



Prof Robert Millar

Prof Millar is Direkteur van die Soogdiernavorsingsinstituut aan die Universiteit van Pretoria en Direkteur van die navorsingsgroep vir reseptorbiologie van die Universiteit van Kaapstad en die Mediese Navorsingsraad. Sy omvattende vakkundige opleiding, publikasiegeskiedenis en patenteportefeulje het prof Millar aan die voerpunt van die gesondheids- en mediese wetenskappe geplaas op terreine soos biochemie, neuro-endokrinologie en kankernavorsing. Sy werk het nie alleen 'n beter begrip van menslike en diere fisiologie aangevoer nie, maar ook uitgeloopt op nuwe maniere om kanker en ander siektes te behandel.

Prof Millar se opleiding sluit onder meer chemie, dierkunde, biochemie, fisiologie, kliniese endokrinologie en voortplantingsbiologie in, wat sy werk as navorser en ook mentor vir PhD-studente onderskraag. Met sy werk het hy diep spore gelaat op terreine soos menslike voortplanting, hormoonvervanging en die behandeling van siektes soos kanker. Die klem in sy onlangse navorsing was op hormone wat gonadotropien (GnRH) vrystel, baanbrekerswerk met die ontdekking van GnRH-prohormone en innoverende GnRH's. Sy groep het deelgeneem aan 'n gesamentlike poging om die GnRH-reseptor vir die eerste keer te kloon en aan werk wat uitgeloopt het op die ontdekking van GnRH-subtypes. As gevolg van dié deurbraak is groot vordering gemaak met die ontwikkeling van kankerwerende middels. Daarbenewens was hy betrokke by geslaagde pogings om agt nuwe middels aanvaar te kry vir kliniese gebruik om siektetoestande soos prostaatkanker, endometriose, onvrugbaarheid en polisistiese ovariese sindroom te behandel. Benewens talle ander toekennings, was prof Millar die ontvanger van die Wellcome-goue penning en die Oppenheimer-goue penning en is hy 'n Geoffrey Harris- en 'n Ernst en Berta Scharrer-laureaat. Hy is 'n genoot van die Royal Society van Edinburgh en van die Royal Society van Suid-Afrika.

'n Omvattende korpus van meer as 350 vakkundige artikels deur prof Millar het verskyn in vaktydskrifte soos die *New England Journal of Medicine*, die *Journal of Clinical Investigation*, *Science*, *Proceedings of the National Academy of Sciences* en *Endocrinology*. Hy is die hoofredakteur van *Neuroendocrinology* en was raadslid van verskeie internasionale vaktydskrifte. Hy besit 18 patente en het talle voorlesings gedoen as hoofspreker of voor plenums by plaaslike en internasionale konferensies. Daar is meer as 11 000 vakkundige verwysings na sy werk en hy het 'n h-indeks van 54.

Prof Millar is Director of the Mammal Research Institute at the University of Pretoria and Director of the UCT/MRC Research Group for Receptor Biology. Broad training, an extensive publishing history and a large patent portfolio have placed Prof Millar at the forefront of health and medical sciences in areas such as biochemistry, neuroendocrinology and cancer research. His work has not only broken new ground in understanding human and animal physiology, but also led to new treatments for cancer and other diseases.

Prof Millar's training includes chemistry, zoology, biochemistry, physiology, clinical endocrinology, reproductive biology and more, which has stood him in good stead, not only as a researcher, but as a mentor for PhD students. His work has made a major impact in areas of human reproduction, hormone replacement and the treatment of diseases such as cancer. His recent research has focused on gonadotropin-releasing hormones (GnRH), pioneering the discovery of GnRH prohormones and novel GnRHs. His group participated in a collaborative effort for the first cloning of the GnRH receptor and the discovery of GnRH subtypes. As a result, great strides have been made in the development of anti-cancer drugs. Furthermore, he has been involved in successfully taking eight drugs into the clinic for treating diseases such as prostatic cancer, endometriosis, infertility, and polycystic ovarian syndrome. Among his many awards, Prof Millar has received the Wellcome Gold Medal, the Oppenheimer Gold Medal, and is a Geoffrey Harris laureate and Ernst and Berta Scharrer laureate. He is a fellow of both the Royal Society of Edinburgh and the Royal Society of South Africa.

