

Research output 2015-17

Over the past three years the staff in the Actuarial Science programme (including CARE, and AcQuFRR (for 2015 & 2016)) produced the following research output.

Peer-reviewed journal articles:

2017

- 1 Kolawole Imole Oluwakemi, **Sure Mataramvura**, Ogunlade Temitope Olu, Pricing European put option in a geometric Brownian motion stochastic volatility model(2017), *Applied and Computational Mathematics*, **6**(5), 215-221.
- 2 Michael Kateregga, **Sure Mataramvura** & David Taylor, Bismut-Elworthy-Li formula for subordinated Brownian motion applied to hedging financial derivatives (2017), *Cogent Economics and Finance*, **5**, Article 1384125
- 3 Perpetual Saah Andam, Joseph Ackora-Pra & **Sure Mataramvura**, Estimation of stochastic volatility with a compensated Poisson jump using quadratic variation (2017), *Applied Mathematics*, **(08)**07, 987-1000.
- 4 Perpetual Saah Andam, Joseph Ackora-Prah & **Sure Mataramvura**, Theories on the relationship between price process and stochastic volatility matrix with compensated Poisson jump using Fourier transforms (2017), *Journal of Mathematical Finance*, **7**, 633-656.
- 5 Michael Kateregga, **Sure Mataramvura** & **David Taylor**, Parameter estimation for stable distributions with applications to commodity futures log-returns (2017), *Cogent Economics and Finance*, **5**, Article 1318813
- 6 **Ranchod S**, Adams C, Burger, R, Carvounes A, Dreyer K, Smith A, Stewart J, Van Biljoen C. South Africa's hospital sector: old divisions and new developments. In: Padarath A, Barron P, editors. *South African Health Review 2017*. Durban: Health Systems Trust; 2017. URL: <http://www.hst.org.za/publications/south-african-health-review-2017>
- 7 **Moultrie, Tom A.** 2017. "Démographie, démographes et " révolution des données " en Afrique". *Afrique Contemporaine* **258**, p25-39. [URL: <http://www.cairn.info/revue-afrique-contemporaine-2016-2-page-25.htm> . Also available in English at : https://www.cairn-int.info/article-E_AFCO_258_0025--demography-demographers-and-the.htm]
- 8 Pillay-van Wyk, V., **Dorrington R. E.** & Bradshaw, D. 2017. "Rapidly changing mortality profiles in South Africa and its nine provinces". *SAMJ* **107**(3):168-169.
- 9 Johnson, LF, **Dorrington RE** & Moola H. 2017. HIV epidemic drivers in South Africa: a model-based evaluation of factors accounting for inter-provincial differences in HIV prevalence and incidence trends. *Southern African Journal of HIV Medicine* **18**(1), a695. <https://doi.org/10.4102/sajhivmed.v18i1.695>
- 10 Johnson, LF, **Dorrington RE**, & Moola H. 2017. Progress towards the 2020 targets for HIV diagnosis and antiretroviral treatment in South Africa. *Southern African Journal of HIV Medicine* **18**(1), a694. <https://doi.org/10.4102/sajhivmed.v18i1.694>
- 11 Johnson, L.F., Cornell, M., **Dorrington, R.E.**, Boulle, A., May, M., Egger, M. and Davies, M-A. 2017. The impact of antiretroviral treatment on adult mortality trends in South Africa. *PLoS Medicine* **14**(12): e1002468. <https://doi.org/10.1371/journal.pmed.1002468>
- 12 **MacDonald, I. L.** 2017. Letter to the editor: Fitting truncated normal distributions. *Statistical Methods in Medical Research*. First published date: May-29-2017.
- 13 **MacDonald, I. L.** 2017. Models for count data. *The American Statistician*, **71**(2), 187-190.
- 14 Stephanou, M., Varughese, M., and **MacDonald, I.** 2017. Sequential quantiles via Hermite series density estimation. *Electronic Journal of Statistics*, **11**(1), 570-607.
- 15* **Towriss, Catriona** & **Timaeus, Ian.** 2017. Modelling period fertility: Schooling and intervals following a birth in Eastern Africa. *Population Studies*. 1-16. 10.1080/00324728.2017.1370121.

