

SAIS NEWSLETTER JULY 19th, 2019

Dear SAIS members,

Below, please find this week's newsletter.

FUNDING CALLS, CONFERENCES, WEBINARS and ANNOUNCEMENTS

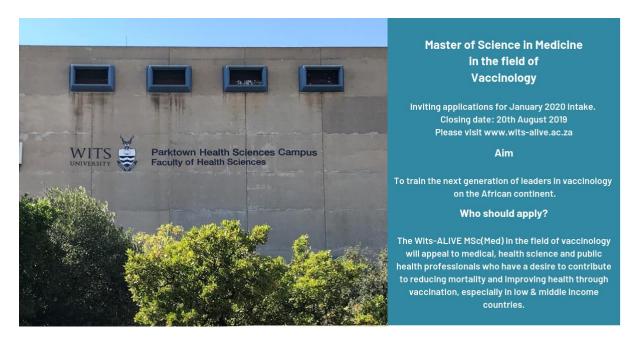
2019 Symposium - Inventions and Innovations - 4-5 November - Tel Aviv, Israel - Save the date!



5th International Neonatal and Maternal Immunization Symposium - Securing Protection for the Next Generation - September 15-17 - Vancouver, Canada

Please follow http://www.inmis.org/ for more information. Please note that the abstract submission deadline has already passed; however, there is still time to register - early registration deadline is before August 4.

<u>Wits ALIVE applications for the MSc (Med) in the field of vaccinology for January 2020 intake</u> - now open Deadline - 20th August. Please find more details of the course and application process at http://www.wits-alive.ac.za/MSc-Med-Vaccinology.





The African Advanced Vaccinology course (Afro-ADVAC) - 7-16 September 2020 - save the date!

A 10-day long course in advanced vaccinology, aimed at decision-makers in the field of vaccinology. Afro-ADVAC 2020 is scheduled to take place from 7th- 16th September 2020 near Johannesburg. Applications will open in January 2020. http://www.wits-alive.ac.za/Afro-ADVAC.

<u>Labroots 5th Annual Microbiology & Immunology 2019 virtual event</u> - September 11-12 from 6:00 AM PDT - save the date!

During the free, two-day event, participants will explore and discover new concepts, tools and techniques to apply to ongoing research and diagnostics. To register and find out more details, please go to https://www.labroots.com/ms/virtual-event/microbiology-immunology-2019.

Society for Maternal-Fetal Medicine (SMFM)'s <u>40th Annual Pregnancy Meeting</u> - February 3-8, 2020 - Dallas, Texas, USA

Abstract submission deadline - August 5 at 9:00pm (ET). Please visit https://www.smfm.org/2020 for more information.

Investigating Cell Fate Decisions with Single Cell Technology - Webinar - July 29 - 2:00 pm ET

In this Cell Press Webinar, Fuchou Tang (Peking University), Jason Buenrostro (Harvard University), and Howard Chang (Stanford University) will discuss recent improvements to single cell analysis techniques and their applications toward understanding and controlling cell fate and function. To register - https://www.workcast.com/register?cpak=3878998849152030&referrer=etocs.

PUBLICATIONS and INTERESTING READS:

<u>Interplay between follistatin, activin A, and BMP4 signaling regulates postnatal thymic epithelial progenitor cell differentiation during aging (open access)</u>

https://www.cell.com/cell-reports/fulltext/S2211-1247(19)30665-5.

Nature HIV research milestone collection

https://www.nature.com/collections/mghkkdjlgx/timeline/.

New vaccine strategy boosts T-cell therapy

Super-charging a treatment for leukaemia also makes it effective on solid tumours http://news.mit.edu/2019/car-t-cell-therapy-cancer-0711.

High-risk pregnancy: the interferon effect

https://presse.inserm.fr/en/high-risk-pregnancy-the-interferon-effect/35765/.

Lungs, hearts infected with hepatitis C can still be transplanted

No matter how well transplant organs are washed out, there's always a small amount of blood remaining that can harbour hepatitis C. https://www.health24.com/Medical/Tests-and-procedures/lungs-hearts-infected-with-hepatitis-c-can-still-be-transplanted-20190712.

Experiences of HIV-infected adults and healthcare providers with healthcare delivery practices that influence engagement in US primary healthcare settings - a qualitative systematic review

https://journals.lww.com/jbisrir/fulltext/2019/06000/Experiences_of_HIV_infected_adults_and_healthcare. 14.aspx.

<u>A composition-dependent molecular clutch between T cell signalling condensates and actin</u> (open access) https://elifesciences.org/articles/42695.



Conformational change within the extracellular domain of B cell receptor in B cell activation upon antigen binding (open access)

https://elifesciences.org/articles/42271.

