

UNIVERSITY OF CAPE TOWN

COLLEGE OF FELLOWS 2024

## **Professor Catherine Orrell**

Desmond Tutu HIV Centre Department of Medicine Faculty of Health Sciences

It is with immense pleasure and enthusiasm that I nominate Professor Catherine Orrell for consideration for membership of the UCT College of Fellows. I have mentored and supported Catherine's career at the Desmond Tutu HIV Centre (DTHC) since I have been the director, and can testify to her academic, clinical and leadership skills, as well as her expertise as a mentor and teacher. Catherine first joined the team in the late nineties when the unit was running a unique HIV care and treatment centre at the New Somerset Hospital. Catherine joined a small team of clinicians who were the first to use antiretroviral therapy (ART) in the setting of clinical trials. She then went on to work at our very new clinic in Masiphumelele, where a National Institutes of Health (NIH) grant enabled ART, she led a project to demonstrate noninferiority of nurse delivered HIV care compared with medical doctor delivered care (see below). Catherine also joined me in setting up the first community-based ART clinic in 2002 and then the Hannan-Crusaid Treatment Centre we established in 2004 in Gugulethu. Together we wrote the first Western Cape Provincial ART guidelines which were adopted by the national government soon after.

Catherine has attained an MSc and MMed in clinical pharmacology – and is an associate fellow of the college of clinical pharmacologists – the diploma in HIV management and her PhD while working at the DTHC. She is a full professor in the Department of Medicine since 2021 and heads up her own full self-funded research group within the DTHC called the Centre for Adherence and Therapeutics (D-CAT).

Catherine is an expert clinical trialist and an international leader in HIV treatment research, especially in medication adherence and pharmacokinetic studies. She has an H-rating of 43 and has published over 100 peer reviewed manuscripts (>5 000 citations) in leading medical journals, including *The New England Journal of Medicine*, and several first, second, or corresponding author publications in *The Lancet, Lancet Infectious Diseases*, and other high impact HIV or general medical journals. Her work is highly cited, attesting to her status as a leader in this field. She regularly presents at international conferences on her subject, frequently as a plenary or keynote speaker and is regularly requested to review other's work submitted to leading medical journals. She is PI on multiple studies with funders including the South African Medical Research Council (SAMRC), the European & Developing Countries Clinical Trials Partnership (EDCTP) and the NIH (R01 and R34s) and has prestigious collaborators on several current or past studies at world-leading universities, including Harvard, University of Boston, and Liverpool University.

Catherine is an exemplary teacher and mentor, who supervised multiple postgraduate students (master's and PhDs) to completion; and she has contributed to the teaching of large numbers of undergraduates and colleagues in local or international settings. She regularly acts as an external examiner for postgraduate students. Catherine's teaching is thoughtful and considered, with her

interactions showing deep understanding of both the issue and the individual. She is exceedingly highly regarded by students and colleagues alike.

Despite Catherine being entirely funded by money from grant income, she works tirelessly to improve the academic environment at UCT and promote colleagues and students, with a strong focus on diversity and women. Internally, she promotes the work of her team and colleagues and ensures it is well integrated into UCT. She currently chairs the Institute of Infectious Disease & Molecular Medicine (IDM) Mentorship Committee. Externally, she is seen as a leader at UCT, taking her research group to a position of international respect and renown.

In addition to doing community outreach around her trials work, as a clinician, she has set up, ran, or contributed to multiple service delivery programs in and around Cape Town, and has worked as a service provider in many public sector clinics during her time at the DTHC. Her early work in setting up ART delivery services has informed policy at national and international levels; and she has actively contributed to both national and international guidelines, via work with the World Health Organisation (WHO) and International AIDS Society (IAS).

In summary, Catherine is an outstanding academic and full Professor who is an asset in the Desmond Tutu HIV Centre and a very real credit to the Dept of Medicine and the Health Science Faculty and I enthusiastically and unreservedly nominate her for consideration to the UCT College of Fellows.