- 16 **Adjiwanou, V.**, Bougma, M., & LeGrand, T 2017. The effect of partners' education on women's reproductive and maternal health in developing countries. *Social Science & Medicine*. doi:<https://doi.org/10.1016/j.socscimed.2017.11.054>
- 17 **Adjiwanou, V.**, & Engdaw, A. W. 2017. Household environmental health hazards' effect on under-five mortality in sub-Saharan Africa: What can we learn from the Demographic and Health Survey? *Global Public Health*, 12(6), 780-794. doi:10.1080/17441692.2017.1281327
- 18* **Timæus, I. M.** and Scott, A. P. Evidence for a healthy migrant effect on mortality in England and Wales. *Journal of Epidemiology and Community Health*, 2017, **71**. jech.bmj.com/content/71/9/863.responses (correspondence)
- 19 Giorgia Gon; Said M Ali; **Catriona Towriss** et al (2017) Unpacking the enabling factors for hand, cord and birth-surface hygiene in Zanzibar maternity units. *Health Policy and Planning*, **32**(8), 1220–1228

2016

- 1 Burger, R., **Ranchod, S.**, Rossouw, L. and Smith, A., 2016. Strengthening the measurement of quality of care. *South African Health Review*, pp.191-200.
- 2 **Ranchod, S.**, Childs, B., **Abraham, M.** and Taylor, R., 2016. International benchmarking of hospital utilisation: how does the South African private sector compare? *South African Actuarial Journal*, 16 (2016) 71–92
- 3 Duyvené de Wit, J.-J. and **Polakow, D.** 2016. "How disruptive can Smart Beta be to the South African Active Fund Management Fraternity?", *Investment Analysts Journal*:1-15. DOI: 10.1080/10293523.2016.1249084
- 4 Chun-Sung Huang, John G. O'Hara and **Sure Mataramvura**; Efficient pricing of discrete arithmetic Asian options under mean reversion and jumps based on Fourier-cosine expansions, *Journal of Computational and Applied Mathematics* 311 (2017), 230-238.
- 5 Bradshaw D., Msemburi W., **Dorrington R. E.**, Pillay-van Wyk V., Laubscher R. and Groenewald P. 2016. "HIV/AIDS in South Africa - how many people died from the disease between 1997 and 2010?", *AIDS* 30(5): 771-778. doi: 10.1097/QAD.0000000000000947
- 6 Beatrice Nojilana, Debbie Bradshaw, Victoria Pillay-van Wyk, William Msemburi, Ria Laubscher, Nontuthuzelo Somdyala, Jané Joubert, Pam Groenewald, **Rob Dorrington** on behalf of the SANBD. 2016 "Emerging trends in non-communicable disease mortality in South Africa, 1997-2010". *SAMJ* 106(5):477-484. DOI:10.7196/SAMJ.2016.v106i5.10674.
- 7 Beatrice Nojilana, Debbie Bradshaw, Victoria Pillay-van Wyk, William Msemburi, Ria Laubscher, Nontuthuzelo Somdyala, Jané Joubert, Pam Groenewald, **Rob Dorrington** on behalf of the SANBD. 2016 "Persistent burden from non-communicable diseases in South Africa needs strong action". *SAMJ* 106(5):436-437. DOI:10.7196/SAMJ.2016.v106i5.10776
- 8 Johnson L. F., Chiu C., Myer L., Davies M-A., **Dorrington R. E.** and Meyer-Rath G. 2016. "Prospects for HIV control in South Africa: a model-based analysis", *Global Health Action* 9: 30314 - <http://dx.doi.org/10.3402/gha.v9.30314>
- 9 Pillay-van Wyk, V, W Msemburi, R Laubscher, **RE Dorrington**, P Groenewald, T Glass, et al. 2016. Mortality trends and differentials in South Africa, 1997-2012 *Lancet Glob Health* 4: e642-53. doi: [http://dx.doi.org/10.1016/S2214-109X\(16\)30113-9](http://dx.doi.org/10.1016/S2214-109X(16)30113-9)
- 10 Knight, L., Hosegood, V. and **Timæus, I. M.** Obligation to family during times of transition: Care, support and the response to HIV and AIDS in rural South Africa. *AIDS Care*, 2016, 28(suppl 4), 18-29. doi: 10.1080/09540121.2016.1195486
- 11 Rathod, S. D., **Timæus, I. M.**, Banda, R., Thankian, K., Chilengi, R., Banda, A., Lemba, M., Stringer, J. S. A. and Chi, B. H. Premature adult mortality in urban Zambia: a repeated population-based cross-sectional study. *BMJ Open*, 2016, 6, e010801. doi: 10.1136/bmjopen-2015-010801

