



Mycobacterium Tuberculosis

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Neglected Global Diseases Initiative



a place of mind
THE UNIVERSITY OF BRITISH COLUMBIA

Newsletter March, 2014

NGDI Member News

Annalee Yassi's AAAS presentation on S. African Healthcare Workers Greater Risk for TB & HIV
More CIHR Grants: Lindsay Eltis of CTBR and Richard Lester
CDRD's Entrepreneurial Fellowship in Drug Development Program
Centre for Tuberculosis Research: TB Day Monday March 24, 2014
UAEM Advocacy & Policy Summer Internship

NGDI-UBC News

WIPO Re:Search Investigator Meeting
Kishor Wasan's February speaking dates

Funding Opportunities

Funding Reminders:
Human Frontier Science Program: Letters of Intent
NSERC CREATE Program
CIHR Reforms Update from SPARC
Medicines for Malaria – The Pathogen Box

Upcoming Conferences

International conference to explore One Health, One Medicine, April 27-30, 2014
17th Annual Conference on Vaccine Research April 28-30, 2014

Call for Papers

Vaccine Hesitancy: Call for papers from PLoS Currents: Outbreaks
Global Health Governance: Call for Submissions

Reports of Interest

Health in the Framework for Sustainable Development
A Report on the Safety and Surveillance Working Group

NGDI Member News

Annalee Yassi's AAAS Presentation on S. African Healthcare Workers Greater Risk for TB & HIV

A large-scale survey of South African healthcare workers has revealed major gaps in workplace protection against tuberculosis, HIV and hepatitis, according to a University of British Columbia health researcher.

Presenting findings today at the 2014 annual meeting of the American Association for the Advancement of Science (AAAS), Dr. Annalee Yassi says issues such as confidentiality, stigma, technological capacity and staff training need to be addressed while improving hospital resources and protocols.

Preliminary results of the 2012 baseline survey of more than 1,000 healthcare workers in three hospitals show that more than 68 per cent of patient care staff had never been screened for TB; nearly 20 per cent were not vaccinated against hepatitis; and 55 per cent did not wear respiratory protection when needed. Despite South Africa's high TB and HIV rates – 18 per cent of its adult population is HIV-positive – and risk of hepatitis transmission, recapping of used needles before disposal and washing and reusing of gloves were common, with more than 20 per cent surveyed reporting needlestick injury or unprotected exposure to bodily fluids.

Yassi, who is helping South Africa implement occupational health guidelines developed by the World Health Organization (WHO), says healthcare



Faculty of Medicine,
School of Population and Public Health

workers in developing countries face greater health challenges while serving significantly more patients.

“In addition to massive workloads, healthcare workers in developing countries are more likely to get sick from the workplace,” says Yassi, a professor in UBC's School of Population and Public Health, noting that healthcare workers in South Africa are at three times the risk of contracting TB than other South Africans, and more than seven times more likely to be hospitalized for drug-resistant TB. A 2013 WHO estimate showed South Africans were almost 300 times more likely to contract TB than Americans.

“Considerable progress is being made, including better standard operating procedures and screening,” says Yassi. “But there's much more we can do to ensure a healthy workplace for the international health care workforce.”

More CIHR Grants

Professor Lindsay Eltis of the Centre for Tuberculosis Research received a 5 year Operating Grant of \$630,545 for *Cholesterol Catabolism in Mycobacterium Tuberculosis and its Role in Pathogenesis.*

“Mycobacterium tuberculosis infects one third of the world's population and kills more people worldwide than any other bacterium. In Canada, this pathogen is a particular concern in First Nations communities. New antibiotics are urgently required to treat TB. Several years ago we discovered a series of enzymes in *M. tuberculosis* that



break down cholesterol. We and other researchers have since demonstrated that some of these enzymes are essential for virulence. The proposed research will help us develop effective inhibitors, a crucial step in developing new TB drugs.”

