDIv3; procedures for DSS and geo data sharing; data integrity development; paper based data collection management system development; PDA data collection system; and clinic record linkage data system; management of data section staff and supervision of LSHTM Graduate Students working with the DSS data on-site.

University of the Witwatersrand

School of Public Health, Johannesburg, South Africa

2005-2008: **Data Manager and Associate Researcher** at the Agincourt Health and Population Unit. Responsibilities included development of the Agincourt Health and Demographic Surveillance System (HDSS) data system, IT infrastructure and GIS, integration of the DSS database with the geo-database; data entry software development; e-archiving software development; meta-data and data system documentation development; procedures for DSS and geo data sharing; data integrity development; and paper based data collection management system development.

The Moorings Farm

Monze, Zambia

2003-2005: **Farm Manager** at H.L. & T. Savory Limited, The Moorings Farm, Monze, Zambia. Responsibilities included managing and overseeing the activities of 14,000 Hectare farm area, particularly hybrid seed production and related trials as well as marketing processes and establishing farm data systems.

OTHER PROFESSIONAL AND RESEARCH ACTIVITIES

2011 Consultant, National Aid Control Program, Tanzania responsible for developing a national reporting system for CTC2 Micro database.

2010-12 Consultant, South Indian Community Study. Mobile cloud based data collection system development for household surveys and clinic-based trails in Vellore District, India.

- 2010 Member, DDI Experts Working Group on Longitudinal Data Management
- 2008-12 Consultant, MIPRAoC demographic surveillance system (DSS) site in Cambodia (run by University of California, Los Angeles) to design and implement the longitudinal data system.
- 2008 Data System and data collection design consultant for Fundação Ibo, Ibo, Mozambique to set up a new demographic surveillance project designed for nutritional interventions.
- 2006-8 Data consultant on an NIH RO3 grant (PI: Samuel J Clark, University of Washington) Extending Access to Data from Demographic Surveillance Systems Sites in Africa
- 2006 Consulting with African Population and Health Research Centre (APHRC). Construction of a 1:10 sample of the AHPRC DSS database.
- 2006 Consulting with Dikgale DSS, University of Limpopo, Polokwane. Conversation for other database from Access to MS SQL server.
- 2005-6 Gwembe Data systems design and data entry management for Gwembe Tonga Research Project, Souther Zambia
- 2002-3 Administrating Gwembe Tonga Research Project in Southern Zambia, DGPS mapping the fields and gardens of Mazulu village as well as collecting data on Gwembe Tonga agricultural practices for under supervision of Prof. Ted Scudder, Caltech University.
- 2002 Development and testing Global Position System (GPS) tracking collars on lions and SQL database in Pilansberg National Park, South Africa in coordination with the University of Natal, Durban.
- 2001 Consultant for GIS Data Systems Development Graspan Breeding Station and Vaalbos National Park for, South African National Parks (SANP), Kimberley: Field mapping and geo-database construction, digitizing vegetation maps to build vegetation layers for and construction of GIS data systems in ArcView
- 2001 Digitizing Vegetation Maps for Vaalbos National Park, South African National Parks, Kimberley
- 2001 Research assistant for South African National Parks collaborating on goat spatial and temporal distribution, in Richtersveld national park and consulting on developing Richtersveld National Park GIS database using ArcView and Esri.
- 2000 Intern for South African National Parks collecting baseline data for the Richtersveld National Park GIS.
- 2000 Working on the Aloe pillansii Project, surveying and mapping the Aloe pillansii population of the Richtersveld, South Africa.
- 1997 Six month internship coding data and building project infrastructure for the Gwembe Tonga Research Project in Sinafala, a rural village in Gwembe Valley, Southern Zambia.

TEACHING AND TRAINING EXPERINECE

- 2010 Hosted and facilitated workshop on Structured Person Event History Register (SPEHR) data model for event-base longitudinal temporal data: Introduction to an implementation of SPEHR data model for managing longitudinal data within DSS sites.

- 2010 INDEPTH sponsored workshop on Data quality: Working with HDSS sites to teach the sites methods and procedures for evaluating and maintaining data quality in longitudinal data.
- 2009 INDEPTH network Biometric workshop: Facilitated the mobile fingerprinting sessions; developed and presented a small mobile fingerprinting application that could be adapted for site specific use within the Indepth network.
- 2009 INDEPTH DDIv3 Workshop: Organized and facilitated a workshop for the Indepth network on the use of the DDI documenting standard for micro level social science data.
- 2007 Statistical Software Packages Workshop: Co-taught data management module on this two week course for Demography Masters and Phd. students at the University of the Witwatersrand, Johannesburg.
- 2006 Longitudinal Data Management and Analysis, University of Colorado: Facilitator on a two week course focusing on longitudinal data analysis and management using demographic surveillance data (DSS), based on the Agincourt Student Dataset.
- 2005-6 Masters in Applied Field Epidemiology, University of Witwatersrand: Facilitator for sessions on data management and analysis using DSS data.
- 2005-6 Census data entry and GIS capture training of field staff, Agincourt DSS, South Africa.
- 2003-4 Training Farm employees in resource mapping using Trimble DGPS, Mooring Farm, Zambia

PRESENTATIONS AT PROFESSIONAL MEETINGS AND CONFERENCES

- 2011 Converting MS Word based Questionnaires to DDI: A demonstration application for uses of metadata throughout the data lifecycle. Presentation at the 37th Annual Conference of the **International Association for Social Science Information Services & Technology (IASSIST)** Vancouver, Canada, 2nd June 2011.
- 2009 Harmonizing the data collection and data entry applications for longitudinal and cross-sectional surveys in social science: a metadata driven approach. Poster presentation made at the **International Union for the Scientific Study of Population (IUSSP)** meeting, Marakech, 2nd October, 2009.
- 2009 Performance Evaluation of the Structured Population Event History Register (SPEHR) Relational Schema for Managing Longitudinal Health and Population Data. Presentation at **NCeSS Conference on eSocial Science** sponsored by NCeSS Center for eSocial Science, United Kingdom, Cologne, Germany 25th June 2009.
- 2007 The Agincourt Demographic Surveillance System: Research design and key Management Issues. Presentation to the **South African Environmental Observation Network (SAEON)**, Agincourt Field Site, South Africa, 16th February, 2007
- 2007 Agincourt Data System. Presentation of the design innovations and challenges in Agincourt DSS database at the **INDEPTH Data Initiative Workshop**, Africa Center, KwaZulu Natal, South Africa. 31st March, 2007
- 2006 Implications of prime-age adult mortality for household use of natural resources in the Agincourt demographic surveillance site. Presentation at the **6th INDEPTH Network Annual General Meeting**, Ouagadougou for plenary session on ‘DSS supporting public health policies’, 18th September 2006.

2006 Introduction to the 1:10 Sample Dataset and its Uses. Presentation to the School of **Public Health and affiliated programs, University of the Witwatersrand**, South Africa. February 2006.

REFERENCES

Basia Zaba

Professor of Medical Demography
Department of Population Studies
London School of Hygiene and Tropical Medicine
Email: basia.zaba@lshtm.ac.uk

Jim Todd

Reader in Applied Biostatistics
(equivalent to Professor grade for US Universities)
Department of Population Studies
London School of Hygiene and Tropical Medicine
Email: jim.todd@lshtm.ac.uk

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