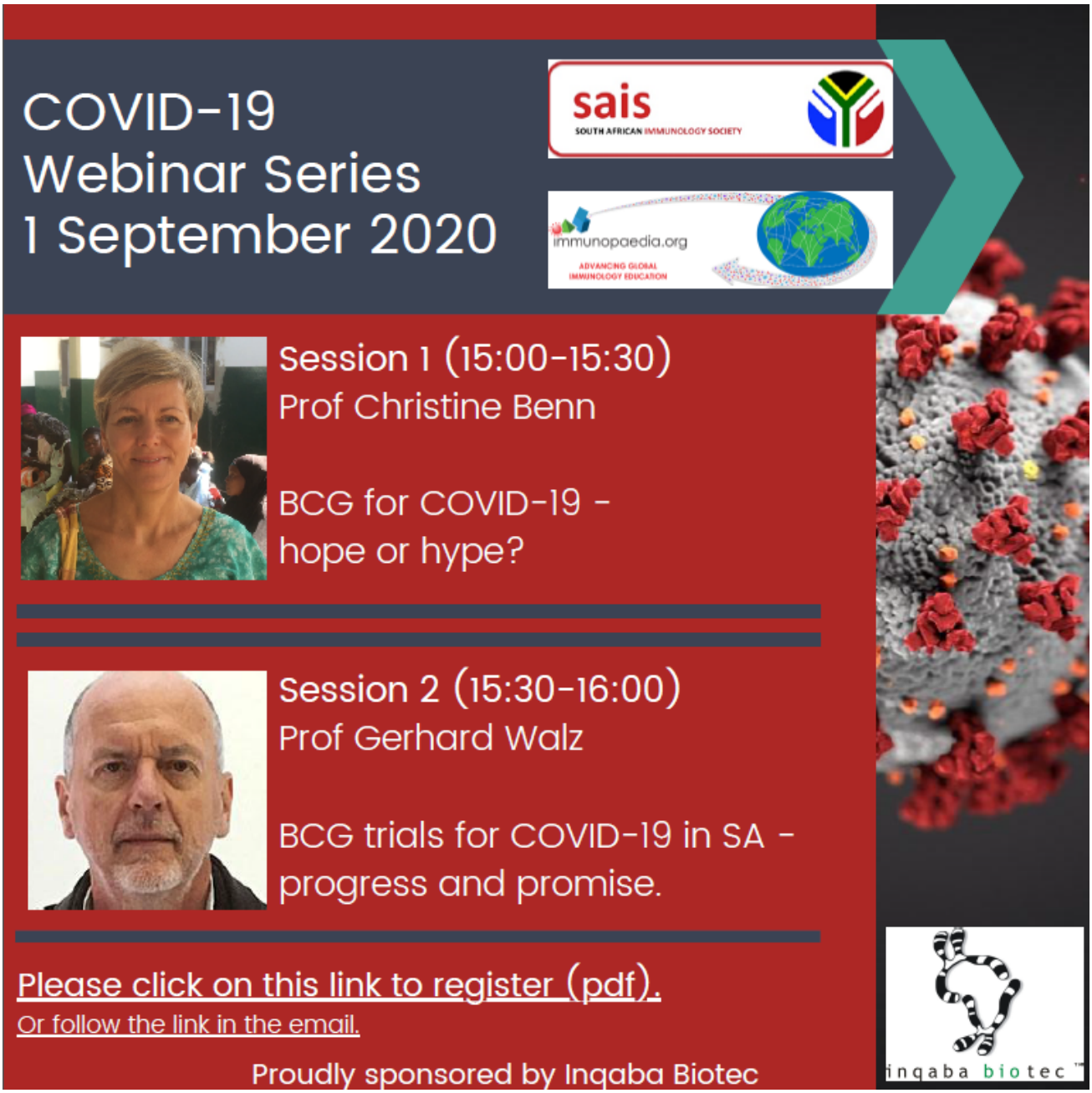
SAIS NEWSLETTER – AUGUST 28TH, 2020

Dear SAIS members

Below, please find this week's newsletter. The next newsletter will be sent out on Friday, 11 September 2020.

