



Prof Louw is sedert 2006 Professor Emeritus in Biochemie. Die malarianavorsingsprogram wat hy in 1997 geloods het, is primêr ingestel op die konstruksie van rekenaargegenereerde, drie-dimensionele modelle van die struktuur van proteïene wat 'n rol speel in malaria-infeksies en beskou word as geskikte teikens vir die ontdekking van geneesmiddels, maar moeilik is om te kristalliseer. Hierdie inligting word gebruik vir studies van struktuuraktiwiteite om voorspelde eienskappe te bevestig met die oog op die rasonale ontwerp van potensiële inhibeerders, gevolg deur ondersoeke om die uitwerking te bepaal van die inhibeerders op die oorlewing van die parasiete en die respons op die vlak van transkripsie en uitdrukking van die proteïene. Die uitslae van hierdie en ander studies word gereeld in prominente, portuurbeoordeelde internasionale vaktydskrifte gepubliseer. Prof Louw werk nou saam met medewerkers in die VK, Swede, Duitsland, Frankryk en Australië.

Die toekennings wat hy ontvang het, sluit mentorprogramme van die Andrew W Mellon Foundation en die Universiteit in, asook verskeie nadoktorale genootskappe. Hy was in 1983 medestigter van die Suid-Afrikaanse Vereniging vir Biochemie en Molekulêre Biologie, waarvan hy ere lid is en, benewens ander posisies, ook as President gedien het. Hy was ook 'n medestigter van die Federation of African Societies of Biochemistry and Molecular Biology en in 2005 van die Suid-Afrikaanse Malaria-inisiatief (SAMI) wat deur hom geïnisieer is en deur die Departement van Wetenskap en Tegnologie befonds word. Verskeie tegniese platforms het hul bestaan aan sy malarianavorsingsprogram te danke, onder andere die Eenheid vir Bioinformatika en Gerekenariseerde Biologie (2003) van die Universiteit van Pretoria.

As skrywer en medeskrywer het hy 75 portuurbeoordeelde artikels gepubliseer. Hy het 'n ISI h-indeks van 20. Prof Louw het op uitnodiging resensies en twee hoofstukke in boeke gepubliseer, asook twee volle konferensiereferate en, op uitnodiging, twee wetenskaplike artikels vir leke. Sedert 1985 het hy as promotor of medepromotor opgetree vir 14 studente wat hul PhD's voltooi het, en as studieleier of medestudieleier vir 29 wat hul MSc-grade voltooi het. Baie van sy studente het met lof geslaag en gesogte en mededingende studie- of reisbeurse ontvang. Agt van die voormalige studente beklee tans akademiese posisies. Hy het 'n B3-gradering van die NNS.

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Prof Louw has been a Professor Emeritus of Biochemistry since 2006. His malaria research programme, initiated in 1997, focuses primarily on constructing computer-based, three-dimensional structures of malarial proteins, which are perceived to be good targets for drug discovery, but difficult to crystallise. This information is used for structure-activity studies to confirm predicted properties, the rational design of potential inhibitors, followed by investigations to determine the effects of these inhibitors on parasite survival and response on the transcriptional level and expression of proteins. The results of these and other studies are regularly published in high-ranking and peer-reviewed international journals. He has active collaborators in the UK, Sweden, Germany, France and Australia.

His awards include Andrew W Mellon Foundation and University Mentoring Programmes as well as several Postdoctoral Fellowships. He was a cofounder (1983) of the SA Society of Biochemistry and Molecular Biology (SASBMB), of which he is an honorary member and has served, amongst others, as President. He is a cofounder of the Federation of African Societies of Biochemistry and Molecular Biology (FASBMB) and initiated and cofounded the SA Malaria Initiative (SAMI) funded by the DST, in 2005. Several technical platforms originated from his malaria research programme, including the Bioinformatics and Computational Biology Unit (2003) at the University of Pretoria.

As author or co-author, he has published 75 peer-reviewed papers and has an ISI h-index of 20. He has published invited reviews, two invited book chapters, two full conference papers and two popular scientific articles. Fourteen students completed their PhD and 29 completed their MSc (often cum laude and with prestigious and competitive bursaries or travel grants) under his supervision or co-supervision since 1985. Eight of them are currently appointed in academic positions. He has a B3-rating from the NRF.

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Prof Louw e bile Profesa wa go ikgetha wa Payokhemistri go tloga ka 2006. Lenaneo la gagwe la dinyakišišo tša malaria, le a le thomilego ka 1997, le nepiša thwii go hlangwa ga dibopego-ponagalotharo tša diproteine tša malaria ka khomphutha, tše di bonwago e le dinepišwa tše botse tša kutullo ya diokobatši, eupša di thata go kwešišega. Tshedimošo ye e šomišwa dithutong tša nyakišišo ya dibopego gore go kgonthišwe diteng tše di ukangwago, popego ya ditšhitiša, tše di latelwago ke dinyakišišo tša go hlatha ditlamorago tša ditšhitiša tše mo phologong ya dinwamadi. Dipoelo tša nyakišišo ye le tša dinyakišišo tše dingwe di fela di gatišwa ka ditšenaleng tša godimo maamong a boditšhabatšhaba. O na le badirišanimmogo ka yena mafaseng a bjalo ka UK, Sweden, Germany, France le Australia.

Difoka tša gagwe di akaretša Mellon Foundation, University Mentoring Programmes le diposo tša go ba monyakišiši wa ka morago ga bongaka. E bile yo mongwe wa bathomi (1983) ba SA Society of Biochemistry and Molecular Biology (SASBMB), woo e lego leloko la tlhompho la go ya go ile la wona gomme e ile ya ba mopresitente wa wona mokgahlo woo, gare ga mešomo ye mengwe. Ke yo mongwe wa bathomi ba Federation of African Societies of Biochemistry and Molecular Biology (FASBMB) gape o thomile le SA Malaria Initiative (SAMI) ye e thekgilwego ka mašeleng ke DST, ka 2005. Go tšwa lenaneong la gagwe la dinyakišišo tša malaria, go bile le diplatfomo tše mmalwa tše di thongwago, go akaretšwa le Bioinformatics and Computational Biology Unit (2003) ya University of Pretoria.

Bjalo ka mongwalanoši le mongwala-le-ba bangwe, o ngwadile diathikele tše 75 ka ditšenaleng tša go abelwa sabsiti gomme o na le intekwe ya go lekana 20 ya h ya ISI. O ngwadile ditshekatsheko tše di gatišitšwego, dikgaolo tše pedi ka dipukung ka taletšo, dipampiri tše pedi tša go balwa khonferentsheng le diathikele tše pedi tša saense. Baihuthi ba lesomenne ba phethile dithuto tša bona tša PhD mola ba 29 ba phethile ditikrii tša bona tša MSc (gantši ka dihloro le go abelwa dipasari goba dikrante tša maemo a godimo) ka fase ga bohlahli le bothušabohlahli bja gagwe go tloga ka 1985. Ba seswai ba bona ba thwetšwe mešomong ya seakatemiki. O na le maemo a B3 a NRF.