



# TDRfellows Newsletter: Issue 12 April 2014



Enabling research by sharing knowledge

#### Welcome to the 12th issue of the TDRfellows newsletter.

Dear Fellow,

It was great to meet with you all at the TDRf 3<sup>rd</sup> Annual Alumni Meeting in Geneva last month. It was the perfect opportunity to finally meet face to face and catch up on all the wonderful work and projects that you are each conducting.

I have been in touch with a few of the group since returning and one question that keeps arising is if everyone would be willing to share their pictures from the meeting? If everyone is willing to share their images I have created a Dropbox account to host them all so that everyone can have access to them. Please feel free to upload your images to Dropbox or send them to me via email and I will upload them for you. I have uploaded some of my images and also some from Rezika which can be accessed via the link below:

https://www.dropbox.com/sh/kuukxnyfyw7sxro/Hhi9k1obUs.

Since the meeting the network has been through the significant revamp I spoke of during my talk. Please take a few moments to explore the new features of the network and especially the TDRfellows member area:

#### https://tdrfellows.tghn.org/

Please feel free to let me know what you think of the new set up as any feedback is much appreciated.

Best wishes,

Liam



#### The Global Health Network Revamp is Complete

The Global Health Network is pleased to announce that we have completed our revamp of the look and feel of the network. Responding to user comments and suggestions, we have reworked the landing pages for all the member areas on the network so that content from within the areas, as well as other areas across the network, can easily be added to the front pages of each area. This will help you to instantly find the content you need, and to join in activities, events and discussions. The front page makeover is only the first in a series of planned improvements to the Global Health Network. Other stages of renovation will include improving the search functionality, improving the sign-up procedure, and allowing you to recommend content. The eLearning centre will also be improved, centralising into a separate training space and gaining improved functionality to help you learn and find the related resources you need. Excitingly, we'll also be integrating a fully interactive process map which will take you through the stages of initiating a clinical research project, with a full write up on each stage, as well as useful links, resources and guidance articles.





## A GSK model of open innovation in drug discovery for malaria, tuberculosis and kinetoplastids



Name: Lyda Osorio

Home institution: Universidad del Valle Cali, Columbia

Host institution: GSK, UK

Dear CDF colleagues and friends,

I just wanted to share with you my recent visit to Tres Cantos – GSK as you may find here opportunities for collaboration. Click in the links if you want to get more details.

Tres Cantos - GSK is located in the north of Madrid, Spain in a science park 30 min from Barajas airport. I visited the drug discovery facilities and met with the Diseases of the Developing World (DDW) team and visiting scientists who are been supported by GSK. For drug discovery, the following activities take place at Tres Cantos: synthesis and optimization of small molecules, ultra high-throughput screening, and analyses of properties and toxicity in in vitro and in vivo models of potential compounds. The DDW team is focused in malaria, tuberculosis and kinetoplastids (visceral leishmaniasis and trypanosomiases).

One of my main interests in visiting Tres Cantos was to know more about the GSK open innovation model that has been implemented here since 2010. Open innovation in the pharmaceutical industry implies that research and development (R&D) is done by means of collaborations with small biotechnology companies, other companies and academia and there are many ways to do this. [1, 2] GSK established the Tres Cantos Open Lab Foundation which provides a web link by which researchers can submit, at any time, a proposal for drug discovery (small molecule, target or model) in malaria, tuberculosis or kinetoplastids. GSK provides facilities, mentorship and the Tres Cantos Open Lab Foundation provides funding of salary and accommodation for the researcher, operational and travel costs. The submitted proposals are assigned to a "sponsor" from the Open Lab who may contact the researcher to discuss the opportunities and assess initial fit against the selection criteria. Then, proposals are reviewed by a Governing Board and if selected funded for typically 1 year. The intellectual property of the work conducted at the Open Lab is covered under the WIPO Re:Search Consortium principles which is a sharing mechanism in relation to research and development, manufacture and/or sale of products for neglected tropical diseases (NTD), malaria and tuberculosis in developing countries.

It is still early days to assess the results of this open innovation model but I think that one important "product" is the training of researchers that are from the countries where these diseases are endemic which is difficult to measure but relevant to increasing human capital in our countries. However, the participation of scientist from countries where NTD, malaria and tuberculosis are endemic is still very small (only 4 of 35 funded projects). Perhaps, we the fellow's community and researchers could help to increase this indicator by publicizing the Open Lab in our countries as one of many alternatives to interact with pharma.

In addition to the Open Lab proposals, there are other ways by which Tres Cantos GSK R&D interacts with academia such as postdoctoral opportunities (current call ends 2nd July 2014), Predict TB for the development of drug combinations against tuberculosis, and Tres Cantos Anti-Malarial Set (TCAMS). TCAMS provides open access to a dataset of more than 13,500 compounds with in vitro activity against P. falciparum [3] and there is a separate dataset for tuberculosis (dataset No.9). To request a sample of the compounds listed in TCAMS all one needs to do is email Lluis Ballell or Elena Fernandez Alvaro describing in one paragraph the work plan intended together with a short rational for performing the studies.

