

# 2013 Partnership Hub Report Catalyzing Partnerships for Global Health

Developed in cooperation with our sponsors:



*"Sanofi has a long history of commitment to advance the discovery and development of medicines for neglected diseases such as malaria and tuberculosis," says Dr. Elias Zerhouni, President of Global R&D, Sanofi.*

*"Our collaboration with the teams at WIPO Re:Search offers a great platform to leverage our expertise and resources more broadly to overcome the global and devastating impact of these diseases."*

Dear WIPO Re:Search Members and Friends,

2013 has been an exciting and fulfilling year for WIPO Re:Search. The Consortium was established in 2011 to provide neglected disease researchers with access to the assets and expertise of the pharmaceutical industry - with the aim of accelerating neglected tropical disease, malaria, and tuberculosis product discovery and development. At the time, none of us could have imagined the innovation and diversity of research collaborations that would be facilitated through WIPO Re:Search. The 44 agreements established over the first two years have surpassed our highest expectations.

The partnership between WIPO, BVGH, and our Members represents a new paradigm for consortium management. BVGH and WIPO are committed to the long-term success of WIPO Re:Search and the development and expansion of its partnerships.

In 2014, BVGH will continue with our proactive partnering approach, which has proven to be highly successful in engaging Members and establishing new partnerships.

We recognize that the real commitment and hard work comes from the dedicated Members of WIPO Re:Search. All of us at BVGH are honored to work with the world-class researchers and companies committed to advancing R&D for neglected diseases.

This report summarizes and describes BVGH's key achievements and deliverables from 2013.



