

## Research publications 2012 to 2017

For full publication lists refer to academics' ORCID information

### 2017

- Hassim, A., Dekker, E.H., Byaruhanga, C., Reardon, T., van Heerden, H. (2017). A retrospective study of anthrax on the Ghaap plateau, Northern Cape Province of South Africa, with special reference to the 2008 outbreak. *Onderstepoort Journal of Veterinary Research* 84 (doi: 10.4102/ojvr.v84i1.1414).
- Chisi, S.L., Schmidt, T., Akol, G.W. & Van Heerden, H. (2017). Use of *Brucella abortus* species specific polymerase chain reaction assay for the diagnosis of bovine brucellosis. *Journal of the South African Veterinary Association* 88(0), a1433. <https://doi.org/10.4102/jsava.v88i0.1433>
- Phaswana, P.H., Ndumnego, O.C., Koehler, S.M., Beyer, W., Crafford, J.E van Heerden, H. (2017) Use of the mice passive protection test to evaluate the humoral response in goats vaccinated with Sterne 34F2 live spore vaccine. *Veterinary Research* 48: 46
- Koehler, S.M., Buyuk F., Celebi, O., Demiraslan, H., Doganay M., Sahin, M., Moehring, J., Ndumnego, O.C., Otlu, S., van Heerden, H., Beyer, W. (2017). Protection of farm goats by combinations of recombinant peptides and formalin inactivated spores from a lethal *Bacillus anthracis* challenge under field conditions *BMC Veterinary Research* 13: 220
- Chisi, S.L., Marageni, Y., Naidoo, P., Zulu, G., Akol, G.W., van Heerden, H. (2017). An evaluation of serological tests in the diagnosis of bovine brucellosis in naturally infected cattle in KwaZulu-Natal province in South Africa. *Journal of South African Veterinary Association* 88 (10.4102/jsava.v88i0.1381)
- Sutton D., Michel A. Mycobacterial infections in equids: clinical characteristics and diagnostic techniques. *Equine Veterinary Education*. In press.
- Van der Heijden, E, Chileshe, J, Vernooij, H Gortazar, C Juste, R, Sevilla, I, Crafford, J, Rutten, V, Michel A. Immune response profiles of calves following vaccination with live BCG and inactivated *Mycobacterium bovis* vaccine candidates. *PLoS One*.
- Martin, LER., T. G. Hanyire, J. Dawson, C.M. Foggin, A.L. Michel, K.P. Huyvaert, M. Miller, F.J. Olea-Popelka. Tuberculosis serosurveillance and management of captive African elephants (*Loxodonta africana*) in the Kavango-Zambezi Transfrontier Conservation Area. *Transboundary and Emerging Diseases*. Accepted.
- Nyanhongo, N., Hansen, M., Nymo, I.H., Godfroid, J., Michel, A.L. 2017. Evaluating the brucellin skin test as an additional test to control bovine brucellosis. *SOJ Microbiology and Infectious Diseases*. 5(4):1-6.
- Miller M, Michel A, van Helden P, Buss P. Tuberculosis in Rhinoceros: An underrecognized Threat? *Transbound Emerg Dis*. doi: 10.1111/tbed.12489. 64(4), 1071-1078.

- Michel, A.L., Lane, E.P., de Klerk-Lorist, L-M., Hofmeyr, M., van der Heijden, E.M.D.L., Botha, L., van Helden, P., Miller, M., Buss, P. 2017. Experimental *Mycobacterium bovis* infection in three white rhinoceroses (*Ceratotherium simum*): Susceptibility, clinical and anatomical pathology. *PLoS One*,12(7),e0179943.
- Katale, BZ, Mbugi, EV, Siame, KK, Keyyu, JD, Kendall, S, Kazwala, RR, Dockrell, HM, Fyumagwa, RD, Michel, AL, Rweyemamu, M, Streicher, EM, Warren, RM, van Helden, P, Matee, MI. 2017. Isolation and Potential for Transmission of *Mycobacterium bovis* at Human-livestock-wildlife Interface of the Serengeti Ecosystem, Northern Tanzania. *Transboundary and Emerging Diseases*; 64(3):815-825. doi: 10.1111/tbed.12445.
- Jenkins, A.O., Michel A., Rutten, V. Original Mycobacterial Sin, a consequence of highly homologous antigens? *Veterinary Microbiology*, 203:286-293.
- Gcebe, N., Rutten, V., Gey van Pittius, N., Naicker, B., Michel, A. *Mycobacterium malmesburyense* sp. nov: A novel non-tuberculous *Mycobacterium* species revealed by multiple gene sequence characterization. *International Journal of Systematic and Evolutionary Microbiology*. 67 (4): 832-838, doi: 10.1099/ijsem.0.001678
- Dippenaar, A., Parsons, SDC, Miller, MA, Hlokwe, T, Gey van Pittius,NC, Pain, A, Warren, RM, Michel, AL, van Helden, PD. 2017. Progenitor strain introduction of *Mycobacterium bovis* at the wildlife-livestock interface can lead to clonal expansion of the disease in a single ecosystem. *Infection, Genetics and Evolution*. 51, 235-238.
- Mbugi, E.V., Katale, B.Z., Lupindu, A.M., Keyyu, J.D., Kendall, S.L., Dockrell, H.M., Michel, A.L., Matee, M.I., van Helden, P.D. 2017. Tuberculosis infection: Occurrence and risk factors in presumptive TB patients of the Tanzanian Serengeti ecosystem. *East African Health Research Journal*,1 (1). [http://www.eac.int/sites/default/files/docs/eahrj\\_i1v1\\_0.pdf](http://www.eac.int/sites/default/files/docs/eahrj_i1v1_0.pdf). <http://onlinelibrary.wiley.com/uplib.idm.oclc.org/doi/10.1111/tbed.12622/epdf>
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- Ghebremariam, M.K., A.L. Michel, M. Nielen, J.C.M. Vernooij, V.P.M.G. Rutten. 2017. Farm level risk factors associated with bovine tuberculosis in the dairy sector in Eritrea. *Transboundary and Emerging Diseases*. DOI: 10.1111/tbed.12622
- Angela C. Brüns, Tanner M, Williams MC, Botha L. O'Brien A, Fosgate GT, Van Helden PD, Clarke J, Michel AL. 2017. Diagnosis and implications of *Mycobacterium bovis* infection in banded mongooses (*Mungos mungo*) in the Kruger National Park, South Africa. *J Wildl Dis*. 53(1), 2017, pp. 19–29.

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- Ndumngu, O.C., Kohler, S.M., Crafford, J., van Heerden, H., Beyer, W. (2016). Comparative analysis of the immunologic response induced by the Sterne 34F2 live spore *Bacillus anthracis* vaccine in a ruminant model. *Veterinary Immunology and Immunopathology* 178:14-21:

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Hlokwe, TM, , De Klerk-Lorist LM and Michel AL. 2016. Wildlife on the move: A hidden tuberculosis threat through introduction of untested species in an ecosystem. *J Wildl Dis*. 2016 Oct;52(4):837-843.

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