

PERSONAL INFORMATION:

Full name: Prof. Faadiel Essop

Phone number: +27 76 901 9474

Email address: mfessop@sun.ac.za

Home address: 11 Hennie Webber Street, Panorama 7500

Work address: Division of Medical Physiology, Department of Biomedical Sciences, Biomedical Research Institute, Faculty of Medicine and Health Sciences, Stellenbosch University, South Africa

PUBLICATIONS IN PEER-REVIEWED JOURNALS (LAST 5 YEARS):

1. Mapanga RF and Essop MF. The damaging effects of hyperglycemia with the onset of acute myocardial infarction: spotlight on glucose metabolic pathways. *American Journal of Physiology Heart Circ* 2016; 310: H153-173. (IF 3.9; 2019).
2. Boyer F, Diotel N, Girard D, Rondeau P, Essop MF and Bourdon E. Enhanced oxidative stress in adipose tissue from diabetic mice, possible contribution of glycated albumin. *Biochem Biophys Res Comm* 2016; 473: 154-160 (IF 3; 2019).
3. Dludla PV, Muller CJF, Joubert E, Louw J, Gabuza KB, Huisamen B, Essop MF and Johnson R. Phenylpropenoic acid glucoside attenuates high glucose induced cell apoptosis in H9c2 cardiomyocytes. *Planta Medica* 2016; 82: 1468-1474 (IF 2.7; 2019).
4. Essop MF. AGEing heart valves: a bitter-sweet stiffening process? *J Clin Path* 2016; 69: 747-749 (IF 2.5; 2019).
5. Patche J, Girard D, Catan A, Boyer F, Dobi, A, Planesse C, Diotel N, Guerin-Dubourg A, Baret P, Essop MF, Meilhac O, Bourdon E and Rondeau P. Diabetes-induced hepatic oxidative stress: a new pathogenic role for glycated albumin. *Free Radic Biol Med* 2017; 102: 133-148 (IF 6.2; 2019).
6. Symington B, Mapanga RF, Norton GR and Essop MF. Resveratrol co-treatment attenuates the effects of HIV protease inhibitors on rat body weight and enhances cardiac mitochondrial respiration. *PLoS ONE* 2017; 12(1): e0170344. doi:10.1371/journal.pone.0170344 (IF 2.7; 2019).
7. Mapanga RF, Joseph DE, Saieva M, Boyer F, Rondeau P, Bourdon E and Essop MF. Glycation abolishes the cardioprotective effects of albumin during ex-vivo ischemia-reperfusion. *Physiological Reports.* 2017; 5(2):e13107. doi:10.14814/phy2.13107 (IF 2.1; 2019).
8. Strijdom H, De Boever P, Walzl G, Essop MF, Nawrot TS, Webster I, Westcott C, Mashele N, Everson F, Kessler H, Stelzl E and Goswami N. Cardiovascular risk and endothelial function in people living with HIV/AIDS: Design of the multi-site, longitudinal EndoAfrica study in the Western Cape Province of South Africa. *BMC Infectious Diseases* 2017; 17:41 DOI: 10.1186/s12879-016-2158-y (IF 2.7; 2019).
9. Dludla P, Muller C, Joubert E, Louw J, Essop MF, Gabuza K, Ghoor S, Huisamen B and Johnson R. Aspalathin protects the heart against hyperglycemia-induced oxidative damage by up-regulating Nrf2 expression. *Molecules* 2017; 22(1), 129; doi: 10.3390/molecules22010129 (IF 2.8; 2016).
10. Johnson R, Dludla PV, Joubert E, Muller CJF, Huisamen B, Essop MF and Louw J. Transcription profile unveils the cardioprotective effect of aspalathin against lipid toxicity. *Molecules* 2017; 22(2), 219; doi: 10.3390/molecules22020219 (IF 3.3; 2019).