**Jennifer Dent**  
President, BVGH

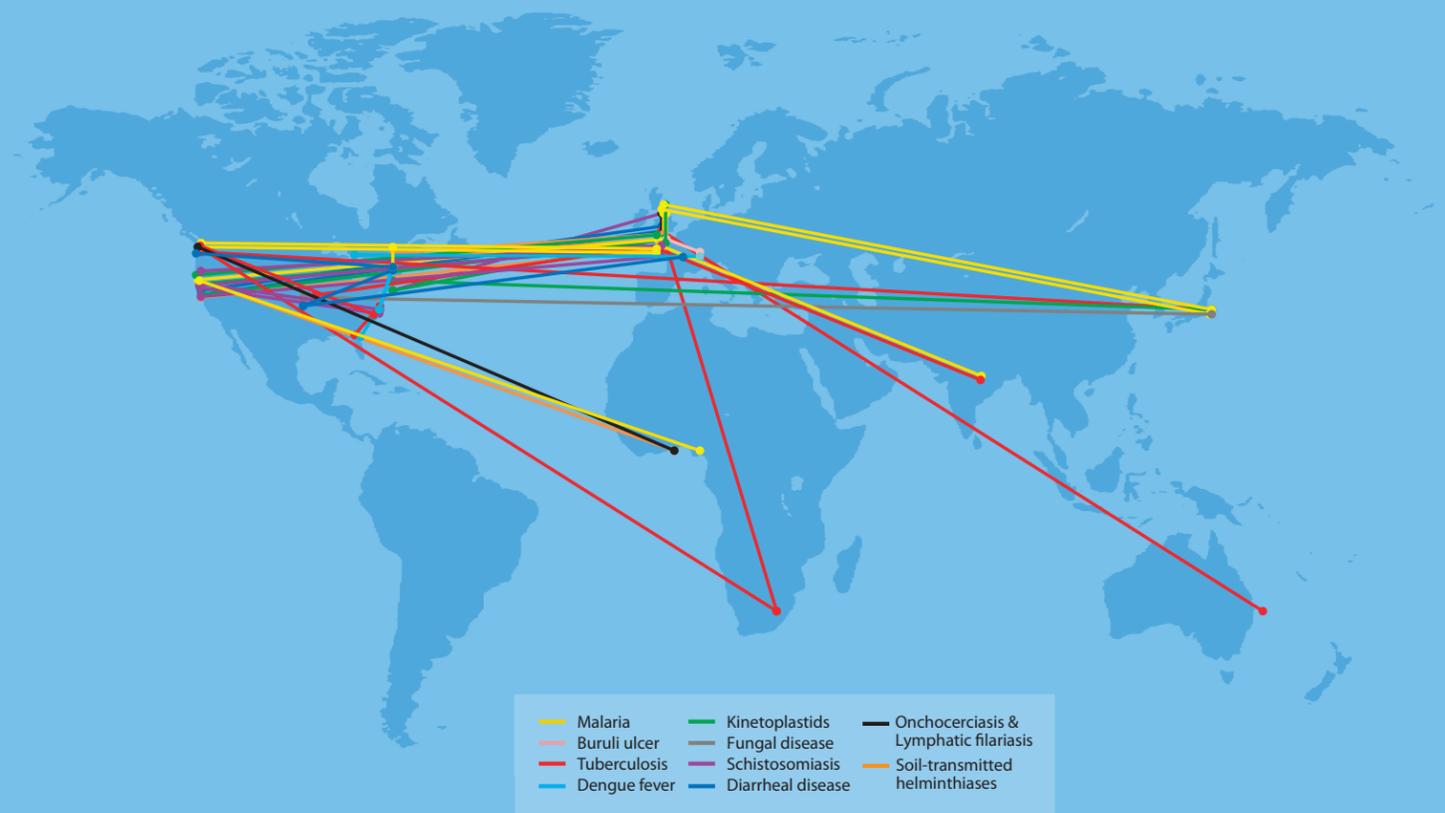
## Annual Report Opening Letter

## 2013 Partnering Objectives and Achievements

Collaboration is not a unique concept or approach in the biomedical sciences, yet the membership, commitment, and focus that WIPO Re:Search brings to neglected tropical diseases (NTDs), malaria, and tuberculosis is. Developing and sustaining partnerships is challenging – BVGH recognizes this and continues to take a very proactive and personal role in identifying and facilitating collaborations. This approach has been successful in establishing a significant number of relationships between Members, with 44 of these relationships progressing to formal agreements and research collaborations to date.

In 2013, BVGH continued to reach out to Members to learn about their current research programs, capabilities, areas of expertise, and partnering interests. BVGH engaged Members to move discussions forward and encouraged Members to make expedient decisions to either pursue or decline a proposed research opportunity. In 2013, BVGH established 31 research arrangements (25 agreements and 6 collaborations) and propelled an additional 12 to advanced stages of negotiation. As the Partnership Hub Administrator, BVGH also continued to seek out new collaboration opportunities, and established 30 projects that, by the end of 2013, were in early-stage discussions. The 2013 Partnership Hub objectives were to establish eight agreements and two research collaborations between Members, which BVGH has surpassed.

## Partnering across the globe



*“As a biopharmaceutical company, Alnylam recognizes the large impact a smaller industry player can have in the neglected disease field. By participating in WIPO*

*Re:Search, Alnylam expects to augment its efforts in the area of global health, while also demonstrating the utility and impact our technology can have worldwide”*

