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SOUTH AFRICAN IMMUNOLOGY SOCIETY



SAIS NEWSLETTER – SEPTEMBER 11TH, 2020

Dear SAIS members

Below, please find this week's newsletter. The next newsletter will be sent out on Friday, 25 September 2020.

FUNDING CALLS, CONFERENCES, WEBINARS and ANNOUNCEMENTS

SAIS Immunopaedia COVID-19 Webinar – 15 September 2020

For updates on webinars, please visit: <https://www.saimmunology.org.za/webinars.html>

**COVID-19
Webinar Series
15 September 2020**

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SOUTH AFRICAN IMMUNOLOGY SOCIETY

immunopaedia.org
ADVANCING GLOBAL
IMMUNOLOGY EDUCATION

Session 1 (15:00–15:30)
Prof Clive Gray

What possible immune responses cause severe COVID-19 in some and recovery in most?

Session 2 (15:30–16:00)
Dr Melinda Suchard

Macrophage activation & Nicotinamide pathways in COVID-19

Please click on this link to register (pdf).
Or follow the link in the email.

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PUBLICATIONS and INTERESTING READS:

Multifaceted effects of antigen valency on B cell response composition and differentiation in vivo

[https://www.cell.com/immunity/fulltext/S1074-7613\(20\)30334-4](https://www.cell.com/immunity/fulltext/S1074-7613(20)30334-4)

Zika Infection Increases Risk of Severe Dengue Fever

A study of Nicaraguan children links prior Zika virus infection with aggravated dengue fever symptoms.

<https://www.the-scientist.com/news-opinion/zika-infection-increases-risk-of-severe-dengue-fever-67883>

Conformational diversity facilitates antibody mutation trajectories and discrimination between foreign and self-antigens

<https://www.pnas.org/content/early/2020/08/25/2005102117>

A pathogenic and clonally expanded B cell transcriptome in active multiple sclerosis

<https://www.pnas.org/content/early/2020/08/27/2008523117>

The coronavirus is most deadly if you are older and male — new data reveal the risks

A slew of detailed studies has now quantified the increased risk the virus poses to older people, men, and other groups.

<https://www.nature.com/articles/d41586-020-02483-2>

Alarmins: The Immune "Gold" in Breast Milk

<https://www.labroots.com/trending/immunology/18560/alarmins-immune-gold-breast-milk>

Link to research article: <https://www.sciencedirect.com/science/article/pii/S0016508520350587?via%3Dihub>

COVID-19 Antibodies Last for at Least Four Months After Recovery

The results from a study in Iceland can't say if a recovered patient's antibodies can protect them from subsequent reinfection.

<https://www.the-scientist.com/news-opinion/covid-19-antibodies-last-for-at-least-four-months-after-recovery-67907>

Long-Lasting Wound Infections Linked to Microbes and Genetics

Two gene variations might help explain why some people experience chronic wounds.

<https://www.the-scientist.com/the-literature/long-lasting-wound-infections-linked-to-microbes-and-genetics-67872>

Robust T cell response towards spike, membrane, and nucleocapsid SARS-CoV-2 proteins is not associated with recovery in critical COVID-19 patients

[https://www.cell.com/cell-reports-medicine/fulltext/S2666-3791\(20\)30118-X](https://www.cell.com/cell-reports-medicine/fulltext/S2666-3791(20)30118-X)

Toward COVID-19 Testing Any Time, Anywhere

Researchers are adapting CRISPR, synthetic biology, and other creative approaches to detect SARS-CoV-2 nucleic acids outside of the lab or doctors' offices, in the hopes of making diagnostics more affordable and accessible.

https://www.the-scientist.com/news-opinion/toward-covid-19-testing-any-time-anywhere-67906?utm_campaign=TS_OTC_2020&utm_medium=email&_hsmi=94553557&_hsenc=p2ANqtz-9OmIYxwb6g7LmuAYlZkjfSJ99e_s8aVVSTXyrfSyeXkO6DQw0FCkFAG4ZtLtHD4qpola3iE-Wlu2lRQhcBFw5cCjBWw&utm_content=94553557&utm_source=hs_email

The transcription factor E2A activates multiple enhancers that drive Rag expression in developing T and B cells

<https://immunology.sciencemag.org/content/5/51/eabb1455>

Evolution of the COVID-19 vaccine development landscape

https://www.nature.com/articles/d41573-020-00151-8?utm_source=Nature+Briefing&utm_campaign=6bcfacc11e-briefing-dy-20200904&utm_medium=email&utm_term=0_c9dfd39373-6bcfacc11e-44620873

'CRISPR babies' are still too risky, says influential panel

The safety and efficacy of genome editing in human embryos hasn't been proven, researchers warn.