- 12 **MacDonald IL** and Lapham BM. 2016. "Even more direct calculation of the variance of a maximum penalized-likelihood estimators". *The American Statistician*. **70**(1):114-118.
- 13 Barkhagen, M., Blomvall, J. & **Platen, E.** 2016. Recovering the real-world density and liquidity premia from option data. *Quantitative Finance*. **16**(7):1147-1164.
- 14 Capriotti, L., Jiang, Y. & **Macrina, A.** 2016. Real-Time Risk Management: An AAD-PDE Approach. *International Journal of Financial Engineering*. **2**(4):1550039-1550070.
- 15 Chan, L. & **Platen, E.** 2016 Pricing of long dated equity-linked life insurance contracts. *Stochastic Analysis and Applications*. **34**(2): 339-355.
- 16 Du, K. & **Platen, E.** 2016 Benchmarked risk minimization. *Mathematical Finance*. **26**(3):617-637.
- 17 Zucchini W, **MacDonald IL**, Langrock: new edition of book "Hidden Markov Models for Time Series", CRC Press, June 2016.
- 18 May, J. D. and **Timæus, I. M.** 'Changes in food security in South Africa since the end of apartheid: Evidence using child malnourishment', in Food Security in South Africa: Human Rights and Entitlement Perspectives, S. Fukuda-Parr and V. Taylor (eds). UCT Press, pp. 83-96, 2015.
- 19 **MacDonald IL** and Zucchini W. 2016. "Hidden Markov models for discrete-valued time series", in "Handbook of Discrete-Valued Times Series", CRC Press, January 2016.
- 20 Crépey, S., **Macrina, A.**, Nguyen, T.M., Skovmand, D. (2016). Rational Multi-Curve Models with Counterparty-Risk Valuation Adjustments. *Quantitative Finance*, **16** (6): 847-866. doi:10.1080/14697688.2015.1095348

2015

- 1 **Timæus, I. M.** and **Moultrie, T. A.** Teenage childbearing and educational attainment in South Africa. *Studies in Family Planning*, 2015, **46**, 143-160. doi: 10.1111/j.1728-4465.2015.00021.x
- 2 **Vissého Adjiwanou** & Afiwa N'Bouké. Exploring the paradox of intimate partner violence and increased contraceptive use in sub-Saharan Africa. *Studies in Family Planning*; **46**(2): 127 - 142.
- 3 **Vissého Adjiwanou** & Thomas LeGrand. Normes de genre légitimant la violence contre les femmes et autonomie décisionnelle des femmes en milieu rural africain. *Cahier Québécois de Démographie*: **44**(1): 89-128.
- 4 Eaton, J. W., Bacaër, N., Bershteyn, A., Cambiano, V., Cori, A., **Dorrington, R. E.**, Fraser, C., Gopalappa, C., Hontelez, J. A. C., Johnson, L. F., Klein, D. J., Phillips, A. N., Pretorius, C., Stover, J., Rehle, T. M. and Hallett, T. B. 2015. How did we do? Systematic comparison of model projections to recent HIV survey data in South Africa: lessons for modelling and HIV epidemiology in the ART era, *Lancet Global Health* **3**: e598-608.
- 5 Johnson L F., **Dorrington R E.**, Laubscher R., Hoffmann C J., Wood R., Fox M P., Cornell M., Schomaker M., Prozesky H., Tanser F., Mary-Ann Davies M-A. and Andrew Boule A. 2015. "A comparison of death recording by health centres and civil registration in South Africans receiving antiretroviral treatment", *Journal of the International AIDS Society* **18**: 20628 | <http://dx.doi.org/10.7448/IAS.18.1.20628>
- 6 Tony Blakely, June Atkinson, Giorgi Kvizhinadze, Nhung Nghiem, **Heather McLeod**, Anna Davies and Nick Wilson. 2015. Updated New Zealand health system cost estimates from health events by sex, age and proximity to death: further improvements in the age of 'big data'. *New Zealand Medical Journal*, **128** (1422):13-23.
- 7 **Moultrie T. A.**, T.K. Le Grand, R Quint and E Samman. 2015. "The IUSSP on a data revolution for development". *Population and Development Review*, **41**(1):172-177. DOI: 10.1111/j.1728-4457.2015.00041.x