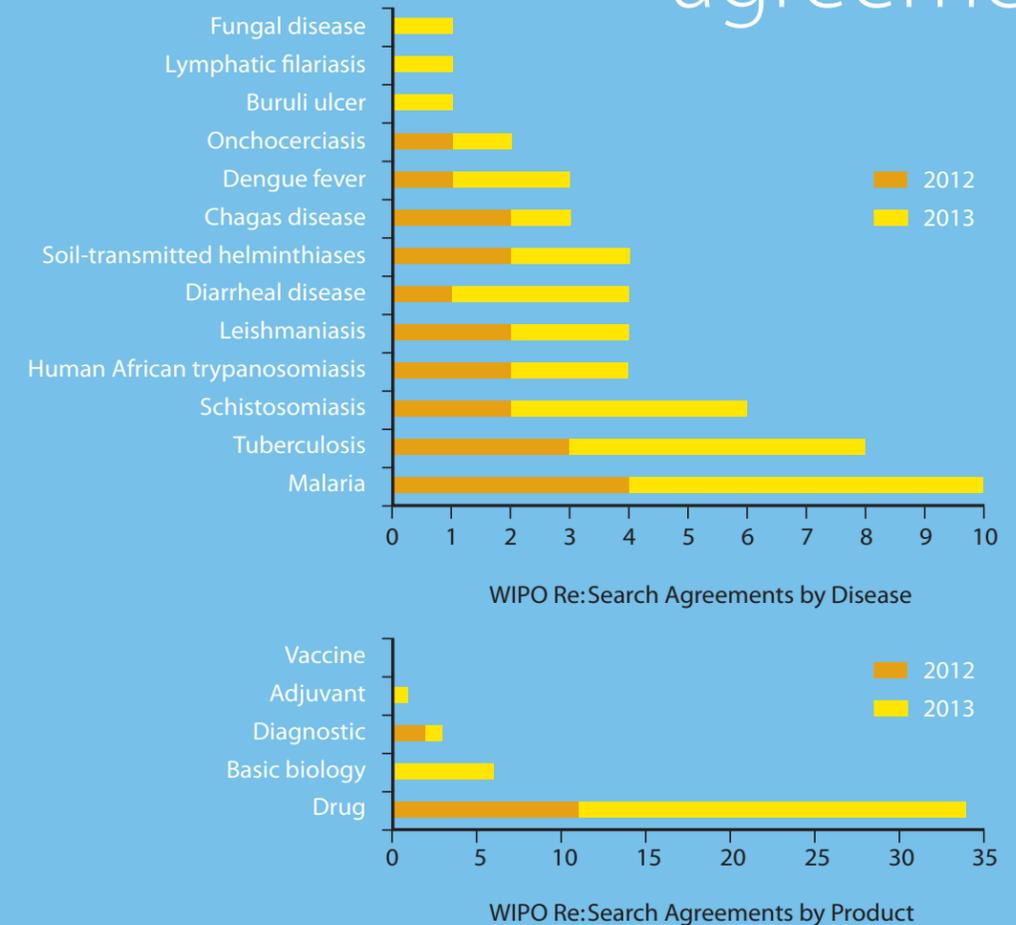
*— Dr. Steven A. Bossone, Vice President,  
Intellectual Property, Alnylam*

## 2013 Partnering Objectives and Achievements

In 2012, WIPO Re:Search agreements encompassed ten diseases of poverty. Approximately 46% of these concentrated on tuberculosis or malaria, while 15% involved kinetoplastid infections (Chagas disease, human African trypanosomiasis [HAT], and leishmaniasis) and 15% involved schistosomiasis. In 2013, malaria and tuberculosis still represented a substantial percentage (35%) of the research agreements, whereas the remaining agreements diversified. Three new diseases were added to the collaboration ranks (lymphatic filariasis, Buruli ulcer, and fungal disease), and kinetoplastid infections and schistosomiasis represented 13% of all 2013 agreements each. The growing number and increasing diversity of research agreements demonstrate the versatility of the WIPO Re:Search model and the commitment of its Members to develop products for a wide range of burdensome, neglected diseases.

Research agreements continue to evolve as more Users are taking advantage of the variety of expertise and assets that Providers can offer. In 2013, Members began to utilize Providers' expertise in formulation, computational chemistry, and structure-activity-relationship and PK/PD predictions to advance hit-to-lead candidates and drive compounds through preclinical studies. While the majority of the WIPO Re:Search agreements involve the use of pharmaceutical company compounds in drug discovery, in 2013, Members began utilizing Providers' IP assets to perform and enhance their basic research as well.

## Research agreements



*"As a multinational healthcare company with operations in over 140 countries, including numerous developing world countries, Novartis is dedicated to discover and develop new treatments for the many unmet medical needs globally, including diseases endemic in developing countries. Novartis recognizes the promise of WIPO Re:Search and anticipates positive outcomes for patients to be borne from the efforts of the Consortium and its Members"*

— Dr. Petra Keil, Head Global Public Policy, Novartis

## 2013 Recruitment Objectives and Achievements

Steady expansion of the Consortium's membership is essential to ensure that WIPO Re:Search meets its goals of accelerating the development of drugs, vaccines, and diagnostics targeting NTDs, malaria, and tuberculosis. New Members bring a diverse range of neglected disease R&D approaches, capabilities, and technologies to the Consortium, thereby expanding BVGH's opportunity to identify even more complementary and meaningful partnership opportunities.

