



SAIS NEWSLETTER – NOVEMBER 20TH, 2020

Dear SAIS members

Below, please find this week's newsletter which will also be the last one for this year. Members are encouraged to follow the SAIS LinkedIn, Facebook and Twitter accounts to stay up to date with the latest research. Please note that from next year, I will no longer be the editor of the Society's newsletters and LinkedIn page. It's been a wonderful opportunity to have the newsletter for this year and I am very grateful for having had the opportunity to contribute to SAIS. I would like to thank the President, Dr Melinda Suchard, the SAIS committee members, Dr Dana Savulescu, Ms Annie Klaas and Ms Bridget de Beer from Onscreen Conferences and Events, and everyone who contributed with content. Wishing everyone a safe and blessed festive period as well as a prosperous 2021!

MESSAGE FROM THE SAIS PRESIDENT

Dear members

We will hold a virtual AGM and elections for the SAIS executive committee early next year. Please consider standing for membership of the SAIS executive committee. You may also volunteer to be a local representative of your institution. Please check that your membership fees are up to date to allow your vote to count. Further details will follow in January. We are also looking for a new newsletter editor and/or manager of our social media pages. If you are interested please discuss with me (melindas@nicd.ac.za).

It's been a disrupted year for most. SAIS nonetheless managed to host a well-received webinar series on COVID-19 immunology (if you missed any talks, the talks are still available for a short time on our website) and has kept us up to date with newsletters, Facebook, Twitter and Linked-In. Particular thank you's go to Prof Clive Gray, Prof Theresa Rossouw and Ms Bon Holtak for facilitating the webinar series in conjunction with the Immunopaedia team, Dr Heena Ranchod for compiling the newsletter, Ms Khanyisile Kgoadi for growing our Facebook and Twitter base and Dr Dana Savulescu for managing our Linked-In site.

In 2020 we have grown our membership base, including a veterinary immunology interest group, and an expanded network of clinical colleagues. COVID-19 has heightened awareness of professionals and public alike regarding relevance of immunology and vaccinology – let's harness the impetus towards increased training and research initiatives. We will work towards hosting a congress in Gauteng next year, and look forward to the build-up for the large international IUIS congress to be hosted in Cape Town in 2022.

Best wishes for your efforts and endeavours into the New Year. We wish you a restful festive season and if travelling, a safe journey.

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

sais

SOUTH AFRICAN IMMUNOLOGY SOCIETY



FUNDING CALLS, CONFERENCES, WEBINARS and ANNOUNCEMENTS

SAVE THE DATE

IVIS2022
KRUGER PARK | SOUTH AFRICA

13TH INTERNATIONAL VETERINARY
IMMUNOLOGY SYMPOSIUM
8-12 AUGUST

IUIS *Immunology
without
Borders*
International Union of Immunological Societies

www.ivis2022.org

Beyond Acute Respiration: SARS-CoV-2's Effects on Long-Term Physiology, 15 December 2020, 2:30 - 4:00 PM, Eastern Standard Time

While primarily a respiratory ailment, COVID-19 also influences other major physiological systems. In particular, growing evidence shows that SARS-CoV-2 infection has pronounced effects on cardiovascular and neurological health. In this webinar from The Scientist, John Connolly and Masataka Nishiga will discuss SARS-CoV-2's relationship with the cardiovascular and neurological systems and how these effects influence diagnosis and treatment. To register, please visit: <https://www.the-scientist.com/sponsored-webinars/beyond-acute-respiration-sars-cov-2s-effects-on-long-term-physiology-68142>

PUBLICATIONS and INTERESTING READS:

Spread of mutated coronavirus in Danish mink 'hits all the scary buttons,' but fears may be overblown

https://www.statnews.com/2020/11/05/spread-of-mutated-coronavirus-in-danish-mink-hits-all-the-scary-buttons-but-fears-may-be-overblown/?utm_source=Nature+Briefing&utm_campaign=9456f086a0-briefing-dy-20201106&utm_medium=email&utm_term=0_c9dfd39373-9456f086a0-44620873

Coronavirus testing finally gathers speed

The imminent large-scale rollout of rapid coronavirus tests promises to aid public health responses to COVID-19 — but a rapid home test remains elusive.