After this initial request and after an initial check to avoid duplication of work, a confidential disclosure agreement (CDA) is put in place for signature and transfer of compounds. At present only small quantities ( $\mu$ L) of material are exchanged. GSK's and other companies' compounds shown to have activity against P. falciparum can also be requested from the open access <u>Malaria Box</u> from Medicines for Malaria Venture (MMV). Finally, there is also inter-pharma collaborations where compounds of other pharma companies are assessed in models already established at Tres Cantos - GSK.

This open innovation model for drug discovery made me think about models of open innovation in clinical development... But, I am sure you have also come across open innovation in R&D in your current or past placements. I will be excited to know more about these open innovation R&D strategies from your experiences.

Kind regards,

Lyda

Lyda Osorio MD PhD

Placement at GSK-Pharma London until May 2014

#### References:

- 1. Melese T, Lin SM, Chang JL, Cohen NH: Open innovation networks between academia and industry: an imperative for breakthrough therapies. Nat Med 2009, 15:502-507.
- 2. Schuhmacher A, Germann PG, Trill H, Gassmann O: Models for open innovation in the pharmaceutical industry. Drug Discov Today 2013, 18:1133-1137.
- 3. Butler D: GlaxoSmithKline goes public with malaria data. In Nature. http://www.nature.com/news/2010/100120/full/news.2010.20.html; 2010.

#### Six Month Progress Reports now available on-line



Name: Rezika Mohammed

Home institution: University of Gondar Gondar, Ethiopia

Host institution: Astellas, USA

WHO/TDR Clinical Development Fellow 6th month report at Astellas Pharma Global Development Inc.(APGD)

August 5th, 2013 to February 4th, 2014

First 6 months WHO/TDR Career Development Fellowship Training:

Click here to read the full report



Name: Welile Sikhondze

Home institution: University of Cape Town, Cape Town

Host institution: FIND, Switzerland

WHO/TDR Career Development Fellowship Training Foundation for Innovative New Diagnostics (FIND)

1st MAY - 31st OCTOBER 2013

First 6 months Progress Report:

Click here to read the full report



Name: Lili Xu

Home institution: National Institute of Parasitic Disease Shangai, China

Host institution: Novartis Vaccines & Diagnostics, Italy

WHO/TDR Career Development Fellowship Training at Novartis Vaccines & Diagnostics, Siena, Italy

1st Sept 2013 – 28st February 2014

First 6 months Progress Report:

Click here to read the full report

Grand Challenges/Explorations - Last Chance to Apply!



### Grand Challenges | EXPLORATIONS

#### Anyone can apply:

- · From any country and any discipline and at any level of experience
- From academia, government, non-profits, or industry
- · Review is "blind" and champion-based

#### Applying is easy:

- · Two-page application
- No preliminary data required

#### Awards are frequent and rapid:

- Two opportunities to apply each year
- Awards made in 4-6 months
- Phase 1 funding of \$100,000 can lead to Phase 2 funding of up to \$1 M

#### To date:

- Over 50,000 applications from 180 countries
- Over 900 Phase I awards to researchers from 50 countries
- · Over 50 projects with Phase II funding

#### **Round 13 topics:**

- New ways of Working Together: Integrating Community-Based Interventions
- Explore New Ways to Measure Fetal and Infant Brain Development
- Inciting Healthy Behaviors: nudge, disrupt, leapfrog, reach
- Novel Enabling Tools and Models Supporting Development of Interventions for Enteric Dysfunction
- Innovations in Feedback & Accountability Systems for Agricultural Development

Accepting applications until May 6, 2014 at www.grandchallenges.org

More Funding opportunities and calls for applications

For Funding Opportunities and calls for applications please check out the Funding Opportunities discussion group: <a href="http://tdrfellows.tghn.org/community/community/group/funding/">http://tdrfellows.tghn.org/community/community/group/funding/</a>
There are several new funding opportunities listed including:
□ UNITAID Call for Letters of Intent (LOI) 2014 □ Grant opportunities from the Gates Foundation and its partners □ Competitive Calls for Innovating for Maternal and Child Health in Africa program □ Grand Challenges Explorations application - Round 13 is open □ Call for health research regional training centre in the WHO African region □ https://tdrfellows.tghn.org/community/group/funding/topics/493/
Also remember to check out the Job opportunities Community Group for new positions across the globe:

https://tdrfellows.tghn.org/community/group/jobs/

#### **Fellows Biosketch**



Name: Welile Sikhondze

Home institution: University of Cape Town, Cape Town

Host institution: FIND, Switzerland

My name is Welile Sikhondze and I'm a TB Clinical Fellow at the Foundation for Innovative New Diagnostics (FIND) in Geneva, from June 2013. I was born in Swaziland and completed my undergraduate medical training at the University of KwaZulu Natal (Nelson R Mandela School of Medicine), in Dec 2005. I'm currently completing a Master's degree in Public Health (Clinical Epidemiology) at the University of Cape Town (UCT) whilst simultaneously training in Mathematical Modelling of Infectious Diseases at the London School of Hygiene and Tropical Medicine (LSHTM).