In 2013, BVGH recruited 15 new User and/or Provider Members, six of which, are located in developing world countries. In addition, WIPO recruited one new Supporter Member. BVGH met its 2013 goal of recruiting ten new Members, with six from developing world countries.

With an additional 32 new Members joining in 2012 and 16 new Members in 2013, BVGH has numerous new research programs and collaborations to explore. Overall, a total of 80 organizations were Members of the WIPO Re:Search consortium by the end of 2013. Twenty-two of these Members are located in Low-to-Middle Income Countries, including 15 African research institutions.

## New Members

- ■ 60 Degrees Pharmaceuticals (60P)
- ■ Eskitis Institute, Griffith University
- ■ Institut Pasteur de Tunis\*
- ■ Institut Pasteur Korea
- ■ International Centre for Genetic Engineering and Biotechnology (ICGEB)\*
  - International Hospital Federation
- ■ McMaster University
- ■ Murdoch Childrens Research Institute
- ■ National Institute of Immunology (NII)\*
- ■ Nigerian Institute of Medical Research (NIMR)\*
- ■ Tulane University
- ■ University of British Columbia
- ■ University of Ibadan\*
- ■ University of Mauritius\*
- ■ University of South Florida (USF)
- ■ University of Vermont (UVM)

■ Provider ■ User ■ Supporter

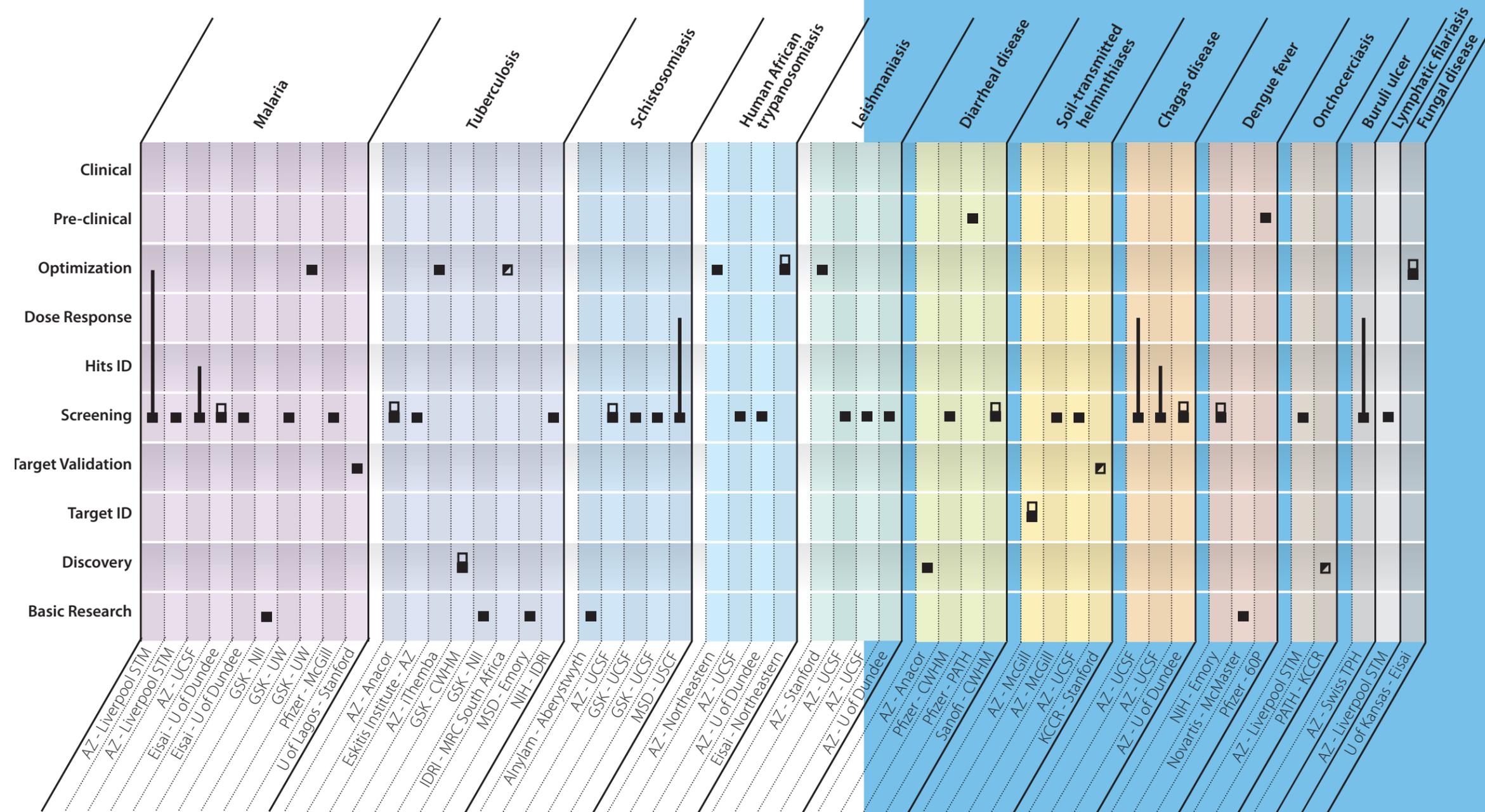
\* Developing world institution

*"GlaxoSmithKline believes that the challenges of developing new medicines for diseases of the developing world are far too complex for any one organization to tackle on its own. Since 2010, through the Tres Cantos Foundation, GSK has supported external scientists in their endeavors*

*to advance product discovery for malaria, tuberculosis, leishmaniasis, and Chagas disease. Partnering with BIO Ventures for Global Health and the World Intellectual Property Organization to share IP assets and establish partnerships through the WIPO Re:Search consortium was a logical progression. Our scientists are committed to the goal of reducing the burden of neglected diseases through collaborative activities with external researchers"*

*— Dr. Mike Strange, Head of Operations, Diseases of the Developing World R&D, GlaxoSmithKline*