Dr. Richard Lester is Co-Investigator of dissemination grant for *Acknowledging the Impact of HIV and Trauma in Post Conflict Northern Uganda*. Patricia Spittal, School of Population and Public Health is PI.

“[We] estimate[d] the spread of HIV, to determine risk factors for HIV, to assess war-related trauma and sexually transmitted infections as risk factors for HIV transmission, and to identify individual, socio-cultural and structural factors that oppose access and utilization of HIV prevention and care services. The first round of study involving all 2400 participants has been completed and round 2 has recently been initiated. Unfortunately with regards to HIV infection, the prevalence rates we found are much higher than those recently published in the 2011 Ugandan AIDS Indicator Survey (UAIS), particularly among women. It is critical now that these important analyses are communicated back to Northern Ugandan political leadership, community and young people.”

CDRD's Entrepreneurial Fellowship in Drug Development Program



About the Fellowship

The aim of this program is to provide a unique opportunity for young entrepreneurial researchers from across the globe to work at CDRD, and be provided with full research support and access to all infrastructure in order to develop their early-stage innovative technologies towards commercialization over a two year period with the following specific objectives:

- To progress their technologies through the pre-clinical drug development pipeline
- To broaden their practical investigative skills, and gain invaluable experience under the mentorship of leading authorities in their fields
- To generate commercial interest in their technology.

Successful applicants will receive a full-time competitive, Post-Doctoral remuneration package for a maximum of two years, and join a vibrant health sciences community based in Vancouver, BC where entrepreneurship and innovation are cornerstones of CDRD's values. It is envisioned that successful applicants will conduct research across CDRD's Scientific Divisions as their technology is advanced through the various phases of pre-clinical development. Furthermore, participants will be encouraged to seek out additional funding opportunities, and will be provided assistance in preparing grants for supplemental and/or longer-term support.

At the time of submission, it is expected that applicants will have:

- Completed initial proof-of-concept studies towards a specific therapeutic market opportunity
- Developed a proposed commercialization strategy addressing both scientific and business objectives.

To be eligible, applicants must have:

- A doctoral degree (PhD), awarded no earlier than 2008
- Canadian citizenship, permanent residency in Canada or status to work for a Canadian organization (Successful international candidates may be supported in their application for a working visa by CDRD)

Application and Review Process

- Letter of Intent Deadline: March 21st, 2014
- The Letter of Intent must be completed in the format shown [here](#).
- The completed Letter of Intent must be submitted to efdd@cdrd.ca by 8 pm (PST) March 21st, 2014, with **ENTREPRENEURIAL FELLOWSHIP** in the Subject Line
- Applications will then be short-listed, and outstanding applicants will be invited to submit a full application under a confidentiality agreement.

For more information about the review process and selection criteria click [here](#).

Please direct all inquiries to: Dr. Brian Duff
Manager, Training bduff@cdrd.ca
Ph: +1 604 827 1197



UAEM Advocacy and Policy Internship

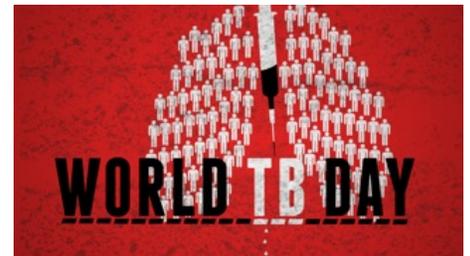
"Ever wanted to be a part of something bigger? Really make an impact in a social issue without making it only a side-involvement? Got plans this summer? How About a UAEM Summer 2014

Internship? Applications open Now!"

<http://uaem.org/get-involved/jobs-and-internships/internships/>

World Tuberculosis Day, Monday March 24, 2014

The Centre for Tuberculosis Research at UBC will be holding their fifth annual symposium with short seminars on topics that expand from basic science to clinical aspects of the management of the disease at the BC Center for Disease Control (BC CDC). Finally, the **keynote speaker Dr. Anil Koul**, Scientific Director and Head, Respiratory Infections Discovery, Johnson and Johnson, Belgium, will present his work leading to the FDA approval of the first TB drug in 50 years, *bedaquiline*. For complete program information click [here](#). There will also be a public talk on Tuesday, March 25 from 6:00 – 8:00 pm at LSI.



