

## **CV Assoc. Prof. Neil Davies (PhD)**

Assoc. Prof. Davies obtained his academic qualifications from the University of Cape Town (South Africa). After a 3-year fellowship in the Chemical Pathology Department at the University of Oxford (United Kingdom), he then joined the *Cardiovascular Research Unit* at the University of Cape Town in 1999.

**His main research focus** is on regenerative medicine with particular reference to delivery of biomaterials and stem cells to infarcted hearts. Integral to this focus is the development of novel therapeutic angiogenesis strategies and investigations into the manipulation of cellular invasion through the engineering of bioactive smart hydrogels. His laboratory was the first to show that reduction in pathological remodelling of an infarcted heart could be achieved through the cardiac injection of synthetic biomaterials. Another first was the recent demonstration that cell type specific invasion of hydrogels could be realised through manipulation of protease specific hydrogel crosslinkers. His laboratory is internationally recognised for its work on controlling biomaterial degradation after implantation. Other notable findings have been the discernment of an optimal dosage of VEGF, a key angiogenesis regulator, for sustained vascular ingrowth and cell specific control of migration speed via utilisation of combinations of cell adhesive peptides.

Assoc. Prof. Davies is author of **50 peer reviewed full papers** that have been cited more than 2000 times with a total of **189 impact points** and an **H-factor of 21**. He has obtained international academic and industry grants of more than **40 million Rand**. He is a regular reviewer of the 12 top journals in his field and is on the editorial board of *Journal of Biomaterials and Tissue Engineering*. He is currently funded by the National Research Foundation (South Africa), Medical Research Council (South Africa) and the International Centre For Genetic Engineering and Biotechnology.