



# Dr Rachel Chikwamba

## Board Member

### Profession & Current Position

Geneticist, currently Group Executive, Council for Scientific and Industrial Research (CSIR)

### Area of Expertise

Life sciences and health; Leadership, strategy development and execution; Research and development strategy, management; Strategic partnerships and business development; Strategic communication and stakeholder engagement; Governance.

### Awards

Recent Awards

- Members of the African Union High Level Panel on Emerging Technologies (APET)
- Appointed Chief Scientist, CSIR Biosciences
- Director's Award in research and leadership excellence
- Winner of the Inaugural SA Bioplan Initiative (R15 million), an entrepreneurship competition, for the GreenPharm Initiative

### Qualification & Designation/s

MBA; PhD; Member of the Academy of Science of South Africa (ASSAF Member, South African Council for Natural Scientific Professions; Dr Chikwamba sits on various boards focusing on agriculture, conservation and health, notably the Global Governing Board of ICRISAT, the Board of Directors of the Wits Health Consortium (Pty) Ltd, the South African Medical Research Council and is the chair of the Advisory Board of the Applied Center for Climate and Earth System Sciences (ACCESS).

### Top Publications

1. Tsekoa, T. L., Lotter-Stark, T., Buthelezi, S., Chakauya, E., Stoychev, S. H., Sabeta, C., ... & Rupprecht, C. E. (2016). Efficient In Vitro and In Vivo Activity of Glyco-Engineered Plant-Produced Rabies Monoclonal Antibodies E559 and 62-71-3. *PloS one*, 11(7), e0159313.
2. van Dolleweerd, Craig J., et al. "Engineering, expression in transgenic plants and characterisation of e559, a rabies virus-neutralising monoclonal antibody." *Journal of Infectious Diseases* 210.2 (2014): 200-208.
3. Ma, J. K. C., Christou, P., Chikwamba, R., Haydon, H., Paul, M., Ferrer, M. P., ... & Yang, D. C. (2013). Realising the value of plant molecular pharming to benefit the poor in developing countries and emerging economies. *Plant biotechnology journal*, 11(9), 1029-1033.
4. Alexandre, K. B., Gray, E. S., Pantophlet, R., Moore, P. L., McMahon, J. B., Chakauya, E., ... & Morris, L. (2011). Binding of the mannose-specific lectin, griffithsin, to HIV-1 gp120 exposes the CD4-binding site. *Journal of virology*, 85(17), 9039-9050.
5. Lotter-Stark, H. C., Rybicki, E. P., & Chikwamba, R. K. (2012). Plant made anti-HIV microbicides—A field of opportunity. *Biotechnology advances*, 30(6), 1614-1626.

### Featured in the Media

News 24; Sowetan; African Business Review; Sun; CNBC Africa.

### Association to the SAMRC

Currently a principal Research on a Research Project funded by the Strategic Health Partnership (SHIP)