- 8 Souza, E. and **T. A. Moultrie** (2015). "Estimating the effect of HIV/AIDS on fertility among Malawian women using demographic and health survey data" *African Journal of AIDS Research* **14**(4):315-321. DOI: 10.2989/16085906.2015.1093512
- 9 **MacDonald I. L.** and **Nkalashe P.** 2015 A simple route to maximum-likelihood estimates of two-locus recombination fractions under inequality restrictions. *J. Genet.* **94**, 479–481
- 10 **Ranchod, S.** and **Kaplan, J.** (2015) Analysing the structure and nature of medical scheme benefit design in South Africa. In A. Padarath, J. King and R. English (eds), *South African Health Review 2014/15*. Durban: Health Systems Trust.
- 11 **Ranchod S, Abraham M** and **Bloch J** (2015) An actuarial perspective on healthcare expenditure in the last year of life. *South African Actuarial Journal*, **15**.
- 12 **Dorrington, R. E.** and Bradshaw, D. (2016) Acknowledging uncertainty about maternal mortality estimates. *Bull World Health Organ*, **94**:155–156.

Other publications:

Reports and other research publications (for which one or more members of the staff were co-authors):

2017

- 1 Continuous Statistical Investigations Committee. "Report on Pensioner Mortality 2005-2010". Actuarial Society of South Africa, 2017.
- 2 HDACC. "Health Data Advisory and Co-ordination Committee (HDACC) Report 3. Department of Health, Dec 2017. <http://www.health.gov.za/index.php/shortcodes/2015-03-29-10-42-47/2015-06-10-09-23-36/2015-06-10-09-26-11>
- 3 Johnson L. F. and **Dorrington R. E.** 2017. "Thembisa version 3.2: A model for evaluating the impact of HIV/AIDS in South Africa". Centre for Infectious Disease Epidemiology and Research, UCT working paper. Available: <http://www.thembisa.org/content/downloadPage/>
- 4 Johnson L. F. and **Dorrington R. E.** 2017. "Modelling the impact of HIV in South Africa's provinces: 2016 update". Centre for Infectious Disease Epidemiology and Research, UCT working paper. Available: <http://www.thembisa.org/content/downloadPage/>
- 5 **Moultrie, Tom A.** 2017. "Who Might Be Left Behind in the SDGs". Blog post for UNSDSN. Available at: <http://unsdsn.org/news/2017/09/01/who-might-be-left-behind/>

2016

- 1 Erasmus, D., **Ranchod, S.**, **Abraham, M.**, Carvounes, A. and Dreyer, K., 2016. Challenges and opportunities for health finance in South Africa. FinMark Trust. <http://www.finmark.org.za/wp-content/uploads/2016/06/south-africa-health-finance-overview.pdf>
- 2 **Ranchod, S.**, Erasmus, D., **Abraham, M.**, Bloch, J., Chigiji, K. and Dreyer, K., 2016. Effective health financing models in SADC: Three case studies. FinMark Trust. <http://www.finmark.org.za/wp-content/uploads/2016/06/regional-sadc-case-studies.pdf>
- 3 Msemburi W., Pillay-van Wyk V., **Dorrington R. E.**, Neethling I., Nannan N., Groenewald P, Laubscher R, Joubert J., Matzopoulos R, Nicol E. Nojilana B., Prinsloo M. Sithole N., Samdyala N. and Bradshaw D. Second national burden of disease study for South Africa: Cause-of-death profile for South Africa, 1997-2012. Cape Town: South African Medical Research Council, 2016. ISBN: 978-1-928340-06-5.
- 4 Msemburi W., Pillay-van Wyk V., **Dorrington R. E.**, Neethling I., Nannan N., Groenewald P, Laubscher R, Joubert J., Matzopoulos R, Nicol E. Nojilana B., Prinsloo M. Sithole N.,

