

## SAIS NEWSLETTER - JANUARY 24<sup>th</sup>, 2020

Dear SAIS members

Please find this week's newsletter below. This year members will receive the newsletter every two weeks. As a result the next newsletter will be sent out on Friday, 7 February 2020.

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### FUNDING CALLS, CONFERENCES, WEBINARS and ANNOUNCEMENTS

#### **6th SA TB Conference - 2-5 June 2020, Durban, South Africa.**

Abstract Submissions, Early Registration and Scholarship Applications will close on **28 February 2020**. For more information please visit: <http://www.tbconference.co.za/Home/>

#### **ASSAf Call: Infectious Diseases Symposium, 20 & 21 April 2020, Berlin, Germany.**

The theme of the symposium is "Challenges on Infectious Diseases Research in the Next Decade". This call is open to early career researchers who are based in South Africa. ASSAf invites submission of abstracts for oral presentations. Interested candidates should please complete the application and return it to Mr Floyd Masemola (floyd@assaf.org.za) Tel: +27 (0)12 349 615 by Friday, **31 January 2020**. ASSAf will cover the flight costs and the hospitality costs will be covered by the Leopoldina for the duration of the symposium. <https://drive.google.com/file/d/1IrmU0o1IU5kbM56mf52rh42WrEpaOHFC/view?ts=5e1c2bbc>

#### **6th McGill Summer Institute in Infectious Diseases and Global Health, June 1-12, 2020, McGill University, Montreal, QC.**

You are encouraged to apply early as evaluation for acceptance is rolling. The deadline for those needing a visa for travel to Canada is February 28th and registration closes on May 10th. For more information on courses, please visit: <http://mcgill-idgh.ca/>

#### **SA MRC call for proposals: "The Small Molecule Drug Discovery Catalyst Programme."**

Expressions of interest to access a copy of the mini-library and / or its supporting structure data file should be emailed to: karabo.kgomo@mrc.ac.za by the **31st of January 2020**. For more information please visit: <http://www.mrc.ac.za/request-for-applications/call-proposals-small-molecule-drug-discovery-catalyst-programme>

#### **Webinar: A case study of protein sample prep strategies for membrane proteins, 29 January 2020, 09:00 am PST.**

<https://www.labroots.com/webinar/study-protein-sample-prep-strategies-membrane-proteins#>

#### **Keystone Symposium - Immunity in Early Life: From the Maternal to the Microbial Environment, June 07 - 11, 2020, Keystone Resort, Keystone, CO, USA**

This Keystone Symposium conference examines early life immunity, bringing together experts from a sundry range of disciplines. Discounted Abstract Deadline: **February 6 2020**, Scholarship Deadline: **February 6 2020**. For more information, please visit:

<https://www.keystonesymposia.org/ks/Online/Events/2020Z4/Details.aspx?EventKey=2020Z4>

**Funding opportunity: Call for ideas for identifying M72/AS01E vaccine-elicited correlates of protection against TB disease**

The Bill & Melinda Gates Foundation and the Bill & Melinda Gates Medical Research Institute are coordinating planning activities to identify M72/AS01E-induced CoP against active TB disease. All submissions are requested by **Friday, January 31, 2020**.

For more information, please visit:

<https://app.smartsheet.com/b/publish?EQBCT=76c41fee03b64dacbac5fb32f5f46fea>

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**PUBLICATIONS and INTERESTING READS:**

**Widely conserved motif in plant immune receptors**

Immune receptors that can trigger a defence response in plants are defined by a newly discovered molecular signature – the MADA motif.

<https://elifesciences.org/digests/49956/widely-conserved-motif-in-plant-immune-receptors>

**In a First, Scientists Generate Early Human Immune Cells in the Lab**

<https://www.labroots.com/trending/cell-and-molecular-biology/16549/first-human-immune-cells-engineered-lab>

Link to research article: <https://www.nature.com/articles/s41556-019-0445-8>

**NIST Interlaboratory Study on Glycosylation Analysis of Monoclonal Antibodies: Comparison of Results from Diverse Analytical Methods**

<https://www.mcponline.org/content/19/1/11>

**Versatile Bile Acids**

Fat-dissolving bile acids may help regulate gut immunity and inflammation.

