

## SAIS NEWSLETTER – JUNE 19<sup>TH</sup>, 2020

Dear SAIS members

Please find this week's newsletter below. The next newsletter will be sent out on Friday, 26 June 2020.

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### **FUNDING CALLS, CONFERENCES, WEBINARS and ANNOUNCEMENTS**

#### **WEBINAR: COVID-19 Serology Assays and Cell Therapy Strategies, 30 June 2020, 10:00 AM PDT**

COVID-19 is a highly pathogenic disease caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). We have assembled a panel of experts to discuss a variety of current strategies for both serological testing and cell therapies to combat tissue damage caused by COVID-19.

For more information and to register, please visit: <https://www.labroots.com/webinar/covid-19-serology-assays-cell-therapy-strategies>

#### **WEBINAR: Single-Cell Proteomics Reveals Immune Responses to COVID-19: Proteomic and Genomic Findings from the Seattle Consortium, 2 July 2020, 3:30 - 5:00 PM.**

In this webinar sponsored by IsoPlexis, James Heath from the Institute for Systems Biology and Stacey Willard from IsoPlexis will discuss how functional phenotyping individual immune cells using IsoPlexis technology edges researchers closer to predicting the risk for severe disease.

For more information and to register, please visit: [https://webinars.the-scientist.com/covid-19-single-cell-proteomics?utm\\_campaign=LandingPage&utm\\_source=TS&\\_ga=2.34151969.1075652357.1592327217-1162526639.1576910671](https://webinars.the-scientist.com/covid-19-single-cell-proteomics?utm_campaign=LandingPage&utm_source=TS&_ga=2.34151969.1075652357.1592327217-1162526639.1576910671)

#### **ALLSA ONLINE CONGRESS, 21-22 AUGUST 2020 (AFTERNOONS).**

To view the event timetable, please visit: [https://allsa.org/wp-content/uploads/2020/06/ALLSA-Congress\\_ALLSA-TIMETABLE.jpg](https://allsa.org/wp-content/uploads/2020/06/ALLSA-Congress_ALLSA-TIMETABLE.jpg)

Registrations can be done using the following link:

<https://allergyfoundation.co.za/learning/product-category/allsa-congress/>

#### **WEBINAR: Association of COVID-19 inflammation with activation of the C5a-C5aR1 axis, 22 June 2020, 03:00 PM Europe/Berlin**

Levels of immune complement component C5a correlate with COVID-19 severity – and blocking its actions may provide a new treatment, explains Eric Vivier from Aix Marseille University and Innate Pharma.

To register, please visit: [https://iuis.clickmeeting.com/association-of-covid-19-inflammation-with-activation-of-the-c5a-c5ar1-axis/register?\\_ga=2.2884665.826902135.1591948447-269084434.1589811443](https://iuis.clickmeeting.com/association-of-covid-19-inflammation-with-activation-of-the-c5a-c5ar1-axis/register?_ga=2.2884665.826902135.1591948447-269084434.1589811443)

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### **PUBLICATIONS and INTERESTING READS:**

#### **Lab-grown cells mimic crucial moment in embryo development**

Artificial structures developed the rudimentary components of a heart and nervous system.

[https://www.nature.com/articles/d41586-020-01757-](https://www.nature.com/articles/d41586-020-01757-z)

[z?utm\\_source=Nature+Briefing&utm\\_campaign=f3c1b9ca3d-briefing-dy-](https://www.nature.com/articles/d41586-020-01757-z?utm_source=Nature+Briefing&utm_campaign=f3c1b9ca3d-briefing-dy-20200611&utm_medium=email&utm_term=0_c9dfd39373-f3c1b9ca3d-44620873)

[20200611&utm\\_medium=email&utm\\_term=0\\_c9dfd39373-f3c1b9ca3d-44620873](https://www.nature.com/articles/d41586-020-01757-z?utm_source=Nature+Briefing&utm_campaign=f3c1b9ca3d-briefing-dy-20200611&utm_medium=email&utm_term=0_c9dfd39373-f3c1b9ca3d-44620873)

