



Prof Louis Nel

Prof Nel is professor van Virologie in die Departement Mikrobiologie en Plantpatologie in die Fakulteit Natuur- en Landbouwetenskappe. Hy doen uitmuntende werk met betrekking tot hondsdolheid (rabiës) in Suid-Afrika en elders in die wêreld. As gevolg van prof Nel se prominente rol as kampvegter vir die stryd teen hondsdolheid is KwaZulu-Natal onlangs gekies as een van drie demonstrasiestreke vir 'n internasionale projek om hondsdolheid uit te roei. Die projek is geïnisieer deur die Global Alliance for Rabies Control in die VSA (GARC) wat 'n borgskap vir vyf jaar van die Bill & Melinda Gates-stigting beding het. Prof Nel is die plaaslike toesighouer oor die KZN-projek en dien op die internasionale bestuurskomitee vir die oorkoepelende program van die Bill & Melinda Gates-stigting. Die Wêreldgesondheidsorganisasie (WGO) hou oorhoofs toesig oor die projek en prof Nel is 'n permanente lid van die deskundige adviespaneel oor hondsdolheid en verwante soönose. Partners for Rabies Prevention (PRP), die strategiese en operasionele arm van GARC, lewer ook ondersteuning. PRP bestaan uit verteenwoordigers van al die belangrike rolspelers in die globale rabiësgemeenskap. Prof Nel was voorsitter van die afgelope drie jaarlikse PRP-konferensies in Italië en is voorsitter van die 2013-konferensie in Zürich.

Onder leiding van prof Nel onderneem die Universiteit talle hondsdolheidverwante navorsingsprojekte gemik op die uitwissing van die siekte. Navorsing word gedoen oor entstowwe, honde-ekologie, epidemiologie en diagnostiek. Sy groep beplan om programme vir voorkoming van, en navorsing oor, hondsdolheid in buurlande te ontplooi ten einde die verspreiding van die siekte van en na Suid-Afrika te voorkom. Onlangse ontwikkelings sluit 'n immuun-voorbehoedmiddel vir honde in ('n belangrike strategie om die hondebevolking te beheer) wat in die toetsfase is, en 'n nuwe molekulêre diagnostiese toets vir hondsdolheid. Die navorsingsgroep het 'n model ontwikkel wat dit moontlik maak om die infeksieroetes te karteer en die gevalle te identifiseer wat nie opgespoor is nie. Prof Nel is lid van die span navorsers wat toegewys is aan die UP Institusionele Navorsingstema (INT) Bioteegnologie en die Bestuur van Diere- en Soönotiese Siektes. Hy dien op die deskundige paneel van die Wêreldorganisasie vir Diergesondheid (OIE) en is die koördineerder van die Suidelike en Oos-Afrika Rabiësgroep (SEARG), die belangrikste groep in Afrika wat hondsdolheid bestry. Hy was verantwoordelik vir die reëling van die volgende internasionale SEARG-vergaderings: die agtste (in Namibië), die negende (in Botswana), die tiende (in Mosambiek) en die 11de (in Tanzanië).

Prof Nel is a professor of Virology in the Department of Microbiology and Plant Pathology in the Faculty of Natural and Agricultural Sciences who has done outstanding work on the subject of rabies in South Africa and the world. As a result of Prof Nel's work in championing this cause, KwaZulu-Natal has recently been selected as a demonstration site in an international project that aims to eliminate rabies. This project was launched by the global Alliance for Rabies Control (ARC), who secured a five-year sponsorship for the project from the Bill and Melinda Gates Foundation (B&GMF). Prof Nel is the custodian for the KZN project and serves on the international steering committee for the larger B&GMF/WHO (World Health Organization) programme. The project is executed under the custody of the WHO, where Prof Nel serves as a permanent member of the expert advisory panel on rabies and related zoonoses. Partners for Rabies Prevention (PRP), the strategic and operational arm of the global ARC, also renders strong support. PRP is composed of dedicated representatives of all the major players in the global rabies arena and Prof Nel has been the chairperson of the past three annual PRP conferences in Italy. He will chair the 2013 meeting in Zurich.

Under Prof Nel's guidance, the University undertakes many rabies-related research projects that promote the quest to eradicate the disease. The research topics include vaccines, dog ecology, epidemiology and diagnostics. His group plans to roll out rabies-prevention and research programmes in neighbouring countries to control the influx and spread of the disease to and from South Africa. Recent developments include an immune contraceptive method for dogs (an important strategy in controlling the dog population), which is in the testing phase, and a new molecular diagnostic test for rabies. The research group has developed a model which allows the regional transmission pathways to be mapped and to identify those cases which went undetected. Prof Nel is part of the team of researchers on the UP Institutional Research Theme (IRT): Biotechnology and the Management of Animal and Zoonotic Diseases. He serves on the expert panel of the World Organisation for Animal Health (OIE) and is the coordinator of the Southern and Eastern African Rabies Group (SEARG), the major group in Africa dedicated to fighting rabies. He organised the eight, ninth, tenth and 11th international SEARG meetings in Namibia, Botswana, Mozambique and Tanzania.