<https://hms.harvard.edu/news/versatile-bile-acids>

**Chronic allergen exposure drives accumulation of long-lived IgE plasma cells in the bone marrow, giving rise to serological memory**

[https://immunology.sciencemag.org/content/5/43/eaav8402?utm\\_campaign=toc\\_imm\\_2020-01-10&et rid=643223756&et\\_cid=3158997](https://immunology.sciencemag.org/content/5/43/eaav8402?utm_campaign=toc_imm_2020-01-10&et rid=643223756&et_cid=3158997)

**A Potential Herbal Adjuvant Combined with A Peptide-based Vaccine Acts against HPV-related Tumors through Enhancing Effector and Memory T Cell Immune Responses**

<https://www.frontiersin.org/articles/10.3389/fimmu.2020.00062/abstract>

**Top 10 Challenges in Cancer Immunotherapy**

[https://www.cell.com/immunity/fulltext/S1074-7613\(19\)30530-8](https://www.cell.com/immunity/fulltext/S1074-7613(19)30530-8)

**Excess of Immune Cells Found in Brains of People with Autism**

An accumulation of T cells and astrocytes in postmortem brain tissue hints at possible autoimmune origins for many cases of autism. <https://www.the-scientist.com/notebook/excess-of-immune-cells-found-in-brains-of-people-with-autism-66917>

**Intranasal vaccination with *Listeria ivanovii* as vector of *Mycobacterium tuberculosis* antigens promotes specific lung-localized cellular and humoral immune responses**

<https://www.nature.com/articles/s41598-019-57245-6>

**From depression to dementia, inflammation is medicine's new frontier** - interesting read  
<https://www.theguardian.com/commentisfree/2020/jan/19/inflammation-depression-mind-body>

**Immune checkpoint molecules in pregnancy: Focus on regulatory T cells**  
<https://onlinelibrary.wiley.com/doi/abs/10.1002/eji.201948382>

**Synchronization of the Normal Human Peripheral Immune System: A Comprehensive Circadian Systems Immunology Analysis**  
<https://www.nature.com/articles/s41598-019-56951-5>

**China reports more than 200 infections with new coronavirus from Wuhan**  
<https://www.sciencemag.org/news/2020/01/china-reports-more-200-infections-new-coronavirus-wuhah>

**Discovery of new T-cell raises prospect of 'universal' cancer therapy**  
<https://www.cardiff.ac.uk/news/view/1749599-discovery-of-new-t-cell-raises-prospect-of-universal-cancer-therapy>

**Global, regional, and national sepsis incidence and mortality, 1990–2017: analysis for the Global Burden of Disease Study**  
[https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(19\)32989-7/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(19)32989-7/fulltext)

**A self-aggregating peptide: implications for the development of thermostable vaccine candidates**  
<https://bmcbiotechnol.biomedcentral.com/articles/10.1186/s12896-019-0592-9>

**How the VISTA molecule affects immune responses**  
<https://www.labroots.com/trending/cancer/16664/vista-molecule-affects-immune-responses>  
Link to research article: <https://science.sciencemag.org/content/367/6475/eaay0524>

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## **JOBS and POSITIONS**

### **Post-doctoral Opportunity: Tick and Tick-borne Disease Programme**

This programme focuses on the control of ticks and tick -related pathogens of agricultural importance by understanding the underlying mechanisms that enable these tick vectors to adapt and feed on their host. The Tick and Tick-borne Disease Programme is offering 2 Postdoctoral positions on the following research focus areas:

Research Focus 1: Evaluation of the immunological profile elicited by various tick vaccine formulations in a murine infection/infestation model.

Research Focus 2: Evaluation of the protection conferred by novel tick vaccine formulations in cattle hosts.

These positions are available immediately (January 2020) for two years (renewed annually based on satisfactory progress), and will remain open until suitable candidates are found. The first closing date for applications: **31 January 2020**. Please apply by forwarding a complete CV with contact details of three referees (including phone numbers and email addresses) to Prof. Christine Maritz-Olivier ([christine.maritz@up.ac.za](mailto:christine.maritz@up.ac.za)). For additional information please contact: Prof. Christine Maritz-Olivier at [christine.maritz@up.ac.za](mailto:christine.maritz@up.ac.za) or Tel: 012 420 3945.



**Job opportunity - Junior sales representative: Biocom Africa, Gauteng**

Two positions available: 1) Diagnostics position and 2) General sales representative – **interviews to start ASAP**. Requirements: At least a MSc / MTech in biological sciences, BSc Hons / BTech will be considered for applicants with relevant experience; Good general knowledge of applications used in biological sciences (antibodies, ELISA, western blotting, flow cytometry, PCR, qPCR, Microarray). Applicants must have a valid driver's license and their own vehicle as the position requires traveling to customers. Please forward proof of these documents with your CV to Izak Storm (marketing@biocomafrika.com)

**Postdoctoral Research Fellow - Immuno-Oncology Research – Merck, Cambridge, MA**

As a postdoctoral fellow in our company's Research Laboratories, you will work with a highly collaborative team of scientists at the Exploratory Science Center at Cambridge, MA to understand the role of the vasculature in mediating immune responses in a disease setting. For more information, please visit: <https://jobs.merck.com/us/en/job/R27739/Postdoctoral-Research-Fellow-Immuno-Oncology-Research>

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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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