# Pipeline



Partnered project initiated ■  
 Partnered project terminated □  
 Partnered project cancelled ▣

"MSD's vision is to make a difference in the health and wellbeing of individuals across the globe. WIPO Re:Search provides MSD and its scientists with an opportunity to further their commitment to health by supporting activities that expand on MSD's R&D efforts. We believe this consortium presents a unique opportunity for us to have an impact on advancing R&D for diseases of poverty and ultimately the individuals and communities of the developing world"

— GERALYN S. RITTER, Senior Vice President, Global Public Policy & Corporate Responsibility, Secretary and Assistant General Counsel, MSD

2013  
Developing World  
Scientist Hosting  
Arrangements

With the financial support of the Australian Government Funds in Trust through WIPO, BVGH facilitated hosting arrangements for five African researchers at WIPO Re:Search Member pharmaceutical and academic institutions.

Olfat Hammam at Stanford

Olfat is a Professor of Pathology at the Theodor Bilharz Research Institute (TBRI) in Egypt. Her research interests include the pathology of schistosomiasis, histopathological effect of anti-schistosomal drugs *in vivo*, and urinary bladder



carcinomas. Professor Michael Hsieh, at Stanford University, is hosting Olfat in his lab where she is examining bladder carcinomas

associated with schistosomiasis, while gaining experience using cutting-edge laboratory equipment and learning the pathology techniques used in Michael's lab.

Fidelis Cho-Ngwa at Novartis



Fidelis is an Associate Professor of Biochemistry at the University of Buea in Cameroon. His research interests include identifying natural products

active against *Onchocerca* worms and further elucidating the products' active components. Fidelis participated in a three-month sabbatical at Novartis' research site in Basel, Switzerland. During his sabbatical, Fidelis obtained the knowledge and skills needed to use high-performance liquid chromatography (HPLC) and mass spectrometry (MS) techniques to extract, purify, and identify compounds.