- Samdyala N. and Bradshaw D. Second national burden of disease study for South Africa: Cause-of-death profile for Limpopo, 1997-2012. Cape Town: South African Medical Research Council, 2016. ISBN: 978-1-928340-14-0.
- 5 Msemburi W., Pillay-van Wyk V., **Dorrington R. E.**, Neethling I., Nannan N., Groenewald P, Laubscher R, Joubert J., Matzopoulous R, Nicol E. Nojilana B., Prinsloo M. Sithole N., Samdyala N. and Bradshaw D. Second national burden of disease study for South Africa: Cause-of-death profile for North West, 1997-2012. Cape Town: South African Medical Research Council, 2016. ISBN: 978-1-928340-11-9.
- 6 Msemburi W., Pillay-van Wyk V., **Dorrington R. E.**, Neethling I., Nannan N., Groenewald P, Laubscher R, Joubert J., Matzopoulous R, Nicol E. Nojilana B., Prinsloo M. Sithole N., Samdyala N. and Bradshaw D. Second national burden of disease study for South Africa: Cause-of-death profile for Northern Cape, 1997-2012. Cape Town: South African Medical Research Council, 2016. ISBN: 978-1-928340-09-6.
- 7 Msemburi W., Pillay-van Wyk V., **Dorrington R. E.**, Neethling I., Nannan N., Groenewald P, Laubscher R, Joubert J., Matzopoulous R, Nicol E. Nojilana B., Prinsloo M. Sithole N., Samdyala N. and Bradshaw D. Second national burden of disease study for South Africa: Cause-of-death profile for Eastern Cape, 1997-2012. Cape Town: South African Medical Research Council, 2016. ISBN: 978-1-928340-08-9.
- 8 Msemburi W., Pillay-van Wyk V., **Dorrington R. E.**, Neethling I., Nannan N., Groenewald P, Laubscher R, Joubert J., Matzopoulous R, Nicol E. Nojilana B., Prinsloo M. Sithole N., Samdyala N. and Bradshaw D. Second national burden of disease study for South Africa: Cause-of-death profile for KwaZulu-Natal, 1997-2012. Cape Town: South African Medical Research Council, 2016. ISBN: 978-1-928340-15-7.
- 9 Msemburi W., Pillay-van Wyk V., **Dorrington R. E.**, Neethling I., Nannan N., Groenewald P, Laubscher R, Joubert J., Matzopoulous R, Nicol E. Nojilana B., Prinsloo M. Sithole N., Samdyala N. and Bradshaw D. Second national burden of disease study for South Africa: Cause-of-death profile for Gauteng, 1997-2010. Cape Town: South African Medical Research Council, 2016. ISBN: 978-1-928340-12-6.
- 10 Msemburi W., Pillay-van Wyk V., **Dorrington R. E.**, Neethling I., Nannan N., Groenewald P, Laubscher R, Joubert J., Matzopoulous R, Nicol E. Nojilana B., Prinsloo M. Sithole N., Samdyala N. and Bradshaw D. Second national burden of disease study for South Africa: Cause-of-death profile for Mpumalanga, 1997-2012. Cape Town: South African Medical Research Council, 2016. ISBN: 978-1-928340-13-3.
- 11 Msemburi W., Pillay-van Wyk V., **Dorrington R. E.**, Neethling I., Nannan N., Groenewald P, Laubscher R, Joubert J., Matzopoulous R, Nicol E. Nojilana B., Prinsloo M. Sithole N., Samdyala N. and Bradshaw D. Second national burden of disease study for South Africa: Cause-of-death profile for Free State, 1997-2012. Cape Town: South African Medical Research Council, 2016. ISBN: 978-1-928340-10-2.
- 12 Msemburi W., Pillay-van Wyk V., **Dorrington R. E.**, Neethling I., Nannan N., Groenewald P, Laubscher R, Joubert J., Matzopoulous R, Nicol E. Nojilana B., Prinsloo M. Sithole N., Samdyala N. and Bradshaw D. Second national burden of disease study for South Africa: Cause-of-death profile for Western Cape, 1997-2012. Cape Town: South African Medical Research Council, 2016. ISBN: 978-1-928340-07-2.
- 13 Johnson LF, **Dorrington RE** & Moolla H. 2016 "Modelling the impact of HIV in South Africa's provinces". Centre for Infectious Disease Epidemiology and Research, UCT working paper. Available: <http://www.thembisa.org/content/downloadPage/>
- 14 **Dorrington RE**, Bradshaw D, Laubscher R. Nannan N "Rapid Mortality surveillance report 2015". Cape Town: South African Medical Research Council, 2016. ISBN: 978-1-928340-17-1.
- 15 *Cuchiero, C; Teichmann, J; Gellert, K; **Giuricich, M**; Platts, A and Sookdeo, S. Polynomial models at work in stochastic portfolio theory: tractable estimation, calibration and implementation. In ACQuFRR (organisation) *Third Financial Mathematics Team Challenge 2016*. University of Cape Town.