https://www.nature.com/articles/d41587-020-00021-z?utm_source=Nature+Briefing&utm_campaign=9456f086a0-briefing-dy-20201106&utm_medium=email&utm_term=0_c9dfd39373-9456f086a0-44620873

Human Antibodies Targeting Influenza B Virus Neuraminidase Active Site Are Broadly Protective

<https://www.sciencedirect.com/science/article/pii/S1074761320303721>

Elicitation of Potent Neutralizing Antibody Responses by Designed Protein Nanoparticle Vaccines for SARS-CoV-2

[https://www.cell.com/cell/fulltext/S0092-8674\(20\)31450-1?_returnURL=https://linkinghub.elsevier.com/retrieve/pii/S0092867420314501?showall=true](https://www.cell.com/cell/fulltext/S0092-8674(20)31450-1?_returnURL=https://linkinghub.elsevier.com/retrieve/pii/S0092867420314501?showall=true)

Are infections seeding some cases of Alzheimer's disease?

A fringe theory links microbes in the brain with the onset of dementia. Now, researchers are taking it seriously.

<https://www.nature.com/articles/d41586-020-03084-9>

The Coronavirus Is No Match Against Sybody 23

<https://www.labroots.com/trending/immunology/19116/coronavirus-match-sybody-23>

Link to research article: <https://www.nature.com/articles/s41467-020-19204-y>

Shot to Prevent H.I.V. Works Better Than Daily Pill in Women

Researchers ended a clinical trial of the drug early because the results were so convincing. The more effective drug would be given in six injections a year instead of as 365 daily pills.

https://www.nytimes.com/2020/11/09/health/HIV-shot-prep-women.html?utm_source=Nature+Briefing&utm_campaign=898f7d70df-briefing-dy-20201110&utm_medium=email&utm_term=0_c9dfd39373-898f7d70df-44620873

What Pfizer's landmark COVID vaccine results mean for the pandemic

Scientists welcome the first compelling evidence that a vaccine can prevent COVID-19. But questions remain about how much protection it offers, to whom and for how long.

https://www.nature.com/articles/d41586-020-03166-8?utm_source=Nature+Briefing&utm_campaign=898f7d70df-briefing-dy-20201110&utm_medium=email&utm_term=0_c9dfd39373-898f7d70df-44620873

Mucosal-associated invariant T (MAIT) cells mediate protective host responses in sepsis

<https://elifesciences.org/articles/55615>

Prothrombotic autoantibodies in serum from patients hospitalized with COVID-19

<https://stm.sciencemag.org/content/early/2020/11/02/scitranslmed.abd3876>

Genetic Profiling Reveals How Ebola Puts Immune Cells in a Chokehold

<https://www.labroots.com/trending/immunology/19142/genetic-profiling-reveals-ebola-immune-cells-chokehold>

Link to research article: [https://www.cell.com/cell/fulltext/S0092-8674\(20\)31308-8](https://www.cell.com/cell/fulltext/S0092-8674(20)31308-8)

A role for TASK2 channels in the human immunological synapse

<https://onlinelibrary.wiley.com/doi/abs/10.1002/eji.201948269>

COVID-19–associated multisystem inflammatory syndrome in children (MIS-C): A novel disease that mimics toxic shock syndrome—the superantigen hypothesis

[https://www.jacionline.org/article/S0091-6749\(20\)31414-7/abstract](https://www.jacionline.org/article/S0091-6749(20)31414-7/abstract)

Grass pollen immunotherapy alters chromatin landscape in circulating T follicular and regulatory cells

[https://www.jacionline.org/article/S0091-6749\(20\)31561-X/abstract](https://www.jacionline.org/article/S0091-6749(20)31561-X/abstract)

Russia announces positive COVID-vaccine results from controversial trial

Developers of the Sputnik V vaccine announce phase III results, two days after Pfizer and BioNTech released the first compelling evidence that a vaccine can protect against coronavirus infection.

https://www.nature.com/articles/d41586-020-03209-0?utm_source=Nature+Briefing&utm_campaign=fc11828d24-briefing-dy-20201112&utm_medium=email&utm_term=0_c9dfd39373-fc11828d24-44620873