NGDI-UBC News

NGDI hosted BIO Ventures Global Health regarding WIPO Re:Search

On February 13, 2014, NGDI hosted the President of BVGH and two Scientific Officers in rounds of discussion with 8 NGDI investigators to discuss potential partnership or collaborations with other members of the [WIPO Re:Search](#) Consortium.

The meetings were very productive and connections are being pursued that may result in important collaborations for neglected tropical disease, malaria and tuberculosis research at UBC.

WIPO Re:Search was formed in 2011 through the efforts of several of the world's leading pharmaceutical companies, the [World Intellectual Property Organization](#) (WIPO), and [BIO Ventures for Global Health](#).

If you would more information about the group or contact info please contact Jocelyn via jocelyn.conway@ubc.ca.



Dr. Kishor Wasan talks in February for NGDI

On February 1st, Dr. Wasan was invited to speak at the UBC Medical Students Conference on Global Health. On February 13th he was hosted by new NGDI member Graham Reynolds at the Faculty of Law for a seminar on Intellectual Property. And on February 19th he was featured at the Vancouver Public Salon at the Vancouver Playhouse Theatre hosted by Mr. Sam Sullivan.



Funding Opportunities

Funding Reminders:

Medicines for Malaria 12th Call for Proposals.

Please visit [MMV's website](#) for detailed information. All applications, using the templates on our website, should be sent electronically to: proposals@mmv.org

Submission deadline: 12 noon CET March 14th 2014.

UBC Graduate Global Leadership Fellowship

Deadline for graduate programs to submit nominations to the Faculty of Graduate Studies: **4:00pm Friday 21 March 2014** (please set an earlier internal deadline for your students). Please see the Graduate Awards website for more information:

<http://www.grad.ubc.ca/awards/graduate-global-leadership-fellowship>

The contact at the Faculty of Graduate Studies for this award is Anne Brozensky, anne.brozensky@ubc.ca

Stars in Global Health Round 7 – Grand Challenges Canada

Request for \$100K Proof of Concept Proposals is due **March 10, 2014** at 3:00 pm ET. For more information click [here](#).

Saving Lives at Birth Round 4

Request for Applications for Seed Grants (\$250K) and Transition-to-Scale Grants (\$2M) are due on **March 27, 2014** at 2:00 pm ET. For more information click [here](#).

Human Frontier Science Program Research Grants: Letters of Intent

Agency Deadlines:

Register by: Thursday, **March 20th, 2014**

Submit LOI by: Thursday, **March 27th, 2014**

Value: up to \$450K

For complete details consults the [guide](#).

The Human Frontier Science Program (HFSP) supports innovative basic research into fundamental biological problems with emphasis placed on novel and interdisciplinary approaches that involve scientific exchanges across national and disciplinary boundaries.

Young Investigators: must be within 5 years of obtaining an independent position (i.e. Assistant Professor, Lecturer or equivalent), but must have obtained their first doctoral degree not longer than 10 years before the deadline.

Program Grants: are meant to allow teams of independent researchers to develop new lines of research through collaboration.

International collaboration is mandatory, with an almost exclusive emphasis on intercontinental collaborations. The number of team members should normally be 2-4, and no more than 4 unless an increase in the number of members is clearly critical for the interdisciplinary nature of the project.

Research carried out within only one country is not eligible.

NSERC CREATE Program

UBC selects six proposals for the [NSERC Collaborative Research and Training Experience \(CREATE\)](#) Letter of Intent competition through an internal selection peer-review process. UBC's 2014 internal selection deadline is Friday, March 28, 2014 by 4:00 p.m., with applications submitted electronically to [Danica Kell](#).

