



SAIS NEWSLETTER - FEBRUARY 10th, 2021

Dear SAIS members

Happy New Year 2021! Wishing you more moments of progress and success this year!

Welcome to SAIS Newsletter series for 2021. This year newsletter will be published twice every month. Additionally, we have introduced a “Community Corner” in the Newsletter. Community Corner seeks to give publicity to member publications from SAIS network. I warmly welcome all members to send me their publications in the year.

For a daily update, please sign-up on our SAIS social media platforms – SAIS LinkedIn, Facebook and Twitter pages. We post all the new studies/events/announcements/advertisements related to immunology in general, and more recently - to COVID-19.

From the editorial team, we say special thank you to Dr Heena Ranchod, Khanyisile Kgoadi and Dr Dana Savulescu for managing SAIS social media platforms and the Newsletters. The SAIS is grateful for your selfless service, and we wish you all the best in your newly chosen endeavours. We welcome Louise Du Toit who will be taking over our social media pages – please send Louise any news you wish publicized at louise.dutoit@up.ac.za

Yours sincerely
Clement Adu-Gyamfi
Newsletter editor

MESSAGE FROM THE SAIS PRESIDENT

Dear SAIS colleagues

Welcome to our 2021 SAIS newsletters - and a big thank you to Clement Adu-Gyamfi, who has taken on the task of newsletter editor. Please let Clement know of interesting articles/conference announcements and job postings to circulate. We are also adding a new “**Community Corner**” to publicize publications from within the SAIS network. Please let Clement know of all your publications so we stay informed of the news from within our own SAIS community.

A warm thank you to Dr Theresa Rossouw who did a sterling job of coordinating our webinar series last year and will act as conference chair this year. The conference will be held online in the second half of the year – watch this space – with hot topics including COVID-19 and beyond. Please let Theresa know if you have ideas for speakers or workshops to be held concurrently. The new committee will be elected concurrently with the conference.

With the imminent roll-out of SARS-CoV-2 vaccines, immunology is corridor conversation for most South Africans and I trust you will be ambassadors to allay fears and misconceptions. The unprecedented scale of this roll-out drives home the realization that vaccines work in two distinct ways – the first is the individual level protection and the second is herd immunity, or building up population immunity to protect the most vulnerable regardless of their immunity level. The herd immunity threshold is given by the formula $1-(1/R_0)$, meaning that estimating the R_0 of SARS-CoV2 as 3; herd immunity will be reached when two-thirds of South Africans (approximately 40 million) are immune.

We have seen from diseases such as measles and polio how vaccines that control disease transmission can decrease diseases from high prevalence to the brink of elimination. We have also seen how vaccine hesitancy increases as the disease prevalence fall and individuals lose their sense of urgency and risk. The road ahead for COVID-19 vaccines will no doubt be a long and bumpy drive. Please steer the course with a steady hand and keep the destination in mind.

Warm regards
Dr Melinda Suchard
SAIS president
melinda@nicd.ac.za

FUNDING CALLS, CONFERENCES, WEBINARS and ANNOUNCEMENTS

POCT Africa 2021 – (Virtual). The 3rd Annual Point of Care Testing Africa Conference will be held on 11 – 12 May 2021 (Virtual).

The conference will be hosted by the South African Medical Research Council (SAMRC) / Cape Peninsula University of Technology (CPUT) / Cardiometabolic Health Research Unit (CHRU) and under the auspices of Africa Federation of Clinical Chemistry (AFCC), South African Association for Clinical Biochemistry (SAACB) and Point of Care Research Network (PCRN). For more information, please visit <https://www.poctafrica.org/>

12th International Congress on Autoimmunity (virtual) will take place from 28 May – 1 June 2021.



Expand your knowledge of autoimmunity with the latest scientific information. The 12th International Congress on Autoimmunity is the only meeting place where you can learn about the newest therapeutic techniques as well as the most up-to-date research on autoimmune diseases. For more information, please visit: <https://autoimmunity.kenes.com/>

11th IAS Conference on HIV Science – known as IAS 2021 – will be hosted in Berlin, Germany, on 18 - 21 July 2021).

