

Dear WIPO Re:Search Members and Friends,

It is hard to believe we are now halfway through 2018! I am pleased to announce that BVGH has already surpassed our goal of establishing eight targeted collaborations in 2018, with nine agreements executed thus far. These partnerships span six infectious diseases and include both drug discovery and diagnostic development partnerships.

Last month, Medicines Development for Global Health (MDGH) and the World Health Organization Special Programme for Research and Training in Tropical Diseases (TDR) <u>announced</u> the FDA's approval of moxidectin, the first new treatment for onchocerciasis in 20 years. BVGH warmly congratulates MDGH and TDR on achieving this important milestone.

In addition to the approval of moxidectin, the MDGH was awarded a priority review voucher (PRV). In TDR Director John Reeder's words, "this voucher to MDGH fully meets the original spirit of the PRV programme to promote research and development of affordable and accessible drugs for neglected tropical diseases. Without this programme, MDGH would not have been able to raise the funds to complete all of work for the new drug application."

Presently, there are several <u>tropical diseases</u> that are PRV-eligible. However, there is one major constituent that is not encompassed: foodborne trematodiases. The WHO estimates foodborne trematodes are responsible for 200,000 illnesses, and over 7,000 deaths annually. This has resulted in more than 2 million disability-adjusted life-years globally. In solidarity, I recently supported the submission of <u>PATH's letter to the FDA</u>, requesting that foodborne trematodiases be added to the tropical diseases qualifying for a PRV.

I am pleased to welcome our newest WIPO Re:Search Member, the **University of Florida**.

Sincerely, Jennifer Dent President, BVGH





## **Special Announcements**



## 2018 Keystone Symposia: 21st-Century Drug Discovery & Development for Global Health

The 21<sup>st</sup>-Century Drug Discovery and Development for Global Health symposium, part of the Keystone Symposia Global Health Series (supported by the Bill & Melinda Gates Foundation) aims at addressing the urgent need for novel and transformative medicines for infectious diseases. With a focus on parasitic and bacterial diseases including malaria, neglected tropical diseases (NTDs), diarrheal disease, and tuberculosis, the 21st-Century Drug Discovery and Development for Global Health symposium will improve understanding of the disease burdens and challenges of developing new therapies, highlight progress towards new drug candidates,

and foster collaboration from research to the clinic. The symposium is targeted towards basic scientists and drug discovery and development experts interested in understanding of the global health landscape.

Plenary session topics include, but are not limited to:

- Robust Target Validation What Does it Mean?
- Workshop 1: Novel Clinical Trial Design
- Improving Target and Phenotypic-Based Approaches
- Workshop 2: Opportunities for Repurposing to Discover New Candidates or Mature Starting Points
- Translational Tools for Predicting Efficacy and Resistance

The symposium will be held October 17-20, 2018 in Berlin, Germany. For more information click here.



#### **UCSD Launches New Center for Anti-Parasitic Drug Discovery**

Leveraging its strengths in molecular biology, clinical research, and pharmaceutical sciences, the **University of California, San Diego (UCSD)** has launched a new Center for Anti-Parasitic Drug Discovery and Development. The new center will involve 15 research and clinical faculty representing three schools and five departments at UCSD. "No other center is equipped to study these many organisms and target the diseases they cause," noted Dr. Jim McKerrow, Dean of the Skaggs School of Pharmacy and Pharmaceutical Sciences, head of the new center, and WIPO Re:Search investigator, "no other entity — academic, government or industrial — covers the spectrum of parasite research and drug discovery from basic science to clinical trials at one site."

The drug development pipeline will be supported by UCSD's <u>Altman Clinical and Translational Research Institute</u>, where researchers will have the capacity to carry out the entire drug discovery and development pipeline, including human clinical trials.

## WIPO Re:Search Statistics



Click <u>here</u> for a list of WIPO Re:Search Members. Click <u>here</u> for a list of WIPO Re:Search collaborations.

## Cornerstones of Collaboration





#### **Novel Treatments for Leishmaniasis**

More than one billion people in over 80 countries are at risk for leishmaniasis. As existing drugs are less than optimal, new therapeutics are needed to combat this debilitating disease. In order to support these efforts, **Eisai Co., Ltd.** will share a peroxisome proliferator-activated receptor (PPAR) agonist with Dr. Tanya Parish at the **Infectious Disease Research Institute (IDRI)**. In the hopes of identifying new candidate therapeutics, Dr. Parish's lab will screen the PPAR agonist against intracellular *Leishmania donovani* using their novel high-content imaging assay.