Nominator: Professor Linda-Gail Bekker

## Publications

- 1. Orrell C, Bangsberg DR, Badri M, Wood R. Adherence is not a barrier to successful antiretroviral therapy in South Africa. *AIDS. 2003; 17 (9), 1369–1375.* (IF: 4.499) (Citations: 468)
- 2. Orrell C, Harling G, Lawn SD, Kaplan R, McNally M, Bekker L-G, Wood R. Conservation of firstline antiretroviral treatment regimen where therapeutic options are limited. *Antiviral therapy*. 2007; 12 (1), 83. (IF: 3.02) (Citations: 173)
- 3. Orrell C, Walensky RP, Losina E, Freedberg KA, Wood R. HIV-1 clade C resistance genotypes after first virological failure in a large community ART programme. *Antiviral Therapy.* 2009; 14(4): 523–531. (IF: 3.02) (Citations: 121)
- Sanne I, Orrell C, Fox M, Conradie F, Ive P, Zeinecker J, Cornell M, Heiberg C, Ingram C, Panchia R, Rassool M, Stevens W, Truter H, Dehlinger M, van der Horst C, McIntyre J, Wood R. Nurse management is not inferior to doctor management of antiretroviral patients: The CIPRA South Africa randomized trial. *Lancet. 2010; 376(9734): 33–40.* (IF: 59.10) (Citations: 304)
- 5. Orrell C, Cohen K, Conradie F, Pitt J, Ive P, Sanne I, Wood R. Efavirenz and rifampicin in the South African context: is increase efavirenz with concurrent rifampicin therapy? *Antiviral Therapy. 2011; 16(4): 527–534.* (IF: 3.02) (Citations: 49)

- 6. Thompson MA, Mugavero MJ, Amico KR, Cargill VA, Chang LW, Gross R, Orrell C, Altice FL, Bangsberg DR, Bartlett JG, Beckwith CG, Dowshen N, Gordon CM, Horn T, Kumar P, Scott JD, Stirratt MJ, Remien RH, Simoni JM, Nachega JB. Guidelines for improving entry into and retention in care and antiretroviral adherence for persons with HIV: evidence-based recommendations from an International Association of Physicians in AIDS Care panel. *Annals of Internal Medicine. 2012; 156 (11), 817–833.* (IF: 19.315) (Citations: 726)
- Orrell C, Cohen K, Mauff K, Bangsberg D, Maartens G, Wood R. A randomised controlled trial of real-time electronic adherence monitoring with text message dosing reminders in people starting first-line antiretroviral therapy. *JAIDS* 2015 Dec 15;70(5):495–502. (IF: 6.56) (Citations: 112)
- Orrell C; Hagins DP, Belonosova E, Porteiro N, Walmsley S, Falcó V, Man CY, Aylott A, Buchanan AM, Wynne B, Vavro C, Aboud M, Smith KY; on behalf of the ARIA study team. Dolutegravir/abacavir/lamivudine fixed-dose combination vs ritonavir-boosted atazanavir plus tenofovir disoproxil fumarate/emtricitabine in treatment-naive women with HIV-1 infection: week 48 results from the randomised, open-label, noninferiority ARIA study. *Lancet HIV. 2017;* 4(12)e535. (IF: 14.75) (Citations: 138)
- Orrell C, Cohen K, Leisegang R, Bangsberg DR, Wood R, Maartens G. Comparison of six methods to estimate adherence in an ART-naïve cohort in a resource-poor setting: which best predicts virological and resistance outcomes? *AIDS Research and Therapy, 2017 Apr 4;* 14(1):20. (IF: 1.605) (Citations: 78)
- 10. Haberer JE, Bwana BM, Orrell C, Asiimwe S, Amanyire G, Musinguzi N, Siedner MJ, Matthews LT, Tsai AC, Katz IT, Bell K, Kembabazi A, Mugisha S, Kibirige V, Cross A, Kelly N, Hedt-Gauthier B, Bangsberg DR. ART adherence and viral suppression are high among most non-pregnant individuals with early-stage, asymptomatic HIV infection: an observational study from Uganda and South Africa. *JIAS*, 22: e25232. 2019. (IF: 5.192) (Citations: 42)