2015

1. **Moultrie, T.A., R.E. Dorrington** & D Budlender. 2015. Report to African Centre for Migration Studies on Migration in South Africa using the 2011 Census data
2. Msemburi W., Pillay-van Wyk V., **Dorrington R. E.**, Neethling I., Nannan N., Groenewald P, Laubscher R, Joubert J., Matzopoulous R, Nicol E. Nojilana B., Prinsloo M. Sithole N., Samdyala N. and Bradshaw D. Second national burden of disease study for South Africa: Cause-of-death profile for South Africa, 1997-2010. Cape Town: South African Medical Research Council, 2014. ISBN:978-1-920618-34-6.
3. Msemburi W., Pillay-van Wyk V., **Dorrington R. E.**, Neethling I., Nannan N., Groenewald P, Laubscher R, Joubert J., Matzopoulous R, Nicol E. Nojilana B., Prinsloo M. Sithole N., Samdyala N. and Bradshaw D. Second national burden of disease study for South Africa: Cause-of-death profile for Limpopo, 1997-2010. Cape Town: South African Medical Research Council, 2014. ISBN:978-1-920618-42-1.
4. Msemburi W., Pillay-van Wyk V., **Dorrington R. E.**, Neethling I., Nannan N., Groenewald P, Laubscher R, Joubert J., Matzopoulous R, Nicol E. Nojilana B., Prinsloo M. Sithole N., Samdyala N. and Bradshaw D. Second national burden of disease study for South Africa: Cause-of-death profile for North West, 1997-2010. Cape Town: South African Medical Research Council, 2014. ISBN:978-1-920618-39-1.
5. Msemburi W., Pillay-van Wyk V., **Dorrington R. E.**, Neethling I., Nannan N., Groenewald P, Laubscher R, Joubert J., Matzopoulous R, Nicol E. Nojilana B., Prinsloo M. Sithole N., Samdyala N. and Bradshaw D. Second national burden of disease study for South Africa: Cause-of-death profile for Northern Cape, 1997-2010. Cape Town: South African Medical Research Council, 2014. ISBN:978-1-920618-37-7.
6. Msemburi W., Pillay-van Wyk V., **Dorrington R. E.**, Neethling I., Nannan N., Groenewald P, Laubscher R, Joubert J., Matzopoulous R, Nicol E. Nojilana B., Prinsloo M. Sithole N., Samdyala N. and Bradshaw D. Second national burden of disease study for South Africa: Cause-of-death profile for Eastern Cape, 1997-2010. Cape Town: South African Medical Research Council, 2014. ISBN:978-1-920618-36-0.
7. Msemburi W., Pillay-van Wyk V., **Dorrington R. E.**, Neethling I., Nannan N., Groenewald P, Laubscher R, Joubert J., Matzopoulous R, Nicol E. Nojilana B., Prinsloo M. Sithole N., Samdyala N. and Bradshaw D. Second national burden of disease study for South Africa: Cause-of-death profile for KwaZulu-Natal, 1997-2010. Cape Town: South African Medical Research Council, 2014. ISBN:978-1-920618-43-8.
8. Msemburi W., Pillay-van Wyk V., **Dorrington R. E.**, Neethling I., Nannan N., Groenewald P, Laubscher R, Joubert J., Matzopoulous R, Nicol E. Nojilana B., Prinsloo M. Sithole N., Samdyala N. and Bradshaw D. Second national burden of disease study for South Africa: Cause-of-death profile for Gauteng, 1997-2010. Cape Town: South African Medical Research Council, 2014. ISBN:978-1-920618-40-7.
9. Msemburi W., Pillay-van Wyk V., **Dorrington R. E.**, Neethling I., Nannan N., Groenewald P, Laubscher R, Joubert J., Matzopoulous R, Nicol E. Nojilana B., Prinsloo M. Sithole N., Samdyala N. and Bradshaw D. Second national burden of disease study for South Africa: Cause-of-death profile for Mpumalanga, 1997-2010. Cape Town: South African Medical Research Council, 2014. ISBN:978-1-920618-41-4.
10. Msemburi W., Pillay-van Wyk V., **Dorrington R. E.**, Neethling I., Nannan N., Groenewald P, Laubscher R, Joubert J., Matzopoulous R, Nicol E. Nojilana B., Prinsloo M. Sithole N., Samdyala N. and Bradshaw D. Second national burden of disease study for South Africa: Cause-of-death profile for Free State, 1997-2010. Cape Town: South African Medical Research Council, 2014. ISBN:978-1-920618-38-4.
11. Msemburi W., Pillay-van Wyk V., **Dorrington R. E.**, Neethling I., Nannan N., Groenewald P, Laubscher R, Joubert J., Matzopoulous R, Nicol E. Nojilana B., Prinsloo M. Sithole N., Samdyala N. and Bradshaw D. Second national burden of disease study for South Africa: Cause-of-death profile for Western Cape, 1997-2010. Cape Town: South African Medical Research Council, 2014. ISBN:978-1-920618-35-3.
12. Johnson L. F., **Dorrington R. E.** and Moola H. Modelling the impact of HIV in South Africa's provinces. Centre for Infectious Disease Epidemiology and Research working paper, July 2015.