FUNDING CALLS, CONFERENCES, WEBINARS and ANNOUNCEMENTS

SAIS Immunopaedia COVID-19 Webinar - 18 August
For updates on webinars, please visit: https://www.saimmunology.org.za/webinars.html



Wild polio-free Africa: successes and challenges to securing the future, 16 September 2020, 20:00 – 21:00 SAST

Join us - two great speakers, one evening - the successes and challenges including dealing with circulating vaccine derived polio. For more information and to register, please visit:
https://www.eventbrite.com/e/wild-polio-free-africa-successes-and-challenges-to-securing-the-future-registration-116979736541

Webinar on demand: Joyce Ngoi & Peter Quashie: Tracking SARS-CoV-2 in Ghana

This seminar Peter & Joyce discuss the analysis of 2 sets of SARS-CoV-2 sequences which include imported and circulating viruses at the inception of Ghana's outbreak, and circulating viruses 2-3 months after Ghana's first reported cases. They present on the adaptations on the ARCTIC protocols they carried out in sequencing batches, discuss the benefits inured by the ARCTIC V3 primers and relative ease of sequencing on the MiSeq and Nanopore platforms. They also analyse the Ghanaian viruses, describe their evolution relative to other SARS-CoV-2 outbreaks and the observed transmission patterns in Southern Ghana. The webinar is moderated by Gordon Awandare.
https://www.youtube.com/watch?v=zeAbZ4smzmY&feature=emb_logo

WEBINAR: Impairment of the immunological and neurological synapses by respiratory viruses. Implications for vaccine design, 31 August 2020, Time: 16:00 CEST

For more information and to register, please visit: https://www.bigmarker.com/iuis/Impairment-of-the-immunological-and-neurological-synapses-by-respiratory-viruses-Implications-for-vaccine-des

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PUBLICATIONS and INTERESTING READS:

Implications of sex differences in immunity for SARS-CoV-2 pathogenesis and design of therapeutic interventions

https://www.cell.com/immunity/fulltext/S1074-7613(20)30336-8

How will COVID-19 affect the coming flu season? Scientists struggle for clues

https://www.sciencemag.org/news/2020/08/how-will-covid-19-affect-coming-flu-season-scientists-struggle-clues

Methods of inactivation of SARS-CoV-2 for downstream biological assays

https://academic.oup.com/jid/advance-article/doi/10.1093/infdis/jiaa507/5892951?searchresult=1

Wits University begins its second Covid-19 vaccine trial in South Africa

Wits is the lead institution in South Africa for a second Covid-19 vaccine trial and will begin screening participants for the NVX-CoV2373 trial
https://www.wits.ac.za/covid19/covid19-news/latest/wits-university-begins-its-second-covid-19-vaccine-trial-in-south-africa.html

What the immune response to the coronavirus says about the prospects for a vaccine

Viral immunologists say that results so far have been predictable — here's why that's good news.
https://www.nature.com/articles/d41586-020-02400-7

In situ structural analysis of SARS-CoV-2 spike reveals flexibility mediated by three hinges

https://science.sciencemag.org/content/early/2020/08/17/science.abd5223?utm_campaign=fr_sci_2020-08-18&et_rid=643223756&et_cid=3450512

Peripheral immunophenotypes in children with multisystem inflammatory syndrome associated with SARS-CoV-2 infection
https://www.nature.com/articles/s41591-020-1054-6

COVID-19 poses a riddle for the immune system
It is unclear why people's immune response to the SARS-CoV-2 coronavirus varies so widely. Tracking patient responses over time sheds light on this issue, and has implications for efforts to predict disease severity.
https://www.nature.com/articles/d41586-020-02379-1

Differences in Antibody Responses Linked to COVID-19 Outcomes
In a small study of patients hospitalized due to SARS-CoV-2 infection, researchers report distinct early differences between the antibody responses of patients who recovered and those who died, possibly paving the way for a tool to predict disease prognosis.
https://www.the-scientist.com/news-opinion/differences-in-antibody-responses-linked-to-covid-19-outcomes-67836

Basophils balance ILC2s
https://www.nature.com/articles/s41577-020-00437-3
Link to research article: https://www.nature.com/articles/s41590-020-0753-y

Scientists worried the pandemic would cause malaria deaths to soar. So far, it hasn't happened
https://www.sciencemag.org/news/2020/08/scientists-worried-pandemic-would-cause-malaria-deaths-soar-so-far-it-hasnt-happened