<https://www.nature.com/articles/d41586-020-02538-4>

Keepin' it regulatory: Foxp3 gets a BAFfling SWItch

<https://immunology.sciencemag.org/content/5/51/eabe5124>

Biosynthesis of medicinal tropane alkaloids in yeast

<https://www.nature.com/articles/s41586-020-2650-9>

Millions of Americans carry the sickle cell trait, many without knowing it. Could they be at risk for severe Covid-19?

<https://www.statnews.com/2020/09/03/millions-carry-sickle-cell-trait-could-they-be-at-risk-for-severe-covid19/>

When antibodies mislead: the quest for validation

Research antibodies don't always do what it says on the tin. Test for true signals before you start your experiment.

<https://www.nature.com/articles/d41586-020-02549-1>

The coronavirus is mutating — does it matter?

Different SARS-CoV-2 strains haven't yet had a major impact on the course of the pandemic, but they might in future.

https://www.nature.com/articles/d41586-020-02544-6?utm_source=Nature+Briefing&utm_campaign=af64422080-briefing-dy-20200908&utm_medium=email&utm_term=0_c9dfd39373-af64422080-44620873

Monitoring Anti-tuberculosis Treatment Response Using Analysis of Whole Blood Mycobacterium tuberculosis Specific T Cell Activation and Functional Markers

<https://www.frontiersin.org/articles/10.3389/fimmu.2020.572620/full>

Tissue-Specific Features of Innate Lymphoid Cells

[https://www.cell.com/trends/immunology/fulltext/S1471-4906\(20\)30186-1](https://www.cell.com/trends/immunology/fulltext/S1471-4906(20)30186-1)

Teaching Old Dogs New Tricks? The Plasticity of Lung Alveolar Macrophage Subsets

[https://www.cell.com/trends/immunology/fulltext/S1471-4906\(20\)30185-X](https://www.cell.com/trends/immunology/fulltext/S1471-4906(20)30185-X)

Azithromycin for severe COVID-19

[https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(20\)31863-8/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)31863-8/fulltext)

Why COVID-19 is more deadly in people with obesity—even if they're young

<https://www.sciencemag.org/news/2020/09/why-covid-19-more-deadly-people-obesity-even-if-theyre-young#>

De novo design of picomolar SARS-CoV-2 miniprotein inhibitors

https://science.sciencemag.org/content/early/2020/09/08/science.abd9909?utm_campaign=fr_sci_2020-09-09&et rid=643223756&et_cid=3476173

A leading coronavirus vaccine trial is on hold: scientists react

Scientists urge caution in global vaccine race as AstraZeneca reports 'adverse event' in a person who received the Oxford vaccine.

https://www.nature.com/articles/d41586-020-02594-w?utm_source=Nature+Briefing&utm_campaign=ae24bfd69a-briefing-dy-20200909&utm_medium=email&utm_term=0_c9dfd39373-ae24bfd69a-44620873

JOBS AND POSITIONS:

TWO POSTS: LECTURER/SNR LECTURER/ASSOCIATE PROFESSOR/PROFESSOR, SCHOOL OF MOLECULAR & CELL BIOLOGY, UNIVERSITY OF THE WITWATERSRAND

The School of Molecular and Cell Biology seeks two established academics to make a dynamic contribution to the discipline of Biochemistry & Cell Biology through an active engagement with both academic and administrative tasks within the School. Applications close: 30 September 2020. For more information, please visit:

https://irec.wits.ac.za/OA_HTML/OA.jsp?page=/oracle/apps/irc/candidateSelfService/webui/VisVacDispPG&OAHP=IRC_EXT_SITE_VISITOR_APPL&OASF=IRC_VIS_VAC_DISPLAY&p_svid=83615&p_spid=4180037

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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