Prof Millar has an extensive publishing track record with more than 350 papers in publications such as the *New England Journal of Medicine*, *Journal of Clinical Investigation*, *Science*, *Proceedings of the National Academy of Sciences* and *Endocrinology*. He is the editor-in-chief of *Neuroendocrinology* and has served on the board of a number of international journals. He holds 18 patents and has presented numerous plenary and keynote lectures at local and international conferences. His work has received more than 11 000 citations and he has an h-index of 54.

Prof Millar ke Molaodimogolo wa Instišhute ya Dinyakišišo tša diphoofole tša go nyantšha, Yunibesithi ya Pretoria le Molaodimogolo wa Sehlopha sa Dinyakišišo tša thutaphelo ya disele le dimolekhule sa UCT/MRC. Tihahlo ye e nabilego, histori ye e tseletšego ya bogatiši le potfolio e kgolo di beile Prof Millar maemong a ketapele go saense ya maphelo le kalafo ka mafapheng a go swana le payokhemistri, thutathakatšhika le dinyakišišo tša kankere. Mošomo wa gagwe ga se ya ba fela wa moswananoši le go tla ka dikgopolo tše diswa ka go kwešišeng fisiolotši ya batho le diphoofole eupša le go tla ka dikalafo tše di diswa tša kankere le malwetši a mangwe.

Tihahlo ya Prof Millar e akaretša khemistri, thutadiphoofole, payokhemistri, fisiolotši, dihomone, thutaphelo ya pele go le tše dingwe tše mmalwa tše di mmeilego maemong a mabotse, e sego fela e le monyakišišo eupša e le mohlalhi wa baithuti ba PhD. Mošomo wa gagwe o bile le khuetsšo ye kgolo ka makaleng a pele go ya batho, peobakeng ya dihomone le tihahlobo ya malwetši a bjalo ka kankere. Dinyakišišo tša gagwe tša moragorago di beile šedi ya tšona mo go dihomone tšego di ntšhago proteine (GnRH), gomme e bilego pulamadibogo ya go hwetšwa ga diprohormone tša GnRH le di GnRH tše diswa. Sehlopha sa gagwe se tšeeere karolo ka maitekong a tšhomišano a tšhampedi ya disele le dimolekhule tša GnRH le go hwetša ya mehutanyana ya GnRH. Ka go dira seo maiteko a magolo a dirilwe ka tšhabollong ya diokobatiši tša go lwa le kankere. Go feta fao o šomile gape ka katlego ka 'go išeng diokobatiši tše seswai kliniking' go alafa malwetši a bjalo ka kankere ya thaka ya senna, mathata a pele go basading le bolwetši bja mathata a mae a sesadi. Magareng ga difoka tša gagwe tše di ntši, Prof Millar o amogetše Metale wa gauta wa Wellcome, Metale wa gauta wa Oppenheimer gomme gape ke Mohlompshamogolo difokeng tša Geoffrey Harris le Berta Scharrer. Ke mogweramoleloko wa Mokgatlo wa Bogoši bja Edinburg le Mokgatlo wa Bogoši bja Afrika-Borwa.

Prof Millar o na le rekoto ye e nabilego ya bogatiši moo a nago le dikgatišo tša dipampiri tše 350 ka dikgatišong tše bjalo ka *New England Journal of Medicine*, *Journal of Clinical Investigation*, *Science*, *Proceedings of the National Academy of Science* le *Endocrinology*. Ke morulaganyimogolo wa *Neuroendocrinology* gape o šomile dibotong tša ditšenale tša boditšhabatšhaba tša go balega. O na le tušo tša mašeleng tše 18 gomme gape o abile dithuto tša ketapele dikhonferentšheng tša mo gae le tša boditšhabatšhaba. Mošomo wa gagwe o tsopotšwe makga a 11 000 gomme o na le h-intekse ya 54.