

## SAIS NEWSLETTER – MAY 15<sup>th</sup>, 2020

Dear SAIS members

Please find this week's newsletter below. The next newsletter will be sent out on Friday, 22 May 2020.

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### FUNDING CALLS, CONFERENCES, WEBINARS and ANNOUNCEMENTS

#### **WEBINAR: Trained immunity and BCG vaccination: a tool against COVID19? 18 May 2020, 03:00 PM Europe/Berlin**

For more information and to register, please visit:

<https://iuis.clickmeeting.com/trained-immunity-and-bcg-vaccination/register>

#### **South African Medical Research Council / Department of Science and Innovation / Technology Innovation Agency Call for Proposals: Diagnostics for COVID-19**

The SAMRC, through its Strategic Health Innovation Partnerships (SHIP) Program, in collaboration with the Department of Science and Innovation (DSI) and the Technology Innovation Agency (TIA), is seeking proposals for the development of local diagnostics and reagents for COVID-19. Application deadline: **29 May 2020**. For more information, please visit: <https://www.samrc.ac.za/request-for-applications/south-african-medical-research-council-department-science-and-innovation>

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### PUBLICATIONS and INTERESTING READS:

#### **Immune cells blast infections and cancer with protein 'bombs'**

[https://www.sciencemag.org/news/2020/05/immune-cells-blast-infections-and-cancer-protein-bombs?utm\\_campaign=news\\_daily\\_2020-05-07&et rid=643223756&et\\_cid=3318359#](https://www.sciencemag.org/news/2020/05/immune-cells-blast-infections-and-cancer-protein-bombs?utm_campaign=news_daily_2020-05-07&et rid=643223756&et_cid=3318359#)

#### **Could BCG Vaccination Induce Protective Trained Immunity for SARS-CoV-2?**

<https://www.frontiersin.org/articles/10.3389/fimmu.2020.00970/full>

#### **How the Function of a Critical Immune Cell is Related to Metabolism**

<https://www.labroots.com/trending/cell-and-molecular-biology/17562/function-critical-immune-cell-related-metabolism>

Link to research article: [https://www.cell.com/cell-metabolism/pdf/S1550-4131\(20\)30119-](https://www.cell.com/cell-metabolism/pdf/S1550-4131(20)30119-4.pdf?_returnURL=https%3A%2F%2Flinkinghub.elsevier.com%2Fretrieve%2Fpii%2FS1550413120301194%3Fshowall%3Dtrue)

[4.pdf?\\_returnURL=https%3A%2F%2Flinkinghub.elsevier.com%2Fretrieve%2Fpii%2FS1550413120301194%3Fshowall%3Dtrue](https://www.cell.com/cell-metabolism/pdf/S1550-4131(20)30119-4.pdf?_returnURL=https%3A%2F%2Flinkinghub.elsevier.com%2Fretrieve%2Fpii%2FS1550413120301194%3Fshowall%3Dtrue)

#### **The antibiotic bedaquiline activates host macrophage innate immune resistance to bacterial infection**

<https://elifesciences.org/articles/55692>

#### **A Peptide-based Magnetic Chemiluminescence Enzyme Immunoassay for Serological Diagnosis of Coronavirus Disease 2019 (COVID-19)**

<https://academic.oup.com/jid/advance-article/doi/10.1093/infdis/jiaa243/5831993?searchresult=1>

#### **COVID-19: unanswered questions on immune response and pathogenesis**

[https://www.jacionline.org/article/S0091-6749\(20\)30631-X/abstract](https://www.jacionline.org/article/S0091-6749(20)30631-X/abstract)

**Newly discovered cell type plays a crucial role in the immune response to respiratory infections**

<http://www.vib.be/en/news/Pages/Newly-discovered-cell-type-plays-a-crucial-role-in-the-immune-response-to-respiratory-infections.aspx>

**HiJAKing SARS-CoV-2? The potential role of JAK inhibitors in the management of COVID-19**

[https://immunology.sciencemag.org/content/5/47/eabc5367?utm\\_campaign=toc\\_imm\\_2020-05-08&et rid=643223756&et\\_cid=3319660](https://immunology.sciencemag.org/content/5/47/eabc5367?utm_campaign=toc_imm_2020-05-08&et rid=643223756&et_cid=3319660)

**Inflammatory Type 2 cDCs Acquire Features of cDC1s and Macrophages to Orchestrate Immunity to Respiratory Virus Infection**

[https://www.cell.com/immunity/fulltext/S1074-7613\(20\)30163-1?dgcid=raven\\_jbs\\_aip\\_email](https://www.cell.com/immunity/fulltext/S1074-7613(20)30163-1?dgcid=raven_jbs_aip_email)