Calreticulin co-expression supports high level production of a recombinant SARS-CoV-2 spike mimetic in Nicotiana benthamiana
https://www.biorxiv.org/content/10.1101/2020.06.14.150458v1

Post-copulatory genetic matchmaking: HLA-dependent effects of cervical mucus on human sperm function
https://royalsocietypublishing.org/doi/10.1098/rspb.2020.1682

SARS-CoV-2 antigens expressed in plants detect antibody responses in COVID-19 patients
https://www.medrxiv.org/content/10.1101/2020.08.04.20167940v1

Mild COVID-19 cases can produce strong T cell response
https://www.eurekalert.org/pub_releases/2020-08/cp-mcc081720.php
Link to research article: https://www.sciencedirect.com/science/article/pii/S0092867420310084?via%3Dihub

Immune Biomarkers Tied to Severe COVID-19: Study
Increases in the levels of three cytokines are among the features linked to poor outcomes.
https://www.the-scientist.com/news-opinion/immune-biomarkers-tied-to-severe-covid-19-study-67843
Link to research article: https://www.nature.com/articles/s41591-020-1038-6

Natural killer cell immunotypes related to COVID-19 disease severity
https://immunology.sciencemag.org/content/5/50/eabd6832

Evidence lags behind excitement over blood plasma as a coronavirus treatment
Researchers call for more rigorous clinical trials as rumours abound that US regulators are considering widening access to the potential therapy.
https://www.nature.com/articles/d41586-020-02324-2

β-catenin and γ-catenin are dispensable for T lymphocytes and AML leukemic stem cells
https://elifesciences.org/articles/55360

FDA Grants Emergency Approval for Blood Plasma to Treat COVID-19
https://www.labroots.com/trending/drug-discovery-and-development/18509/fda-grants-emergency-approval-blood-plasma-treat-covid-19

Targeting Checkpoint Molecule Could Mean Checkmate for Cancer
https://www.labroots.com/trending/immunology/18481/targeting-checkpoint-molecule-mean-checkmate-cancer
Link to research article: https://www.cell.com/cell/fulltext/S0092-8674(20)30946-6

Injectable Drug Stops HIV From Entering Cells
https://www.labroots.com/trending/immunology/18479/injectable-drug-stops-hiv-entering-cells
Link to research article: https://www.pnas.org/content/early/2020/08/19/2009700117

Some COVID-19 Patients Lack Key Structures for Antibody Creation
An absence of germinal centers—which arise during infections to produce long-lived antibody-generating cells—might explain rapidly waning antibody levels in the disease.
https://www.the-scientist.com/news-opinion/some-covid-19-patients-lack-key-structures-for-antibody-creation-67868

Is a Bradykinin Storm Brewing in COVID-19?
Excess of the inflammatory molecule bradykinin may explain the fluid build-up in the lungs of patients with coronavirus infections. Clinical trials of inhibitors are putting this hypothesis to the test.
https://www.the-scientist.com/news-opinion/is-a-bradykinin-storm-brewing-in-covid-19--67876

New drool-based tests are replacing the dreaded coronavirus nasal swab
https://www.sciencemag.org/news/2020/08/new-drool-based-tests-are-replacing-dreaded-coronavirus-nasal-swab

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JOBS AND POSITIONS:

Laboratory Manager - CLIME research Group at the Division of Molecular Biology and Human Genetics, Department Biomedical Sciences, Faculty of Medicine and Health Sciences, Stellenbosch University (Tygerberg Campus, Cape Town)
CLIME is an internationally-funded research group comprised of 37 staff (25 of whom are laboratory staff) that focusses on tuberculosis, the single biggest cause of death in South Africa. CLIME is seeking a dynamic and energetic individual to manage and supervise activities within its laboratory and the various stakeholders (field staff, national, and international collaborators) that interact with our group to a high standard. The incumbent should ensure compliance with the relevant international and national norms and standards. Two-year fixed-term appointment with the possibility of extension (Ref. TGB02/188/0820).
Candidates must apply online on http://www.sun.ac.za/english/careers by 31 August 2020. Enquiries can be directed to Prof. Grant Theron on 021 938 9693, or at gtheron@sun.ac.za. For more information on the opportunity as well as details related to the application process, please visit:
http://www.sun.ac.za/english/faculty/healthsciences/Molecular_Biology_Human_Genetics/clinical_mycobacteriology_epidemiology/vacancies

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

Thank you.

Kind regards
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