Prof Nel ke moprofesa wa Birolotši wa Kgoro ya Maekropayolotši le Patolotši ya Dimela ka Lefapheng la Thutamahlale a Temo le Tlhago yo a dirilego mošomo wa go atlega go fetiša ka bolwetši bja bogafa bja dimpša mo Afrika-Borwa le lefaseng ka bophara. Ka lebaka la mošomo wa Prof Nel wa go ba ketapele, KwaZulu-Natal e kgethilwe bjalo ka lefelo la ditšhupetšo ka protšekeng ya boditšhabatšhaba yeo maikemišetšo a yona e lego go fediša bogafa bja dimpša. Protšeke ye e thakgotšwe ke ba Global Alliance for Rabies Control (ARC) (Mokgatlo wa Taolo ya Bogafa bja Dimpša) wa lefase ka bophara, wo o hweleditšego protšeke thekgo ya mengwaga ye mehlano mašelang ya go tšwa go Setheo sa Bill and Melinda Gates (B&GMF). Prof Nel ke moetapele wa protšeke ya KZN ebile ke leloko la komititšhepedišo ya boditšhabatšhaba ya bogolo bja B&GMF/WHO (World Health Organization). Protšeke e šoma ka fase ga boetapele bja WHO, mo Prof Nel a lego bjalo ka leloko la sa ruri la sehlophakeletšo sa ditsebi ka bogafa bja dimpša le malwetši a mangwe a go amana le a diphoofolo a go fetela batho (zoonoses). Bašomišani go Thibelo ya Bogafa bja Dimpša (PRP), lekala la tšhepedišo le maano la ARC la lefase ka bophara, gape le aba thekgo ya go tia. PRP e bopilwe ka baemedi ba go ineela ba batseakarolo bohle ba bagolo ka tikologong ya bogafa bja dimpša ya lefase ka bophara, gape Prof Nel o bile modulasetulo wa dikhonferentshe tsa PRP tša ngwaga ka ngwaga tše tharo tša go feta go la Italy. O tla ba modulasetulo wa kopano ya 2013 go la Zurich.

Ka fase ga tlhahlo ya Prof Nel, Yunibesithi e tšea diprotšeke tše ntsi tša dinyakišišo tša go amana le bogafa bja dimpša tšeo di godišago go nyaka go fediša bolwetši bjo. Dihlogo tša dinyakišišo di akaretša mekento ya thibela, ekholotši ya dimpša, epidemiolotši le dithahlobo. Sehlopha sa gagwe se beakanya go phatlalatsa mananeo a dinyakišišo le thibelo ya bogafa bja dimpša ka dinageng tsa baagišani go laola kgeregelu ya batho ka bontši le phatlalalo ya bolwetši go tsena le go tšwa ka Afrika-Borwa. Tše diswa tša bjale di akaretša mokgwa wa thibelapelegi wa tšhontšho ya dimpša (leano la bohlokwa taolong ya katafalo ya dimpša), wo o sa lego kगतong ya diteko, le teko ya phekolo ya molekhule ye ntshwa yeo e šomago gabotse phekolong ya bogafa bja dimpša. Sehlopha sa dinyakišišo se dirile mmatlolo wo, ka kgaetšo ya monwana ya tsine ya birase ye e phekotšwego ka lekga le lengwe le le lengwe la bogafa bja dimpša ka seleteng, o dumelela ditsela tša phetišetšo go bopša le go laetša makga ao di sego tša hwetšwa. Prof Nel ke karolo ya sehlopha sa banyakišiši ka ga Kgwekgwe ya Dinyakišišo ya Institšhušene (IRT): Payotheknolotši le Taolo ya Malwetši a Diphoofolo le a go amana le tšono. O šoma sehlopheng sa ditsebi sa Mokgatlo wa Lefase wa Maphele a Diphoofolo (OIE) ebile ke mmeakanyi wa Sehlopha sa Bogafa bja Dimpša sa Borwa le Bohlabela bja Afrika (SEARG), sehlopha se segolo ka mo Afrika sa go ineela twantšhong ya bogafa bja dimpša. O beakantše dikopano tša SEARG tša boditšhabatšhaba tša bošeswai, bošenyane, bošosome le bo11 go la Namibia, Botswana, Mozambique le Tanzania.