**Vaccine Prevents Virally-induced Type 1 Diabetes**

<https://www.labroots.com/trending/immunology/17567/vaccine-prevents-virally-induced-type-1-diabetes>  
Link to research article: <https://advances.sciencemag.org/content/6/19/eaaz2433>

**Coronapod: The overlooked outbreaks that could derail the coronavirus response**

<https://www.nature.com/articles/d41586-020-01405-6>

**A strategic approach to COVID-19 vaccine R&D**

[https://science.sciencemag.org/content/early/2020/05/08/science.abc5312?utm\\_campaign=fr\\_sci\\_2020-05-11&et rid=643223756&et\\_cid=3322291](https://science.sciencemag.org/content/early/2020/05/08/science.abc5312?utm_campaign=fr_sci_2020-05-11&et rid=643223756&et_cid=3322291)

**BCG-induced trained immunity: can it offer protection against COVID-19?**

<https://www.nature.com/articles/s41577-020-0337-y>

**A noncompeting pair of human neutralizing antibodies block COVID-19 virus binding to its receptor ACE2**

[https://science.sciencemag.org/content/early/2020/05/12/science.abc2241?utm\\_campaign=fr\\_sci\\_2020-05-13&et rid=643223756&et\\_cid=3325009](https://science.sciencemag.org/content/early/2020/05/12/science.abc2241?utm_campaign=fr_sci_2020-05-13&et rid=643223756&et_cid=3325009)

**'Rinse and Replace': Boosting T Cell Turnover To Reduce HIV-1 Reservoirs**

[https://www.cell.com/trends/immunology/fulltext/S1471-4906\(20\)30068-5?dgcid=raven\\_jbs\\_aip\\_email](https://www.cell.com/trends/immunology/fulltext/S1471-4906(20)30068-5?dgcid=raven_jbs_aip_email)

**Loss of Smell, Taste May Be Reliable Predictor of COVID-19: Study**

Data from a crowdsourcing smartphone app is helping to track the spread of the disease in real time and reveals the symptom as the number one indicator of infection.

<https://www.the-scientist.com/news-opinion/loss-of-smell-taste-may-be-reliable-predictor-of-covid-19-study-67528>

**Brain-spleen link tunes immunity**

<https://www.nature.com/articles/s41583-020-0316-0>

**Platelets Fuel the Inflammasome Activation of Innate Immune Cells**

[https://www.cell.com/cell-reports/fulltext/S2211-1247\(20\)30564-7?dgcid=raven\\_jbs\\_etoc\\_email](https://www.cell.com/cell-reports/fulltext/S2211-1247(20)30564-7?dgcid=raven_jbs_etoc_email)

**Humoral immune response and prolonged PCR positivity in a cohort of 1343 SARS-CoV 2 patients in the New York City region**

<https://www.medrxiv.org/content/10.1101/2020.04.30.20085613v1>



**The Promise and Peril of Natural Killer Cell Therapies in Pulmonary Infection**

[https://www.cell.com/immunity/fulltext/S1074-7613\(20\)30176-X?dgcid=raven\\_jbs\\_aip\\_email](https://www.cell.com/immunity/fulltext/S1074-7613(20)30176-X?dgcid=raven_jbs_aip_email)

**Immunology of COVID-19: current state of the science**

[https://www.cell.com/immunity/fulltext/S1074-7613\(20\)30183-7](https://www.cell.com/immunity/fulltext/S1074-7613(20)30183-7)

Link to research article: <https://www.sciencedirect.com/science/article/pii/S1074761320301837?via%3Dihub>

**Low Vitamin D Levels Linked to COVID-19 Mortality**

<https://www.labroots.com/trending/microbiology/17611/low-vitamin-levels-linked-covid-19-mortality>

**Cell Reports Collection: Immunology**

Immunology, and its intersection with other classic fields, is of keen interest at Cell Reports. The editors have compiled a selection of recent papers that show the breadth of immunology studies we've had the pleasure of reading. These represent only a fraction of the interesting work that can be found in our pages and we recommend visiting our recent archives to see more.

<https://www.cell.com/cell-reports/collections/immunology>

**Complexity and ultrastructure of infectious extracellular vesicles from cells infected by non-enveloped virus**

<https://www.nature.com/articles/s41598-020-64531-1>

**Clinical Characteristics of 5 COVID-19 Cases With Non-respiratory Symptoms as the First Manifestation in Children**

[https://www.frontiersin.org/articles/10.3389/fped.2020.00258/full?utm\\_campaign=ba-cov-sci-fped-children-gastro-symptoms&utm\\_medium=cvlp&utm\\_source=fweb](https://www.frontiersin.org/articles/10.3389/fped.2020.00258/full?utm_campaign=ba-cov-sci-fped-children-gastro-symptoms&utm_medium=cvlp&utm_source=fweb)

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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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