



SPECIAL REPORTS ([HTTP://MG.CO.ZA/SECTION/SPECIAL-REPORTS](http://mg.co.za/section/special-reports))

Caroline Pule: Understanding the physiology of drug-resistant and tolerant TB

Advertorial (<http://mg.co.za/author/advertorial>) 15 Aug 2016 00:00



Caroline Pule

(<http://mg.co.za/article/2016-08-15-00-caroline-pule-understanding-the-physiology-of-drug-resistant-and-tolerant-tb>)

Caroline Pule is a PhD student in the department of molecular biology and human genetics, Stellenbosch University. Pule attained an MSc in Medical Sciences (molecular biology) from the same university in March 2014, after completing a BTech in Medical Biotechnology at the Cape Peninsula University of Technology (with 14 distinctions) in December 2011.

Her research focuses on understanding the physiology of drug-resistant and tolerant *Mycobacterium tuberculosis*, and how these bacteria modulate the host response in the context of the macrophage infection model. Pule explores this research question through the use of transcriptomic analysis, fluorescence dilution and macrophage-model experiments, integrating the resulting data using bioinformatics. Her research findings may lead to the identification of novel biological pathways and the development of novel drug targets to combat the spread of drug-resistant TB.

Pule is an ambassador of the South African National Tuberculosis Association, vice-president of the Western Cape Branch of the South African Association of Women Graduates, an executive committee member of the Association of South African Women in Science and Engineering, and a research director of the non-profit organisation The Governance (an inter-university organisation of emerging young African leaders and motivational speakers advocating social change by empowering young Africans with pertinent skills). She also started a foundation to help establish science clubs in disadvantaged communities and to distribute scientific literature to these communities.

She had a first-author article published in the international peer-reviewed *Journal of Antimicrobial Chemotherapy*, and also authored the international 2015 TB Summit report paper published by EuroSciCon Honnau Publishing as a Kindle edition. In 2015 and 2016 she was a peer reviewer of abstracts submitted for the 46th and 47th Union World Conferences on Lung Health, and also served on a selection committee for the 2015 Angus Scholarship Honours Award.

Pule presented her MSc thesis at the 35th Annual Congress of the European Society of Mycobacteriology in Vienna and at the 4th National TB Conference in Durban. In 2015, she won a prize for the best poster presentation at the 2015 International TB Summit in London, and in June 2016 made a presentation on her PhD work at the 2016 TB Summit.

Pule has won several prestigious awards in open competitions. In 2014, she won the Stellenbosch University Rector's Award for Exceptional Leadership, a DST doctoral fellowship at the South African Women in Science Awards, as well as the National Health Scholarship award from the South African Medical Research Council and the department of health. In 2015, she participated in SABC radio interviews focusing on tuberculosis research and the growth of women scientists, and was also featured in the *Science Stars* magazine.

222
SHARES

LinkedIn

Twitter

Google+

Facebook

More

We recommend



City of Ekurhuleni dismisses claims its municipal manager resigned over investigation (News)
(<http://mg.co.za/article/2016-08-12-city-of-ekurhuleni-dismisses-claims-its-municipal-manager-resigned-over-investigation>)



Teachers have a crucial role to play in building social cohesion (News)
(<http://mg.co.za/article/2016-08-29-teachers-have-a-crucial-role-to-play-in-building-social-cohesion>)



Julius Malema: The ANC will never govern the Rustenburg municipality again (News)
(<http://mg.co.za/article/2016-08-16-julius-malema-the-anc-will-never-govern-the-rustenburg-municipality-again>)



Post-Brexit, SA has an ideal opportunity to rethink its links with the UK and China (News)
(<http://mg.co.za/article/2016-08-26-00-post-brexit-sa-has-an-ideal-opportunity-to-rethink-its-links-with-the-uk-and-china>)

From around the Web



Capetown math student shocks wall street with a system that makes more money than any other system used by (24BusinessNews)
(http://www.24businessnews.com/lpd/roza/481110328132&utm_content=6152891)



Cape Town Teacher makes R4,200 per day! He reveals his Money-Making Secret here... (www.realcashguide-sa.com)
(http://www.realcashguide-sa.com/?article=110328132&utm_content=6152891)



What These 70's Stars Look Like Now is Unbelievable (Petty & Posh)
(http://www.pettyandposh.com/what-these-70s-stars-look-like-now-is-unbelievable/?utm_content=P513-T1-baywatch-70s&utm_source=outbrain&utm_medium=cpc&utm_term=228132&utm_campaign=DESKTOP-70s)



5 Tips for Forex Trading that Every Investor Should Know (http://preg.financika.com/)
(<http://serving.plexop.net/pserving/bridge/4&t=http://preg.financikatrade.com/as1273/index1.html?cpl=18908&ppl=1&a=4&adv=1&f=984528>)

Recommended by (<http://www.outbrain.com/what-is/default/en>)

COMMENTS