



SAIS NEWSLETTER – JULY 17TH, 2020

Dear SAIS members

Below, please find this week's newsletter. The next newsletter will be sent out on Friday, 31 July 2020.

SAIS ON FACEBOOK AND TWITTER

Our social media profiles attract followers from all over the world, including immunologists and non-immunologists. Content shared on the network caters to both the scientists and the general public as we share a spectrum of information including journal articles and scientific advances, WHO updates on Covid-19, Covid-19 updates in South Africa (provided by the NICD, SA MRC and others), advances in vaccine trials, study and research vacancies as well as funding opportunities for postgraduates and senior scientists. Currently our twitter account is still small, with about 293 followers that include Faith Osier, IUIS and Frontiers in Immunology while the Facebook page has grown to 499 followers. Please invite your colleagues to follow SAIS on social media for updates on all the new studies/events/announcements related to immunology in general, and more recently - to COVID-19.

The pages can be accessed using the following links:

Facebook:

<https://www.facebook.com/pg/SAImmunologySociety/about/>

Twitter:

<https://twitter.com/saimmunology?lang=en>

Kind regards,
Khanyisile Kgoadi

FUNDING CALLS, CONFERENCES, WEBINARS and ANNOUNCEMENTS

BRICS STI Framework Programme – South African Medical Research Council

In response to the COVID-19 pandemic and in the absence of treatments and preventative vaccines, the BRICS STI Framework Programme is launching a call for multilateral basic, applied and innovation research projects in an effort to facilitate cooperation among the researchers and institutions in the five BRICS countries. Applications deadline: 20 August 2020

For more information, please visit: <https://www.samrc.ac.za/request-for-applications/brics-sti-framework-programme>

Africa Research Excellence Fund Research Development Fellowship 2020

The AREF Research Development Fellowship (RDF) Programme is being launched to support African researchers who are working on important challenges for human health in Africa.

Applications close 23 September 2020. For more information, please visit:

<http://www.africaresearchexcellencefund.org.uk/2020/06/18/africa-research-excellence-fund-researcher-development-fellowship-2020/>

14th Vaccine Congress – Online Edition: Combatting the threat of Covid-19, 27-28 September 2020

We are pleased to announce that we are developing the 14th Vaccine Congress into a FREE online event, enabling us to provide wider access to the research development on Covid-19 during this time of crisis. The focus will be on combatting the threat of Covid-19, with leading experts in vaccinology sharing their knowledge on the current developments and challenges we face. Abstract submission closes **31 July 2020**. For more information, please visit:

<https://www.elsevier.com/events/conferences/vaccine-congress>

FUNDING OPPORTUNITY: DRIVING EQUITABLE ACCESS TO FIT-FOR-PURPOSE ANTIGEN-DETECTING RAPID DIAGNOSTIC TESTS FOR COVID-19

FIND is leading a call for expressions of interest (EOI) to accelerate the availability and manufacturing scale-up of rapid diagnostic tests for the detection of SARS-CoV-2 antigens. This EOI is has been prepared in the context of the Access to COVID-19 Tools (ACT) Accelerator Diagnostics Pillar. Launched by FIND and Unitaid, it supports the work plans of two working groups within the pillar: “R&D of tests & digital tools” (led by the Bill & Melinda Gates Foundation and the Praesens Foundation) and “Market readiness” (led by Unitaid and FIND). First deadline for receipt of submissions is **24 July 2020**.

For more information, please visit: <https://www.finddx.org/eoi-covid19-ag-rdt/>

ATS 2020, Virtual conference, 5-10 August 2020

The ATS International Conference is the home of pulmonary, critical care, and sleep professionals. Specialties represented in sessions at the International Conference include: Allergy/Immunology, Behavioral Science, Cardiology, Environmental and Occupational Health, Infectious Disease, Pediatric Pulmonary, Critical Care, and Sleep. For more information and to register, please visit:

<https://conference.thoracic.org/attendees/index.php>

Keystone eSymposia: Myeloid Cells and Innate Immunity in Solid Tumors, 21-23 September 2020