#### **Combating Multi-Drug Resistant Tuberculosis**

Multi-drug resistant tuberculosis (TB) is a growing threat to global health. Drs. Tanya Parish and Alyssa Manning at the **Infectious Disease Research Institute (IDRI)** are working toward the discovery and development of new drugs that concurrently target *Mycobacterium tuberculosis* (*Mtb*) while promoting immune response to infection. To support these efforts, **Eisai Co., Ltd.** will provide the investigators with phosphodiesterase (PDE) V inhibitors and calcium channel blockers for screening against intracellular *Mtb* using IDRI's novel high-content imaging system.

## **New Member Announcement**



Located in Gainesville, Florida, the University of Florida (UF) attracts over \$700 million in research annually. Through the <a href="Emerging Pathogens Institute">Emerging Pathogens Institute</a>, UF researchers are working to prevent and contain new and re-emerging diseases, with a focus on vector-borne diseases, tuberculosis, foodborne illnesses, and antimicrobial resistance (AMR). Further, through the <a href="Institute for Therapeutic Innovation">Institute for Therapeutic Innovation</a> and new technologies such as a hollow fiber infection model, researchers are optimizing drug regimens to kill pathogens and quell AMR.

## **BVGH FundFinder Featured Awards**

### **Grand Challenges Africa: Open Call for Letter of Intent on Drug Discovery**

This Grand Challenges Africa funding scheme seeks to support new drug discovery projects in Africa by identifying new chemical entities with potential for drug development for malaria, tuberculosis, and neglected tropical diseases (NTDs). Applicants will be selected based on scientific merit and potential to advance the drug discovery process. Awardees will benefit from a network of drug discovery scientists in Africa and across the globe, linking them to peers and mentors and providing them with access to resources and technologies. Applicants must describe how their proposals add value to existing infrastructure, and how activities will lead to a sustained opportunity for drug discovery within the region.

- Funder: The African Academy of Sciences, the Bill & Melinda Gates Foundation, Medicines for Malaria Venture (MMV), and the University of Cape Town Drug Discovery and Development Centre (H3D).
- Funding Amount: Innovation Seed Grants of up to \$100,000 over 24 months
- Deadline: Letter of intent due July 18, 2018
- **Eligibility:** Applicants must work in drug discovery on the African continent and have a creative idea for a drug discovery project based on one or more of the following: Biological targets, biological screens or assays, small molecule starting points, in vitro and in vivo DMPK/ADME assays and related technologies.

#### Mobile Health: Technology and Outcomes in Low- and Middle-Income Countries (mHealth)

MHealth supports research to develop or adapt innovative mobile health technology for low- and middle-income countries (LMICs), and the health-related outcomes associated with implementation of the technology. The program aims to contribute to the evidence base for the use of mobile technology to improve clinical outcomes and public health, and build research capacity in LMICs by establishing research networks. MHealth includes the use of mobile and wireless devices (cellphones, tablets, etc.) to improve health outcomes, health care services, and health research. The developed or adapted mHealth technology can include external hardware or software components for mobile or wireless devices. For specific information regarding the award, click <a href="here">here</a>.

- Funding amount: Applicants may request up to \$125,000 direct costs per year for up to 2 years.
- Funder: National Institutes of Health (NIH), Fogarty International Center
- Deadline: Letter of intent due August 1, 2018
- **Eligibility:** U.S. and non-domestic organizations are eligible to apply. Non-domestic entities are restricted to higher education institutions and other non-profit organizations in LMICs, as defined by The World Bank.

For more information about BVGH FundFinder, please email Cathy Manner.

# **Highlighted Contribution**

#### **Seq-Well: Single-Cell RNA Sequencing**

The <u>Shalek lab</u> at the **Massachusetts Institute of Technology** (MIT) and the Ragon Institute have codeveloped <u>Seq-Well</u>, a portable, low-cost platform for single-cell RNA sequencing designed to be compatible with low-input, clinical biopsies. Single-cell RNA sequencing enables researchers to identify the cell types, states, lineages, signaling pathways, and biomarkers active within complex specimens or even seemingly homogenous cell populations. It can also help uncover the mechanisms underlying cellular responses to the environment, disease, or drugs to aid in identifying novel targets for future development or biomarkers for diagnostic assays. To maximize impact and promote innovation, the investigators have published a <u>manuscript</u> detailing the development and validation of the Seq-Well platform, and provide in-depth protocols and videos describing how to perform Seq-Well experiments.





# **Upcoming Global Health Events**

Dates	Event Name	Location
August 19 - 24	14 <sup>th</sup> International Congress of Parasitology (ICOPA)	Daegu, Korea
September 23	First International Podoconiosis Conference	Addis Ababa, Ethiopia
October 14 - 18	Keystone Symposium: Framing the Response to Emerging Virus Infections (S2)	Hong Kong, China
October 28 - November 1	American Society of Tropical Medicine and Hygiene Meeting (ASTMH)	New Orleans, Louisiana

















\* Known as EMD in the US and Canada  $\mid$  \*\* Known as Merck & Co., Inc. in the US and Canada





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