The IAS Conference on HIV Science is the world's most influential meeting on HIV research and its applications. This conference presents the critical advances in basic, clinical and operational HIV research that move science into policy and practice. Through its open and inclusive programme, the meeting sets the gold standard of HIV science, featuring highly diverse and cutting-edge research. Please submit Abstract by 15th February 2021. For more information, visit: www.ias2021.org

10th SA AIDS Conference taking place from 8-11 June 2021.



For more information, please visit: <http://saaids.co.za/>

PUBLICATIONS and INTERESTING READS:

Efficacy Results announced: global first Antibody Mediated Prevention (AMP) trials

<https://www.samrc.ac.za/news/efficacy-results-announced-global-first-antibody-mediated-prevention-amp-trials>

Glycolysis fuels phosphoinositide 3-kinase signaling to bolster T cell immunity

https://www.eurekalert.org/pub_releases/2021-01/mskc-ski012121.php

The link to the full paper is below: <https://science.sciencemag.org/content/371/6527/405>

Safety and Efficacy of the BNT162b2 mRNA Covid-19 Vaccine

<https://pubmed.ncbi.nlm.nih.gov/33301246/>

What defines an efficacious COVID-19 vaccine? A review of the challenges assessing the clinical efficacy of vaccines against SARS-CoV-2

<https://pubmed.ncbi.nlm.nih.gov/33125914/>

Variant-proof vaccines — invest now for the next pandemic

<https://www.nature.com/articles/d41586-021-00340-4>

SAIS COMMUNITY CORNER – PUBLICATIONS FROM SAIS NETWORK

Scriba TJ, Fiore-Gartland A, Penn-Nicholson A, Mulenga H, Mbandi SK, Borate B, Mendelsohn SC, Hadley K, Hikuam C, Kaskar M. 2021. Biomarker-guided tuberculosis preventive therapy (CORTIS): a randomised controlled trial. *The Lancet Infectious Diseases*. *Lancet Infect Dis* 2021. Published Online January 25, 2021, [https://doi.org/10.1016/S1473-3099\(20\)30914-2](https://doi.org/10.1016/S1473-3099(20)30914-2) [https://www.thelancet.com/journals/laninf/article/PIIS1473-3099\(20\)30914-2/fulltext](https://www.thelancet.com/journals/laninf/article/PIIS1473-3099(20)30914-2/fulltext)

Suchard MS, Adu-Gyamfi C, Cumming B and Savulescu DM. Evolutionary views of Tuberculosis: indoleamine 2,3-dioxygenase catalysed nicotinamide synthesis reflects shifts in macrophage metabolism. *Bioessays* 2020: May 42(5) <https://doi.org/10.1002/bies.201900220>

Glanzmann B, Möller M, Schoeman M, Urban M, van Helden PD, Frigati L, Grewal R, Pieters H, Loos B, Hoal EG, Glashoff RH, Cornelissen H, Rabie H, Esser MM, Kinnear CJ. Identification of a novel WAS mutation in a South African patient presenting with atypical Wiskott-Aldrich syndrome: a case report. *BMC Med Genet*. 2020 Jun 5;21(1):124. doi: 10.1186/s12881-020-01054-6. PMID: 32503528; PMCID: PMC7275612.

Pretorius M, Benade E, Fabian J, Lawrie D, Mayne ES. The influence of haemodialysis on CD4+ T-cell counts in people living with human immunodeficiency virus with end-stage kidney disease. *South Afr J HIV Med*. 2020 Dec 21;21(1):1125. doi: 10.4102/sajhivmed.v21i1.1125. PMID: 33391830; PMCID: PMC7756925.

Savulescu DM, Groome M, Malfeld SCK, Madhi S, Koen A, Jones S, Duxbury V, Scheuermaier K, de assis Rosa D and Suchard MS. HLA antibody repertoire in infants suggests selectivity in transplacental crossing. *American Journal of Reproductive Immunology* 2020, e13264 <https://doi.org/10.1111/aji.13264>

Kroeze S, Rossouw TM, Steel HC, Wit FW, Kityo CM, Siwal M et al. Plasma inflammatory biomarkers predict CD4 T-cell recovery and virological rebound in HIV-1 infected Africans on suppressive antiretroviral therapy. *JID*, 29 December 2020. DOI: 10.1093/infdis/jiaa787 PMID: 33373447

Maponga TG, Glashoff RH, Vermeulen H, Robertson B, Burmeister S, Bernon M, Omshoro-Jones J, Ruff P, Neugut AI, Jacobson JS, Preiser W, Andersson MI. Hepatitis B virus-associated hepatocellular carcinoma in South Africa in the era of HIV. *BMC Gastroenterol*. 2020 Jul 13;20(1):226. doi: 10.1186/s12876-020-01372-2. PMID: 32660431; PMCID: PMC7359588.