**Type I and III interferons disrupt lung epithelial repair during recovery from viral infection**

[https://science.sciencemag.org/content/early/2020/06/10/science.abc2061?utm\\_campaign=fr\\_sci\\_2020-06-11&et rid=643223756&et\\_cid=3362278](https://science.sciencemag.org/content/early/2020/06/10/science.abc2061?utm_campaign=fr_sci_2020-06-11&et rid=643223756&et_cid=3362278)

**A Global Effort to Define the Human Genetics of Protective Immunity to SARS-CoV-2 Infection**

[https://www.cell.com/cell/fulltext/S0092-8674\(20\)30611-5?dgcid=raven\\_jbs\\_etoc\\_email](https://www.cell.com/cell/fulltext/S0092-8674(20)30611-5?dgcid=raven_jbs_etoc_email)

**Coronavirus Vaccine Tracker**

Researchers around the world are developing more than 135 vaccines against the coronavirus. Vaccines typically require years of research and testing before reaching the clinic, but scientists are racing to produce a safe and effective vaccine by next year.

[https://www.nytimes.com/interactive/2020/science/coronavirus-vaccine-tracker.html?utm\\_source=Nature+Briefing&utm\\_campaign=f3c1b9ca3d-briefing-dy-20200611&utm\\_medium=email&utm\\_term=0\\_c9dfd39373-f3c1b9ca3d-44620873](https://www.nytimes.com/interactive/2020/science/coronavirus-vaccine-tracker.html?utm_source=Nature+Briefing&utm_campaign=f3c1b9ca3d-briefing-dy-20200611&utm_medium=email&utm_term=0_c9dfd39373-f3c1b9ca3d-44620873)

**Natural Killer Cells with "Memory" to Target Hepatitis B**

<https://www.labroots.com/trending/immunology/17849/natural-killer-cells-memory-target-hepatitis>

Link to research article: <https://gut.bmj.com/content/early/2020/03/29/gutjnl-2019-319252>

**The receptor binding domain of the viral spike protein is an immunodominant and highly specific target of antibodies in SARS-CoV-2 patients**

[https://immunology.sciencemag.org/content/5/48/eabc8413?utm\\_campaign=toc\\_imm\\_2020-06-12&et rid=643223756&et\\_cid=3363718](https://immunology.sciencemag.org/content/5/48/eabc8413?utm_campaign=toc_imm_2020-06-12&et rid=643223756&et_cid=3363718)

**HIV and TB increase death risk from COVID-19, study finds—but not by much**

[https://www.sciencemag.org/news/2020/06/hiv-and-tb-increase-death-risk-covid-19-study-finds-not-much?utm\\_campaign=news\\_daily\\_2020-06-15&et rid=643223756&et\\_cid=3366743](https://www.sciencemag.org/news/2020/06/hiv-and-tb-increase-death-risk-covid-19-study-finds-not-much?utm_campaign=news_daily_2020-06-15&et rid=643223756&et_cid=3366743)

**Potent neutralizing antibodies from COVID-19 patients define multiple targets of vulnerability**

[https://science.sciencemag.org/content/early/2020/06/15/science.abc5902?utm\\_campaign=fr\\_sci\\_2020-06-15&et rid=643223756&et\\_cid=3366486](https://science.sciencemag.org/content/early/2020/06/15/science.abc5902?utm_campaign=fr_sci_2020-06-15&et rid=643223756&et_cid=3366486)

**How deadly is the coronavirus? Scientists are close to an answer**

Public-health researchers use the infection fatality rate to gauge how to respond to a new disease, but it's tricky to calculate.