11. Dludla PV, Essop MF, Gabuza KB, Muller CFJ, Louw J, and Johnson R. Age-dependent development of left ventricular wall thickness in type 2 diabetic (db/db) mice is associated with elevated serum low-density and triglyceride serum levels. *Heart and Vessels* 2017; 32(8): 1025-1031 (IF 1.6; 2019).
12. Breedt ES, Lacerda L and Essop MF. Trimetazidine therapy for diabetic mouse hearts subjected to *ex vivo* acute heart failure. *PLoS ONE* 12(6): e0179509. <https://doi.org/10.1371/journal.pone.0179509> (IF 2.7; 2019).
13. Benade J and Essop MF. Introduction of "sugar tax" in South Africa: placebo or panacea to curb the onset of cardio-metabolic diseases? *South African Heart Journal*; 2017; 14:148-153 (no IF yet).
14. Golbidi S, Daiber A, Korac B, Li H, Essop MF and Laher I. Health benefits of fasting and caloric restriction. *Current Diabetes Reports*; 2017;17 (12):123. doi: 10.1007/s11892-017-0951-7 (IF 3.7; 2019).
15. Deshpande G, Mapanga RF and Essop MF. Frequent sugar-sweetened beverage consumption and the onset of cardiometabolic diseases: cause for concern? *Journal of the Endocrine Society*; 2017; 1(11): 1372-1385 (no IF yet). Article featured in a special Endocrine Society thematic issue on cardiovascular endocrinology.
16. Teer E and Essop MF. HIV and cardiovascular disease: role of immunometabolic perturbations. *Physiology*; 2018 Jan 1;33(1):74-82. doi: 10.1152/physiol.00028.2017 (IF 7.2; 2019).
17. Dorsemans AC, Essop MF and Bourdon E. No stress – better results? *Advances in Physiology Education* 2018; 42: 720-722. (IF 1.5; 2019).
18. Mofo-Mato EP, Guewo-Fokeng M, Essop MF and Owira PMO. Genetic polymorphisms of organic cation transporter 1 (OCT1) and responses to metformin therapy in individuals with type 2 diabetes: A systematic review. *Medicine*; 2018 97 (27): p e11349. doi: 10.1097/MD.00000000000011349. (IF 1.6; 2019).
19. Mofo-Mato EP, Guewo-Fokeng M, Essop MF and Owira PMO. Genetic polymorphisms of organic cation transporters 1 (OCT1) and responses to metformin therapy in individuals with type 2 diabetes mellitus: a systematic review protocol. *Systematic Reviews* 2018; 7: 105 <https://doi.org/10.1186/s13643-018-0773-y> (IF 2.5; 2019).
20. Deshpande GP, Patterson HG and Essop MF. The human transketolase-like proteins TKTL1 and TKTL2 are bona fide transketolases. *BMC Structural Biology* 2019; 19:2. (IF 1.3; 2018).
21. Teer E, Joseph D, Driescher N, Nell T, Dominick L, Midgley N, Deshpande G, Page M, Pretorius E, Woudberg N, Lecour S, Glashoff R and Essop MF. HIV and cardiovascular diseases risk: exploring the interplay between T cell activation, coagulation, monocyte subsets and lipid subclass alterations. *American Journal of Physiology Heart Circ* 2019; 316: H1146-H1157 (IF 3.9; 2018).
22. Driescher N, Joseph DE, Human VR, Ojuka E, Cour M, Hadebe N, Bester D, Marnewick JL, Lecour S, Lochner A and Essop MF. The impact of sugar-sweetened beverage intake on rat cardiac function. *Heliyon* 2019; Mar 19;5(3):e01357. doi: 10.1016/j.heliyon.2019.e01357. (IF 1.7; 2019).
23. Mofo-Mato EP, Essop MF and Owira PMO. Effects of naringenin on renal expression of organic cation transporter 1 and 2 proteins and metformin disposition in diabetic rats. *Journal of Functional Foods* 2019; 59: 1-7. (IF 3.3; 2019).
24. Essop MF and Beselaar L. Student response to a cooperative learning element within a large Physiology class setting: lessons learned. *Advances in Physiology Education* 2020; 44(3): 269-275. (IF 1.5; 2019).
25. Essop MF. Implementation of an authentic learning exercise in a postgraduate Physiology classroom setting. *Advances in Physiology Education* 2020; 44(3): 496-500. (IF 1.5; 2019).