13. **Dorrington RE**, Bradshaw D, Laubscher R, Nannan N "Rapid Mortality surveillance report 2014". Cape Town: South African Medical Research Council, 2015. ISBN: 978-1-928340-02-7.
14. NDoH. "The 2013 National Antenatal Sentinel HIV Prevalence Survey South Africa". Department of Health, 2015. ISBN: 978-1-920031-89-3.

Graduates

The Actuarial programme, the Centre for Actuarial Research, and ACQuFRR (for 2015 & 2016) have together successfully supervised or co-supervised 21 masters graduates and 3 PhDs over the past three years.

Research funding

A total of nearly R7 million research funding was raised by staff over the three years.

Conferences and workshops

Members of the staff presented 72 papers at conferences and workshops, well over half at international conferences.

Reviewing papers and funding applications and participation on editorial boards

Members of the staff reviewed a total of 90 papers submitted to peer-reviewed journals, funding applications, etc., over the three years 2015-17, the majority of which were articles for international journals.

Membership of journal editorial boards

Tom Moultrie Editor of Population Studies

Rob Dorrington South African Actuarial Journal

Ian Timæus Journal of Biosocial Science

Prizes and other accomplishments

Prizes

2016

1. David Taylor: Investment Analysts Journal "Paper of the Year" for 2014

2015

1. Daniel Polakow: 2014 paper (by Flint, Osche and Polakow in SAAJ) won the RGA prize for best published research by ASSA

Other

2016

1. Vissého Adjiwanou: Appointed Adjunct Professorship at the Université de Montréal (2016 – 2019)

2015

1. Vissého Adjiwanou: Visiting professor at the Institut Supérieur des Sciences de la Population, University of Ouagadougou, Burkina Faso (25 June 2015 - 25 July 2015)
2. Vissého Adjiwanou: Promoted, *ad hom*, to Senior Lecturer
3. Rob Dorrington: *Ad hom* excellence award