The required internal selection cover page and application instructions, including the evaluation grid, can be found on the [SPARC Internal Guidelines webpage](#) (scroll to "NSERC CREATE → I. Phase 1 (LOI)" section); and [presentation materials](#) from the recent workshop are also available (CWL required).

UBC Internal Selection Deadline: **Friday, March 28, 2014 by 4:00 p.m.**

NSERC CREATE LOI Deadline: Thursday, **May 1, 2014**.

CIHR Reforms - Info Session audio + CIHR funding gap update

The following resources are available on the [Presentation Materials section of our website](#) (CWL required) from the January 2014 CIHR Reforms Information Sessions:

1. Presentation slides, updated on January 30th
2. Audio files, in 15-minute segments, from the final session on January 29th

The summary Q&A document is still under development. In the meantime, please be aware that **CIHR has changed the funding start date for the 2014 Foundation Scheme live pilot and Transitional OOGP from October 1, 2015 to July 1, 2015** to address the funding gap. For more details, visit the [CIHR update](#).



MMV and partners are set to launch a new initiative to boost drug discovery research for neglected diseases and we need your help! [The Pathogen Box](#) will contain ~400 diverse, drug-like molecules active against neglected diseases and will be available free of charge to drug researchers at the end of 2015.

The question is which molecules should be in the Pathogen Box? If you have compounds active against neglected diseases of interest or drug discovery expertise, feel free to send us your suggestions before **30 June 2014**, when the final selection of compounds will be made.

Upcoming Conferences

International conference to explore One Health, One Medicine, April 27-30, 2014



The University of Minnesota will present an international conference on the science behind One Health this spring in Minneapolis. **The International Conference on One Medicine One Science (iCOMOS)** will be a global forum to discuss groundbreaking science that addresses issues at the interface of animals, humans and the environment.

The One Health initiative recognizes that human, animal and ecosystem health are all linked and is designed promote, improve, and defend the health and well-being of all species with increased collaborations between physicians, veterinarians and other scientific health and environmental professionals.

iCOMOS will take place Sunday, April 27-Wednesday, April 30, attracting presenters and participants in human health, veterinary medicine, public health, food policy, food production and food safety, infectious diseases, environmental health and agriculture.

Conference registration is now underway. To register or review the conference schedule including complete list of speakers and workshops visit <http://www.icomos.umn.edu>.

17th Annual Conference on Vaccine Research April 28-30, 2014



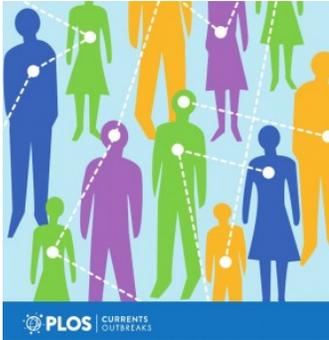
The Annual Conference on Vaccine Research (ACVR) provides high-quality, current reports of scientific progress and best practices featured in both invited presentations and submitted oral abstracts and posters. The ACVR brings together the diverse disciplines involved in the research

and development of vaccines and associated technologies for disease control through immunization. By drawing upon an international audience of scientists and researchers, healthcare professionals and trainees, veterinarians, vaccine manufacturers, and public health officials, the conference is designed to encourage the exchange of ideas across a broad range of disciplines. The event summary is available [here](#).

Call for Papers

Vaccine Hesitancy: A Call for Papers from PLOS Currents: Outbreaks

PLOS Currents: Outbreaks issues a call for papers in collaboration with the European Centre for Disease Prevention and Control (ECDC) on the issue of vaccine hesitancy.



The prevention of outbreaks of vaccine-preventable diseases, such as measles, rubella, or polio, is dependent on herd immunity. Yet ensuring widespread vaccination coverage is complicated by a wide range of factors, not least vaccine hesitancy, through which segments of the public are uncertain about the safety and efficacy of vaccinations.