26. Berner K, Strijdom H, Essop MF, Webster I, Morris L and Louw Q. Fall history and associated factors among adults living with HIV-1 in the Cape Winelands, South Africa: a cross-sectional investigation. *Open Forum Infectious Diseases* 2019; 6(10): ofz401, <https://doi.org/10.1093/ofid/ofz401> (IF 3.7; 2019).
27. Zouhal H, Salhi A, Saeidi A, Huige L, Essop MF, Laher I, Rhibi F, Shalamzari SA and Ben Abderrahman A. Exercise training and fasting: current insights. *Open Access Journal of Sports Medicine* 2020; 11: 1-28. (no IF yet).
28. Dludla PV, Johnson R, Mazibuko-Mbeje SE, Muller CJF, Louw J, Joubert E, Orlando P, Silvestri S, Chellan N, Nkambule BB, Essop MF and Tiano L. Fermented rooibos extract attenuates hyperglycemia-induced myocardial oxidative damage by improving mitochondrial energetics and intracellular antioxidant capacity. *South African Journal of Botany* 2020; 131: 143-150. (IF 1.8; 2019).
29. Dominick L, Midgley N, Swart L-M, Sprake D, Deshpande G, Laher I, Joseph D, Teer E and Essop MF. HIV-related cardiovascular diseases: the search for a unifying hypothesis. *American Journal of Physiology Heart Circ* 2020; 318: H731-H746. (IF 3.9; 2019).
30. Mofo-Mato EP, Essop MF and Owira PMO. Citrus fruit-derived flavonoid naringenin and the expression of hepatic organic cation transporter 1 protein in diabetic rats treated with metformin. *Basic and Clinical Pharmacology and Toxicology* 2020; 10.1111/bcpt.13407. doi:10.1111/bcpt.134072020. (IF 2.7; 2019).
31. Dludla PV, Muller CJF, Louw J, Joubert E, Mazibuko-Mbeje SE, Tiano L, Silvestri S, Orlando P, Marcheggiani F, Cirilli I, Chellan N, Ghoor S, Nkambule BB, Essop MF, Huisamen B, and Johnson R. The combination effect of aspalathin and phenylpropanoic acid glucoside from rooibos against hyperglycemia induced cardiac damage: an *in vitro* study. *Nutrients* 2020; 12(4): 1151. <https://doi.org/10.3390/nu12041151>. (IF 4.5; 2019).
32. Essop MF and Opie LH. The acute coronary syndrome revisited: effects and therapeutic modulation of excess metabolic fuel supply. *Cardiovascular Journal of Africa* 2020; 31: 132-134. (IF 1.4; 2018).
33. Saeidi A, Haghghi MM, Kolahdouzi S, Daraei A, Abderrahmane AB, Hackney AC, Essop MF, Laher I and Zouhal H. The effect on physical activity on adipokines in individuals with obesity: a narrative review. *Obesity Reviews* 2021; Jan;22(1):e13090. doi: 10.1111/obr.13090. (IF 7.3; 2019).
34. Benade J, Sher L, De Klerk S, Deshpande G, Bester D, Marnewick JL, Sieck G, Laher I, Essop MF. The impact of sugar-sweetened beverage consumption on the liver: a proteomics-based analysis. *Antioxidants* 2020; 9(7), 569; <https://doi.org/10.3390/antiox9070569>. (IF 4.5; 2019).
35. Sher L, Geddie H, Olivier L, Cairns M, Truter N, Beselaar L and Essop MF. Chronic stress and endothelial dysfunction: mechanisms, experimental challenges and way ahead. *American Journal of Physiology Heart Circ* 2020; 319(2): H488-H506. (IF 3.9; 2019).
36. Teer E, Joseph DE, Glashoff RH and Essop MF. Monocyte/macrophage-mediated innate immunity in HIV-1 infection: from early response to late dysregulation and links to cardiovascular diseases onset. *Virologica Sinica*; 2021. <https://doi.org/10.1007/s12250-020-00332-0>. (IF 3.2; 2019).
37. Teer E, Joseph DE, Dominick L, Glashoff RH and Essop MF. Expansion of FOXP3 and GARP in CD4+CD25- negative cells in immune compromised HIV-infected individuals with virological failure. *Virologica Sinica* (IF 3.2); 2021. <https://doi.org/10.1007/s12250-021-00386-8>.
38. Berner, K, Gouelle A, Strijdom H, Essop MF, Espach Y and Louw Q. Biochemical analysis of gait impairments contributing to early functional decline in adults living with HIV-1 infection. *Open Forum Infectious Diseases* (IF 3.2) – *in press*.

BOOK CHAPTERS:

1. Zouhal H, Salhi A, Laher I, Essop MF and Abderrahman AB. Health benefits of exercise and fasting. In: Laher I (eds). *Handbook of healthcare in the Arab World*. Springer, Cham, 2021. https://doi.org/10.1007/978-3-319-74365-3_189-1.
2. Essop MF. Reflections on transformation in a science context and future implications. In: Fataar A and Costandius E (eds). *Evoking Transformation: Visual Redress at Stellenbosch University*. African Sun Media, Stellenbosch, 2021. <https://doi.org/10.52779/9781991201096/06>.
3. Essop MF and Adendorff H. Autonomy pathways to compare active teaching methods in undergraduate science classes. In: Blackie M, Adendorff H and Mouton M. *Tools to enhance Science education – exploring the knowledge practices. Series: Legitimation Code Theory: Knowledge-Building in Research and Practice*. In press, 2021.