It was during my community service in a rural hospital in Swaziland (2008) that I realised the true extent of the scourge of infectious diseases, particularly HIV and TB, in Sub-Saharan Africa. Swaziland has the highest HIV and TB prevalence rates in the world with those hardest hit having very limited access to adequate healthcare. It was this experience that encouraged me to pursue a career in Infectious Disease Clinical Research. In 2009 I relocated to Cape Town to undergo intensive Public Health and Clinical Research training at the University of Cape Town where I also worked as a Clinical Research Medical Officer on TB diagnostic and vaccine clinical trials.

My training at FIND has been very instrumental in developing my research skills further and providing a comprehensive view of the TB diagnostic pipeline. I have been most fortunate to be exposed to both the development and implementation of novel diagnostic tools and this is unique to the organizational structure at FIND. It has also encouraged me to pursue a research career in TB operational research, aimed at identifying and addressing the bottlenecks and challenges to successful implementation of novel TB diagnostics in high burden, low resource countries, especially Swaziland.

As my fellowship draws to a close, I must express my heartfelt gratitude to WHO/TDR, UCT and FIND for allowing me the opportunity to develop my research career in a manner that would not have been possible otherwise. My future plans are to return to South Africa and Swaziland to conduct quality implementation research to investigate the best practices for the successful integration of novel TB diagnostic technology into existing health systems.

#### **Upcoming Conferences & Meetings**

#### May 2014:

23rd Annual Canadian Conference On HIV/AIDS Research

1st - 4th May 2014 St Johns, Canada

32nd Annual Meeting of the European Society for Paediatric Infectious Diseases

6th - 10th May 2014 Dublin, Ireland

**HIV Drug Therapy in the Americas** 

7th - 10th May 2014 Rio de Janeiro, Brazil

#### May 2014 Cont.:

#### **24th European Congress of Clinical Microbiology and Infectious Diseases**

10th - 13th May 2014 Barcelona , Spain

#### **International Symposium On HIV And Emerging Infectious Diseases**

21st - 23rd May 2014 Marseille, France

#### June 2014:

#### 15th Annual HIV Clinical Care Symposium

June 3-4, 2014 Troy, New York, United States

#### **HIV Update: Contemporary Issues in Management**

June 5-7, 2014 -Boston, Massachusetts, United States

#### Association for Professionals in Infection Control and Epidemiology (APIC) 41st Annual Conference

June 7-9, 2014 Anaheim, California, United States

#### 9th International Conference on HIV Treatment and Prevention Adherence

June 8-10, 2014 Miami Beach, Florida, United States

#### **2014 STD Prevention Conference**

June 9-12, 2014 Atlanta, Georgia, United States

#### 10th International Workshop on HIV & Hepatitis Co-infection

June 12-13, 2014 Paris, France

#### **Seventh EDCTP Forum**

30th June - 2nd July 2014 Berlin, Germany

#### July 2014:

#### **Beating Malaria - London 2014**

July 1-3, 2014 London, United Kingdom

#### 12th Vaccines Research & Development: All Things Considered Conference

July 9-11, 2014 Boston, Massachusetts, United States

#### **20th International AIDS Conference (AIDS 2014)**

July 20-25, 2014 South Wharf, Australia

#### **32nd Annual Conference on Pediatric Infectious Diseases**

July 27 - August 1, 2014 Vail, Colorado, United States

#### **Conference Reports**



Name: Welile Sikhondze

Home institution: University of Cape Town, Cape Town

Host institution: FIND, Switzerland

#### 44th Union World Conference on Lung Health

Hosted by: The International Union Against Tuberculosis and Lung Disease
30 October - 03 November 2013
Palais des Congres, Paris, France

'The conference theme is "Shared Air, Safe Air?" This theme reflects growing concerns about the need to improve or preserve the quality of the air we breathe for both healthy and vulnerable persons alike. To safeguard the wellness of future generations, it is essential that we take action now on the problems of tobacco smoke and air pollution, and the preventable spread of airborne infections. These are issues that affect everyone, but the risks and the impact are disproportionately greater for those who are poor and disadvantaged'.

#### 1) Objectives for attending this conference

- To gain a comprehensive view of the current global TB research agenda
- Exposure to discussions on the country challenges in TB control
- Engaging with and learning from other scientists on research activity
- To seek networking opportunity with other scientists and stakeholders
- To understand the direction and pipeline of future TB research

#### 2) Agenda of the conference

This annual international conference was held at the Palais des Congrès in Paris, France from 30 Oct - 3 Nov 2013. It is the largest annual meeting focusing on lung health issues as they affect low- and middle-income countries. The aim of this meeting is to discuss the latest research and programme developments in the fights against tuberculosis, the growing threat of MDR-TB and lung disease, as well as related problems, such as HIV, non-communicable diseases.

Click here to read the full report

#### **NEWS FLASH!**

The Global Health Network has launched a dedicated member area to support knowledge exchange and skill-sharing between laboratories and research staff in resource-constrained settings. Click here to visit Global Health Laboratories