Measles Cases and Deaths Surge Worldwide

<https://www.labroots.com/trending/health-and-medicine/19159/measles-deaths-surge-worldwide>

Link to research article: <https://www.who.int/news/item/12-11-2020-worldwide-measles-deaths-climb-50-from-2016-to-2019-claiming-over-207-500-lives-in-2019>

T Cells: Warriors of SARS-CoV-2 Infection

<https://www.sciencedirect.com/science/article/pii/S147149062030260X>

SARS-CoV-2 epitopes are recognized by a public and diverse repertoire of human T cell receptors

<https://www.sciencedirect.com/science/article/pii/S1074761320304696>

SARS-CoV-2 Exits Cells Via Lysosomes

A study finds that β -coronaviruses don't use the normal secretory pathway, a possible explanation for some aspects of COVID-19 pathology.

<https://www.the-scientist.com/news-opinion/sars-cov-2-exits-cells-via-lysosomes-68153>

COVID vaccine excitement builds as Moderna reports third positive result

Preliminary data show that the immunization is 94% effective and seems to prevent severe infections.

<https://www.nature.com/articles/d41586-020-03248-7>

Women Scientists lead the South African leg of the Phase 3 Janssen Efficacy COVID-19 vaccine trial

<https://www.samrc.ac.za/media-release/women-scientists-lead-south-african-leg-phase-3-janssen-efficacy-covid-19-vaccine>

Breastmilk Harbors Antibodies to SARS-CoV-2

An abundance of immunoglobulin antibodies, and a paucity of viral RNA, in breastmilk offer evidence that women can safely continue breastfeeding during the pandemic.

<https://www.the-scientist.com/news-opinion/breastmilk-harbors-antibodies-to-sars-cov-2-68162>

Measles has come back with a vengeance in the last several years

The nearly 870,000 reported cases in 2019 were largely due to outbreaks in nine countries

<https://www.sciencenews.org/article/measles-cases-deaths-numbers-increase-2019-outbreaks-covid>

Antibiotics Before Age 2 Linked to Childhood Health Conditions

<https://www.labroots.com/trending/drug-discovery-and-development/19199/antibiotics-age-2-linked-childhood-health-conditions>

Link to research article: [https://www.mayoclinicproceedings.org/article/S0025-6196\(20\)30785-0/fulltext](https://www.mayoclinicproceedings.org/article/S0025-6196(20)30785-0/fulltext)

Cytotoxic T cells swarm by homotypic chemokine signalling

<https://elifesciences.org/articles/56554>

More people are getting COVID-19 twice, suggesting immunity wanes quickly in some

<https://www.sciencemag.org/news/2020/11/more-people-are-getting-covid-19-twice-suggesting-immunity-wanes-quickly-some>

The known unknowns of T cell immunity to COVID-19

<https://immunology.sciencemag.org/content/5/53/eabe8063>

Safety and immunogenicity of ChAdOx1 nCoV-19 vaccine administered in a prime-boost regimen in young and old adults (COV002): a single-blind, randomised, controlled, phase 2/3 trial

[https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(20\)32466-1/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)32466-1/fulltext)

Monocyte CD169 expression as a biomarker in the early diagnosis of COVID-19

<https://academic.oup.com/jid/advance-article/doi/10.1093/infdis/jiaa724/5989467?searchresult=1>

JOBS AND POSITIONS:

Post-doctoral position Immunology – University of the Witwatersrand, Johannesburg, South Africa

Applications from potential postdoctoral fellows and their hosts are invited by the URC. As there is a limited amount of financial resources available for this purpose, the selection of candidates will be primarily based on the merit of the proposal, but also the expected research output and the commitment to co-funding of the fellowship. The value of the fellowship is R 255 000 per annum tax-free. The duration of the fellowship is two years with a review of progress after one year. The closing date for applications is **4 December 2020**. No late applications will be considered. Potential postdoc fellow: Applications are submitted by hosts and must include the CV of the intended postdoc. Submission process: Please email the applicants CV (PDF format) and completed application (in MS Word and PDF formats) to Alban.VanRoy@wits.ac.za. The PDF version of the application must contain all three required signatures. Application form can be accessed at the following link: <https://www.linkedin.com/feed/update/urn:li:activity:6731478218525687808>