Microbiome therapeutics go small molecule (interesting read)

Small-molecule drugs and biologics that alter the microbiome or its interaction with host tissues are poised to change the face of microbiome therapeutics. https://www.nature.com/articles/d41573-019-00122-8.

<u>Implementation of "Treat-all" at adult HIV care and treatment sites in the Global IeDEA Consortium: results</u> <u>from the Site Assessment Survey</u> (open access)

https://onlinelibrary.wiley.com/doi/full/10.1002/jia2.25331.

<u>A legal framework for vector-borne diseases and land use - 104th Annual Meeting: Bridging Communities and Ecosystems: Inclusion as an Ecological Imperative</u> - interesting read

https://www.esa.org/blog/2019/07/15/a-legal-framework-for-vector-borne-diseases-and-land-use/.

Swell Snapshots - first sharp images reveal structure of key inflammatory protein

https://hms.harvard.edu/news/swell-snapshots.

Personalized cancer vaccines in clinical trials

The field is young, but predicting antigens produced by patients' malignant cells could yield successful treatments for individuals with a range of cancer types. https://www.the-scientist.com/features/personalized-cancer-vaccines-in-clinical-trials-66075.

The intestine harbors functionally distinct homeostatic tissue-resident and inflammatory Th17 cells (open access)

https://www.cell.com/immunity/fulltext/S1074-7613(19)30224-9.

Rapid and focused maturation of a VRC01-class HIV broadly neutralizing antibody lineage involves both binding and accommodation of the N276-glycan (open access)

https://www.cell.com/immunity/fulltext/S1074-7613(19)30249-3.

Age-associated changes in the impact of sex steroids on influenza vaccine responses in males and females (open access)

https://www.nature.com/articles/s41541-019-0124-6.

Singapore scientists uncover mechanism behind development of viral infections

Clinical trial findings provide new insights on why some people get sick from flaviviral infections such as dengue fever and yellow fever, while others don't. https://www.duke-nus.edu.sg/allnews/detail/index/singapore-scientists-uncover-mechanism-behind-development-of-viral-infections.

<u>High-throughput targeted long-read single cell sequencing reveals the clonal and transcriptional landscape of lymphocytes</u> (open access)

https://www.nature.com/articles/s41467-019-11049-4.

<u>Investing in malaria prevention, treatment, and elimination</u> (infographic by The Institute for Health Metrics and Evaluation)

http://www.healthdata.org/infographic/investing-malaria-prevention-treatment-and-elimination.



Ebola outbreak declared an international public-health emergency

The World Health Organization's action could increase the resources available to fight year-old outbreak in the Democratic Republic of the Congo. https://www.nature.com/articles/d41586-019-02221-3.

Combination strategy nearly eliminates invasive mosquitoes in field

Researchers use two techniques - Wolbachia infection and irradiation - to suppress reproduction in populations of Asian tiger mosquitoes at two study sites in China. https://www.the-scientist.com/news-opinion/combination-strategy-nearly-eliminates-invasive-mosquitoes-in-field-66165. https://www.nature.com/articles/d41586-019-02160-z.

JOBS and POSITIONS







Research coordinator

Based at Centre for Vaccines and Immunology, NICD

1 Modderfontein Road, Sandringham

Grant funded position through Wits Health Consortium – 1-year contract, renewable.

Remuneration: approx. R550K per annum

Background

The Centre for Vaccines and Immunology comprises the National and World Health Organisation Regional Reference Laboratories for acute flaccid paralysis as well as measles and rubella surveillance. Additionally, the centre conducts projects on viral hepatitis, Tuberculosis and other vaccine preventable diseases. Our research focus is immune tolerance and its application to infectious diseases such as Tuberculosis and HIV. A key project is the role of indoleamine 2,3 dioxygenase as a TB biomarker.

The centre has a cell culture wing, viral culture laboratories, immunology laboratories (LSR Fortessa 18 colour flow cytometer (BD) and 2 Luminex flow cytometers), molecular laboratories with Sanger sequencing, and capacity at the institute for next generation sequencing.

Key roles and responsibilities

The successful candidate will lead grant-funded projects in the unit, optimize laboratory methods, manage grant-funded staff, students and equipment and coordinate sample logistics. Additionally, the candidate will supervise MSc students and contribute to grant and paper writing and academic activities such as journal clubs and seminars. In particular, the successful candidate will coordinate the MRC-SHIP funded 3-year study of IDO as TB biomarker.

Qualifications and experience

PhD in immunology or related discipline, evidence of research output. Teaching and training record advantageous. Grants management advantageous. Preferred skills: real-time PCR, biochemistry, flow cytometry, cell culture.

Please email CV and cover letter to Dr Melinda Suchard by Monday 22 July, melindas@nicd.ac.za

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.

Kind regards

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