In May 2013 the ECDC hosted [a multi-disciplinary scoping meeting](#) to address the issue of vaccine hesitancy. Participants came from the fields of psychology, anthropology, epidemiology and medicine to discuss trends in the public acceptance of vaccines, with the following objectives:

- to explore the key drivers behind recent trends in measles epidemiology and vaccination coverage in Europe
- to identify and conceptualize the myriad social and political factors that affect individual decision-making as concerns vaccination
- to identify and examine best practices in public health for monitoring and addressing public mistrust in vaccines
- to identify potential ECDC activities in this field

In order to continue this discussion, the ECDC is collaborating with *PLOS Currents: Outbreaks* to host a [call for papers](#) on vaccine hesitancy and contemporary vaccination coverage from a multidisciplinary perspective. We invite researchers from a wide range of disciplines to contribute original research that addresses vaccine hesitancy and barriers to vaccination. Please contact us at currents@plos.org with any questions, we look forward to expanding the conversation.

Global Health Governance: Call for Submissions



Global Health Governance will be publishing a special issue on a proposed Framework Convention on Global Health (FCGH) in December 2014. The proposal for an FCGH would create a new international framework, grounded in the international human right to health, that would support health at the national and global levels.

For this FCGH special issue, Global Health Governance invites submission of theoretical and empirical policy research articles that examine and analyze how the FCGH could improve health through improved governance and realization of the right to health.

The website for the Joint Action and Learning Initiative on National and Global Responsibilities for Health (JALI): <http://www.jalihealth.org/> has more information about the FCGH.

Abstracts (up to 400 words) for proposed articles are due March 30, 2014. Articles selected for submission will be due July 31, 2014. More information is available [here](#).

Reports of Interest

Health in the Framework of Sustainable Development



From the foreword:

The collective efforts of the global community towards ending extreme poverty and hunger and to promote gender equality were successfully directed by the Millennium Declaration and the Millennium Development Goals (MDGs). The importance of health as a key feature of human development was recognized, with three MDGs explicitly linked to health indicators and the others structured around major determinants of health.

While considerable health gains have been achieved through the MDGs, there needs to be a continued commitment for accelerating progress related to those goals, many of which will not be achieved by 2015. Epidemiological and demographic transitions accompanied by changing exposures to risk factors have brought forth non-communicable diseases as major global contributors to preventable death and disability. At the same time, health inequities have persisted within populations, despite improvement in aggregate national health

indicators. There is also a concern that segmentation into specific age or risk groups such as childhood and pregnancy misses critical periods of life like adolescence, a critical period as it lays the foundation for adult health. Similarly, the health needs of the elderly must also be addressed. The report is available [here](#).

A Report of the Safety and Surveillance Working Group



From the Executive Summary:

Drugs and vaccines are reaching unprecedented numbers of people in low- and middle-income countries (LMICs). These products have tremendous potential to save lives and reduce suffering, but many of the countries in which these products will be used do not have the capacity to effectively monitor their post-market safety. International initiatives have sought to address this gap, but have not attracted significant donor or industry support, or political capital and resources from LMIC governments. With new donor funding scarce in this weak global economy, substantial new resources for addressing post-market safety needs may not be forthcoming. Given limited resources and expanding post-market safety needs, a new strategy is needed. This report is the culmination of the seven-month effort of the Safety Surveillance Working Group (SSWG) to develop that strategy.

The strategy developed through the SSWG process is designed to complement and build upon, not duplicate or replace, existing international pharmacovigilance capacity building initiatives, World Health Organization (WHO) standards and technical assistance programs, and disease- and product-specific initiatives. The human and financial resources available to strengthen post-market safety surveillance in developing countries are limited. Synergies must be encouraged and reinforced.

This strategy developed through the SSWG process has five parts, which are summarized here. Early focus on the global health product pipelines; Risk-based prioritization; Inverting the current capacity building paradigm; Incorporating sustainability from outset; and Planning for scalability. The report is available [here](#).