Christian Agyare at UCSF



Christian, a senior lecturer at the Kwame Nkrumah University of Science and Technology (KNUST) in Ghana, specializes in examining the potential of natural products and medicinal plants to be anti-microbial and anti-parasitic drugs. Christian is spending two five-month sabbaticals in the laboratory of Dr. Conor Caffrey at the University of California, San Francisco (UCSF). While visiting Conor's lab, Christian will gain experience cultivating, maintaining, and screening compounds against numerous pathogenic parasites, including the causative agents of schistosomiasis, trypanosomiasis, filariasis, malaria, and protozoal infections.

Wellington Oyibo at Novartis



Wellington is an Associate Professor at the University of Lagos in Nigeria. His goal is to identify malaria and non-malaria

fever biomarkers and develop diagnostics for complicated and uncomplicated malaria. During his three-month sabbatical at Novartis' site in Basel, Switzerland, Wellington worked alongside Novartis researchers, gaining exposure to Novartis' processes in innovation and industry dynamics, governance of R&D innovation, clinical development activities, and knowledge management.

Krupa Naran at AstraZeneca



Krupa Naran is a doctoral candidate at the University of Cape Town in South Africa. She is examining and validating the accuracy of an *in vitro* model of *Mycobacterium tuberculosis* in predicting drug efficacy *in vivo*. Krupa participated in a three-month sabbatical at AstraZeneca's Bangalore, India facility to gain experience designing and developing combination assays, adapting *M. tuberculosis* cultures to hypoxic conditions, and assessing the intracellular activities of drugs.

## 2013 Communication Objectives and Achievements

Effective communication between the Partnership Hub (BVGH) and WIPO Re:Search Members is critical to maintaining program momentum and establishing meaningful collaborations. Awareness of WIPO Re:Search within the neglected disease research community is also key to engaging new User and Provider Members and expanding the potential for innovative and impactful research.

To advance WIPO Re:Search communication efforts, BVGH distributes the monthly Partnership Hub Snapshot – an electronic newsletter that describes Partnership Hub activities, introduces new Members, highlights Provider contributions, and announces new research partnerships arranged through WIPO Re:Search. In February, BVGH launched a new Snapshot format, creating a more visually appealing, enticing monthly email update. Member feedback on the new format has been positive, and email open-rates in 2013 have exceeded industry standards (28.1% vs. 20%). By the end of 2013, the Snapshot was distributed to over 1,000 contacts monthly – a number that has increased from approximately 550 contacts in late 2012. These contacts represent individuals from 181 organizations and 32 countries.

To further engage and inform WIPO Re:Search's target audience, BVGH attended and presented the Consortium's activities and collaborations at ten national and seven international conferences and events in 2013. By continuing to present the achievements and impact of WIPO Re:Search in advancing NTD research and development at key events, WIPO Re:Search will gain recognition while expanding membership and awareness into new institutes and regions worldwide.

# Communications



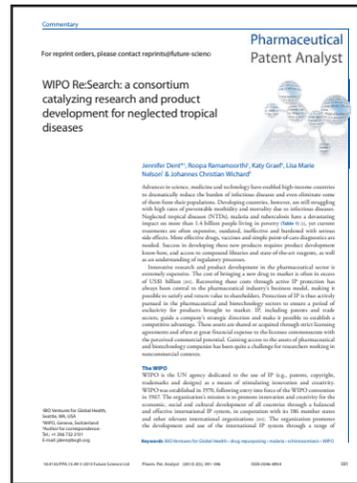
Global conference attendance

*"As a global biopharmaceutical company, AstraZeneca has a key contribution to make in the discovery and development of innovative medicines for some of the world's most serious diseases. We work closely*

*with others in the healthcare community because we know we can't meet all the challenges alone. WIPO Re:Search provided us with the opportunity to contribute our resources and expertise to external scientists working to develop products that impact health of the world's poorest"*