<https://www.nature.com/articles/d41586-020-01738-2>

**Systemically comparing host immunity between survived and deceased COVID-19 patients**

<https://www.nature.com/articles/s41423-020-0483-y>

**Coronapod: The Surgisphere scandal that rocked coronavirus drug research**

The latest from the hydroxychloroquine saga, as a questionable dataset threatens trust in science and forces major journals to review their processes

<https://www.nature.com/articles/d41586-020-01790-y>

**Deciphering the role of host genetics in susceptibility to severe COVID-19**

<https://www.frontiersin.org/articles/10.3389/fimmu.2020.01606/abstract>

**Inflammatory macrophage memory in NSAID-exacerbated respiratory disease**

[https://www.jacionline.org/article/S0091-6749\(20\)30803-4/abstract](https://www.jacionline.org/article/S0091-6749(20)30803-4/abstract)

**Quantitative modeling of the effect of antigen dosage on B-cell affinity distributions in maturing germinal centers**

<https://elifesciences.org/articles/55678>

**Could Statins Reduce the Severity of COVID-19?**

The cholesterol-lowering drugs quell inflammation and reverse endothelial tissue damage, hints that they might curb the body's excessive immune response to SARS-CoV-2 infection.

<https://www.the-scientist.com/news-opinion/could-statins-reduce-the-severity-of-covid-19--67629>

**Experimental MS Treatment Relies on "Retraining" the Immune System**

<https://www.labroots.com/trending/immunology/17890/experimental-ms-treatment-relies-retraining-immune-system>

Link to research article: [https://www.cell.com/cell-reports/pdf/S2211-1247\(20\)30728-](https://www.cell.com/cell-reports/pdf/S2211-1247(20)30728-2.pdf?_returnURL=https%3A%2F%2Flinkinghub.elsevier.com%2Fretrieve%2Fpii%2FS2211124720307282%3Fshowall%3Dtrue)

[2.pdf?\\_returnURL=https%3A%2F%2Flinkinghub.elsevier.com%2Fretrieve%2Fpii%2FS2211124720307282%3Fshowall%3Dtrue](https://www.cell.com/cell-reports/pdf/S2211-1247(20)30728-2.pdf?_returnURL=https%3A%2F%2Flinkinghub.elsevier.com%2Fretrieve%2Fpii%2FS2211124720307282%3Fshowall%3Dtrue)

**Coronavirus breakthrough: dexamethasone is first drug shown to save lives**

In a large trial, a cheap and widely available steroid cut deaths by one-third among patients critically ill with COVID-19.

<https://www.nature.com/articles/d41586-020-01824-5>

**Macrophage metabolic reprogramming presents a therapeutic target in lupus nephritis**

<https://www.pnas.org/content/early/2020/06/10/2000943117>

**Characterizing the BCG Induced Macrophage and Neutrophil Mechanisms for Defense Against Mycobacterium tuberculosis**

<https://www.frontiersin.org/articles/10.3389/fimmu.2020.01202/full>

**CoughVid: A digital diagnosis tool**

Can COVID-19 be diagnosed by artificial intelligence? Prof David Atienza Alonso and his team at the Embedded Systems Laboratory of the Swiss Federal Institute of Technology Lausanne (EPFL) are leveraging signal processing, pervasive computing and machine learning to develop an app and website for at-home screening of COVID-19

[https://www.youtube.com/watch?index=2&list=PLpCH1XIO3IYt\\_gceYebFYhpSTKi7G5xMK&t=0s&v=v\\_KtkArTBjM](https://www.youtube.com/watch?index=2&list=PLpCH1XIO3IYt_gceYebFYhpSTKi7G5xMK&t=0s&v=v_KtkArTBjM)

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**JOBS and POSITIONS**

**JOB OPPORTUNITY- Whitehead Scientific**

Whitehead Scientific is seeking to appoint a Senior Applications specialist in the Gauteng region. If you have an in-depth knowledge of molecular genomics, a passion for front line troubleshooting and feel at ease working with clients across a diverse range of scientific institutes, consider applying for this position.

For more information contact Tammy Arendse ([tammy@whitesci.co.za](mailto:tammy@whitesci.co.za))

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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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