This virtual conference will present the latest developments in our understanding of the origins and contributions of various myeloid cell subsets to tumor growth and metastasis. Additionally, this meeting will challenge paradigms about macrophage and granulocyte origins in tumors, about links between metabolism and function, and about mechanisms by which myeloid cells control immunity. The program will also feature the latest clinical studies of myeloid cell targeted therapeutics in cancer which will stimulate new ideas, collaborations and advance development of new cancer immune therapeutics. Deadlines: Scholarships- 20 July 2020; Abstract Submission - 5 August 2020. For more information, please visit:

https://virtual.keystonesymposia.org/ks/live/488/page/3088?_ga=2.43857186.605791825.1594377733-220957198.1573809503

WEBINAR: Ramos B cell engineering for the evaluation of the humoral anti-SARS-CoV-2 immunity, 20 July 2020, 16:00 CEST

Michael Reth and his team are studying how the B cell antigen receptor (BCR) and the B cell surface is organized in resting and activated B cells for the sensing of foreign antigens. In their studies they are using the CRISPR/Cas9 method to rapidly generate loss- or gain-of-function mutants of the Burkitt lymphoma cell line Ramos as specific cell line. They thus have generated Ramos B cells which are lacking all four components of the BCR and replaced the antigen receptor by the spike protein of SARS-CoV-2. This allows them to test for SARS-COV-2 spike specific antibody responses and monoclonal antibodies by flow cytometry. The first results of their assays will be discussed in the presentation.

For more information and to register, please visit: <https://www.bigmarker.com/iuis/Ramos-B-cell-engineering-for-the-evaluation-of-the-humoral-anti-SARS-C>

PUBLICATIONS and INTERESTING READS:

Interleukin-17 producing mucosal associated invariant T cells - emerging players in chronic inflammatory diseases?

<https://onlinelibrary.wiley.com/doi/abs/10.1002/eji.202048645>

COVID-19 Attacks Endothelial Cells

<https://www.labroots.com/trending/cell-and-molecular-biology/18043/covid-19-attacks-endothelial-cells>

Celebrate Vaccines, British Society for Immunology

Celebrate Vaccines is the British Society for Immunology's campaign to champion the critical role of vaccination and vaccine research in advancing global health. The expert voice of the immunology community is a vital part of this message, and we have been working to strengthen public understanding of vaccination and to help everyone make informed decisions about vaccines and their children's health.

<https://www.immunology.org/celebrate-vaccines/about-celebrate-vaccines>

Rewilding immunology

<https://science.sciencemag.org/content/369/6499/37>

TOX is expressed by exhausted and polyfunctional human effector memory CD8+ T cells

<https://immunology.sciencemag.org/content/5/49/eaba7918>

Finding Camel-ot: A Holy Grail against pandemic SARS-CoV-2?

<https://immunology.sciencemag.org/content/5/49/eabd4758>

One U.K. trial is transforming COVID-19 treatment. Why haven't others delivered more results?

<https://www.sciencemag.org/news/2020/07/one-uk-trial-transforming-covid-19-treatment-why-haven-t-others-delivered-more-results>

Redefining Memory T Cell Subsets

[https://www.cell.com/trends/immunology/fulltext/S1471-4906\(20\)30127-7?dgcid=raven_jbs_aip_email](https://www.cell.com/trends/immunology/fulltext/S1471-4906(20)30127-7?dgcid=raven_jbs_aip_email)

Resident macrophages acquire innate immune memory in staphylococcal skin infection

<https://elifesciences.org/articles/55602>

Moving with the kines: chemokine receptor expression regulates the migration and differentiation of IgG4-expressing B cells

<https://onlinelibrary.wiley.com/doi/abs/10.1002/eji.202048802>

Why COVID Herd Immunity Is Important but Impossible

<https://www.labroots.com/trending/immunology/18074/covid-herd-immunity-impossible>

Can boosting interferons, the body's frontline virus fighters, beat COVID-19?

<https://www.sciencemag.org/news/2020/07/can-boosting-interferons-bodys-frontline-virus-fighters-beat-covid-19>

Scientists make precise gene edits to mitochondrial DNA for first time

Weird enzyme enables researchers to study — and potentially treat — deadly diseases.