Adu-Gyamfi CG, Snyman T, Makhathini L, Darboe F, Penn-Nicholson A, Fisher M, Savulescu D, Hoffmann CJ, Chaisson RE, Martinson NA, Scriba TJ, George JA, & Suchard MS. Plasma indoleamine 2, 3-dioxygenase activity, a sensitive screening tool for active pulmonary Tuberculosis. *International Journal of Infectious Diseases*, 2020(99) <https://doi.org/10.1016/j.ijid.2020.08.028>



Ruhanya V, Jacobs GB, Nyandoro G, Paul RH, Joska JA, Seedat S, Glashoff RH, Engelbrecht S. Peripheral blood lymphocyte proviral DNA predicts neurocognitive impairment in clade C HIV. *J Neurovirol.* 2020 Dec;26(6):920-928. doi: 10.1007/s13365-020-00882-9. Epub 2020 Jul 31. PMID: 32737863; PMCID: PMC7717048.

Teer E, Joseph DE, Glashoff RH, Faadiel Essop M. Monocyte/Macrophage-Mediated Innate Immunity in HIV-1 Infection: From Early Response to Late Dysregulation and Links to Cardiovascular Diseases Onset. *Virology.* 2021 Jan 5. doi: 10.1007/s12250-020-00332-0. Epub ahead of print. PMID: 33400091.

Ruhanya V, Jacobs GB, Naidoo S, Paul RH, Joska J, Seedat S, Nyandoro G, Engelbrecht S, Glashoff R. Impact of plasma IP-10/CXCL10 and RANTES/CCL5 levels on neurocognitive function in HIV treatment naïve patients. *AIDS Res Hum Retroviruses.* 2021 Jan 20. doi: 10.1089/AID.2020.0203. Epub ahead of print. PMID: 33472520.

Steel H, Theron A, Anderson R, Rossouw T. Systemic soluble CD40 ligand and platelet-derived growth factor-BB are differentially affected by virally-suppressive anti-retroviral therapy. *Front. Immunol.* 11:594110. doi: 10.3389/fimmu.2020.594110].

Osier F, Ting J, Fraser J, Lambrecht B, Romano M, Gazzinelli R, Bortoluci K, Zamboni D, Akbar A, Evans J, Brown D, Patel K, Wu Y, Perez A, Perez O, Kamradt T, Falk C, Barda-Saad M, Ariel A, Santoni A, Kiyono H, Chereshev V, Dieye A, Mbow M, Bbengue B, Niang MS, Suchard MS, Cassatella M and Annunziato F. The global response to the COVID-19 pandemic: how have immunology societies contributed?" Viewpoint in *Nature Reviews Immunology*, 2020.

FUNDING CALLS

Polio Research foundation (PRF)

The PRF Scientific Advisory Panel invites applications for funding under the following six categories: Postdocs fellowship, Bursary, James Gear Fellowship, Travel grant, and major impact project. For more information, visit: <https://www.prf.ac.za/>

Collaborative Research Programme – International Centre for Genetic Engineering and Biotechnology (CRP-ICGEB).

For more information, please visit: <https://isg.icgeb.org>

IMPORTANT LINKS

To renew your SAIS Membership please visit: <https://saimmunology.org.za/membership.htm>

For Healthworkers, to enrol for COVID-19 vaccine please visit: <https://vaccine.enroll.health.gov.za/#/>

Please don't forget to send me any information on funding opportunities, meetings, workshops and/or conferences, so I can post it on the SAIS LinkedIn page and twitter handle. Additionally, if you are recruiting/hiring, I am more than happy to advertise it on LinkedIn/twitter and in the newsletter.

Thank you.

Kind regards

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