PhD Opportunity - Division of Immunology, University of Cape Town, South Africa

The Reproductive Immunology Research Consortium in Africa (RIRCA), a collaboration between the University of Cape Town and Stellenbosch University is seeking a PhD candidate to study fetomaternal immunity during HIV infection; in particular, the role of the placenta. The successful candidate will have experience in immunology, infectious diseases or cell biology. He/she will be supervised by Dr. Heather Jaspan and Prof Clive Gray. A bursary is available for three years to investigate immune networks in the placenta and to apply cellular and molecular techniques to address T cell immunity in placentas collected from women living with and without HIV. Applications and enquiries should be submitted to either Professor Clive Gray (clive.gray@uct.ac.za) or Dr. Heather Jaspan (hbjaspan@gmail.com). Closing date for applications:

2 December 2020. For more information, please visit:

<http://www.immunology.uct.ac.za/news/phd-opportunity-division-immunology>



PATHOLOGIST (PRINCIPAL) - GRADE PHP

Universitas Academic Complex/UFS	Chemical Pathology, Microbiology (Ref: UNI1608)
IALCH Academic Complex/UKZN	Anatomical Pathology, Haematology (Ref: IALCH1608)
Tshwane Academic Division/UP	Anatomical Pathology (Ref: TAD1608)
Tygerberg Tertiary Business Unit/US	Microbiology and Immunology (Ref: TYG1608)

Key Job Responsibility

■ Responsible for management of a unit / laboratory / facility in collaboration with a laboratory manager. ■ Active involvement within the NHLS/ University /Professional bodies promoting discipline and/or organisational strategic objectives at a regional or national level. ■ Participation in the development of teaching program/modules and/or participation in regional / national discipline specific teaching programs. ■ Manages several pathologists and/or a large laboratory. ■ Implements improvements to local / regional laboratory practices or clinical programmes ■ Contribute to the development of pathology diagnostic policies and/or responsible for supporting several laboratories and/or providing a referral consultative and/or clinical diagnostic service at a regional level ■ Lead the QA team of the Unit/Laboratory to comply with SANAS requirements and ensure continuous quality improvement. ■ Introducing or improving diagnostic and interpretation techniques and procedures ■ Validation of new instruments / tests for national programmes (e.g. via HTA) ■ Collaboration of research with other departments at a national level.

Minimum requirements & Key competencies

■ FCPATH or MMED qualification in the relevant discipline ■ Minimum 5 years' experience as pathologist ■ At least 1-year laboratory management experience ■ HPCSA registered for independent practice as pathologist in applicable discipline ■ Multiple Peer Reviewed Publications as first/senior author ■ Successfully supervised/co-supervised BSc Hons, MSc, MMED, PhD. ■ Additional research degree desirable. ■ Evidence of external/ community interaction (schools, engaging with outside clinicians / clinical groups, training academic community outside pathology) ■ Undergraduate and/or postgraduate external examiner (national level). ■ Academic curriculum development at local level. ■ Acting as examiner for CMSA. ■ Evidence of consultation on complex clinical queries locally / regionally. ■ Nationally: Invited for participation in committees, symposia, congresses, working groups. ■ National conference presentations ■ PI in research projects at local level. ■ PI on national grant ■ Evidence of peer recognition such as reviewing manuscripts, review research proposals, editorials, conference abstract reviewing, editorial board, NRF rating, etc.

For Microbiology / Immunology TYG; FCPATH or MMED qualification in chemical pathology / clinical pathology / microbiology / virology / haematology PLUS Demonstrable evidence of experience in an immunology laboratory (diagnostic or research) or a clinical immunology setting

Interested persons who meet the requirements are invited to send their CVs, ID, HPCSA registration and qualification, to Mr. Keslin Chetty, enquiry telephone number (011) 386 6537 or via e-mail: aarqahr@nhls.ac.za . Please indicate the center, discipline and reference number of the post. For more information on the post, please contact Prof Andrew Whitelaw via email: medmicro@sun.ac.za or visit: <https://www.nhls.ac.za/careers/>

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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