<https://www.nature.com/articles/d41586-020-02054-5>

Immunophenotyping of COVID-19 and influenza highlights the role of type I interferons in development of severe COVID-19

https://immunology.sciencemag.org/content/5/49/eabd1554?utm_campaign=toc_imm_2020-07-10&et rid=643223756&et_cid=3402632

The mathematical strategy that could transform coronavirus testing

Four charts show how pooling samples from many people can save time or resources.
<https://www.nature.com/articles/d41586-020-02053-6>

Extrapulmonary manifestations of COVID-19

<https://www.nature.com/articles/s41591-020-0968-3>

Impaired type I interferon activity and inflammatory responses in severe COVID-19 patients

https://science.sciencemag.org/content/early/2020/07/10/science.abc6027?utm_campaign=fr_sci_2020-07-13&et rid=643223756&et_cid=3404691

Cancer systems immunology

<https://elifesciences.org/articles/53839>

Russia Completes First Human Trial for COVID-19 Vaccine

<https://www.labroots.com/trending/drug-discovery-and-development/18119/russia-completes-human-trial-covid-19-vaccine>
<https://www.forbes.com/sites/kenrapoza/2020/07/13/russia-completes-human-trials-of-covid-19-vaccine/#719510007153>

Harnessing Stem Cell–Like T Cells to Better Fight Cancer

Better understanding the CD8+ T cells already present in tumors could be key to making immunotherapies work for more patients.
<https://www.the-scientist.com/features/harnessing-stem-celllike-t-cells-to-better-fight-cancer-67707>

Structural basis of a shared antibody response to SARS-CoV-2

https://science.sciencemag.org/content/early/2020/07/10/science.abd2321?utm_campaign=fr_sci_2020-07-13&et rid=643223756&et_cid=3404691

Using Serology with Models to Clarify the Trajectory of the SARS-CoV-2 Emerging Outbreak

[https://www.cell.com/trends/immunology/fulltext/S1471-4906\(20\)30148-4?dgcid=raven_jbs_aip_email](https://www.cell.com/trends/immunology/fulltext/S1471-4906(20)30148-4?dgcid=raven_jbs_aip_email)

Lessons for COVID-19 immunity from other coronavirus infections

[https://www.cell.com/immunity/fulltext/S1074-7613\(20\)30312-5?dgcid=raven_jbs_aip_email](https://www.cell.com/immunity/fulltext/S1074-7613(20)30312-5?dgcid=raven_jbs_aip_email)

First data for Moderna Covid-19 vaccine show it spurs an immune response

An mRNA Vaccine against SARS-CoV-2 — Preliminary Report
https://www.nejm.org/doi/full/10.1056/NEJMoa2022483?query=featured_home

Tissue-specific tolerance in fatal Covid-19

<https://www.medrxiv.org/content/10.1101/2020.07.02.20145003v1>

Deep immune profiling of COVID-19 patients reveals distinct immunotypes with therapeutic implications

https://science.sciencemag.org/content/early/2020/07/15/science.abc8511?utm_campaign=fr_sci_2020-07-15&et rid=643223756&et_cid=3407816



JOBS and POSITIONS

JOB OPPORTUNITY: JUNIOR RESEARCH FELLOW, Centre for Lung Infection and Immunity, Faculty of Health Sciences, University of Cape Town

Applicants are invited to apply for a University Research Committee (URC)-funded junior research fellow (JRF) position at the Centre for Lung Infection and Immunity (CLII). The CLII conducts clinical and basic science research into several aspect of tuberculosis (TB) including (i) Novel technologies and approaches for the diagnosis of TB (ii) Mechanisms of drug resistance and novel diagnostic and treatment strategies to prevent its development (iii) TB transmission in the community through both active and passive case finding strategies. Closing date for applications: **22 July 2020**. For more information, please visit:
http://www.staff.uct.ac.za/sites/default/files/FHS_E200231_JRF_Lung%20Infect%20Pulmonology_0.pdf

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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