*—Dr. Manos Perros, Head of Infection and Site Head, Boston R&D, Innovative Medicines and Early Development, AstraZeneca*

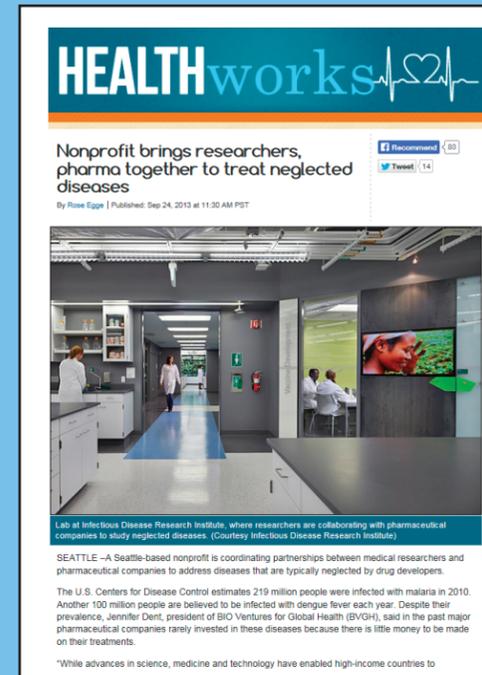
2013  
Communication  
Objectives and  
Achievements



BVGH published a commentary article entitled “WIPO Re:Search: a consortium catalyzing research and product development for neglected tropical diseases” in the *Pharmaceutical Patent Analyst* journal. The article described WIPO’s mission and role in the Consortium, BVGH’s partnering methods, and individual research collaborations facilitated between User Members and the eight WIPO Re:Search Founding Pharmaceutical Members.



BVGH created the “WIPO Re:Search Partnership Stories 2012 - 2013” brochure, which describes 26 collaborations and two hosting opportunities facilitated through WIPO Re:Search. The storybook provides an in-depth look at the manner in which collaborations are facilitated and the important research conducted by Members, as well as the diversity and complexity of arrangements that the Consortium has promoted.



BVGH drafted a press release announcing the 30th WIPO Re:Search collaboration, which catalyzed the publication of a follow-up article by Seattle’s KOMO News. The news article, entitled “Nonprofit brings researchers, pharma together to treat neglected diseases,” discussed the role of pharmaceutical companies in developing products for diseases of poverty, and presented the perspectives of researchers from Seattle-based Members, Seattle Biomedical Research Institute and the University of Washington.

*“Eisai seeks to utilize innovative methods to generate solutions for prevention and treatment of diseases. At its roots, collaborative research is not a novel activity, however, we believe that WIPO*

*Re:Search is an innovative way to stimulate new partnerships and facilitate impactful neglected disease research. We are proud to be a Founding Member of the WIPO Re:Search consortium”*

— Sayoko Sasaki, Corporate Officer,  
Vice President, Corporate Affairs, Eisai

## 2013 and 2014 Conclusions and Objectives

BVGH met and exceeded all program objectives in 2013:

- Established 31 new agreements
- Recruited 15 new Members, including six from developing world countries
- Arranged five sabbaticals for developing world researchers
- Continued and broadened communication activities

BVGH objectives and deliverables for 2014 include:

- Establish 15 new agreements
- Recruit at least ten new “targeted” User Members
- Recruit two new Funding Members in partnership with WIPO
- Continue communication activities to increase awareness of WIPO Re:Search

*“The phrase “neglected diseases” confronts us with the reality that not enough is being done to alleviate the suffering of millions of people. The issue is complex, but a universal call to action is for higher levels of scientific collaboration, aimed at speeding forward the next generation of safe, effective, affordable medicines and vaccines. WIPO Re:Search is an important step in higher-level collaboration and, two years in, is already stimulating new R&D and partnerships to help us retire the phrase “neglected diseases” from the human lexicon”*

*— Dr. Freda Lewis-Hall, Chief Medical Officer, Pfizer*