140 Collaborations Established

140+ Members

40 Countries
Dear WIPO Re:Search Members and Friends,

In these pages we celebrate another successful year for the WIPO Re:Search consortium. Membership has grown to include over 140 organizations representing 40 countries, and we continue to advance our mission each and every day.

In 2018, BVGH established 18 new research and development (R&D) collaborations using our novel targeted partnering approach. Guided by the communications strategy we developed with our partners at the World Intellectual Property Organization (WIPO), we increased awareness of the Consortium through publications, presentations, and an expanded social media presence. With support from the Government of Australia, we bolstered global biomedical R&D capacity by coordinating the placement of 14 East African and Indo-Pacific scientists at advanced research institutions in Australia and the United States, equipping them with important skills and experience that they are now bringing back to their home institutions. All of these activities align with the goals and objectives of the WIPO Re:Search Strategic Plan, 2017–2021.

While our central purpose is and always will be to improve the lives of those affected by malaria, tuberculosis, and neglected tropical diseases (NTDs), we also strive to create value for you, our Members. This is especially true at a time when your commitment and hard work are proving more impactful than ever. We look forward to building on our momentum in 2019 and recognize that there is much work left to be done. We thank you for your ongoing support of WIPO Re:Search, and we are eager to continue working with you to make this world a healthier place.

Jennifer Dent
President, BVGH
Through WIPO Re:Search, BVGH has connected us with outstanding scientific partners around the world, uniting their expertise and Johnson & Johnson’s resources to catalyze neglected disease R&D with the aim of creating new drugs. Without the Consortium, we would not have had the opportunity to share our Jump-stARter library and other assets so broadly, to potentially develop better solutions for these devastating diseases.

Dr. Paul Jackson
Johnson & Johnson

Advancing Business and Corporate Social Responsibility Objectives

- Repurposing of valuable assets to stimulate neglected disease R&D and improve health
- Opportunities to contribute to international dialogue and action on key global health issues (e.g., IP as a driver of R&D innovation, UN Sustainable Development Goals, access to medicines)
- Strengthening of Access to Medicine Index submissions through inclusion of WIPO Re:Search asset-sharing activities

Expanding Global Brand Awareness and Visibility

- Public demonstration of commitment to sharing IP to advance neglected disease R&D
- Members and collaborations highlighted in WIPO Re:Search publications, presentations, and social media platforms

Accelerating R&D Programs

- Customized R&D partnership development and alliance management services aligned with Members’ priorities and interests
- Access to technologies and expertise from other Members, saving valuable resources and time
- New perspectives on neglected disease R&D through partnerships with endemic-country scientists
- Relationship building with UN agencies (including WIPO and WHO), governments, funders, researchers, and companies
Through WIPO Re:Search, I am collaborating with leading international scientists and companies to repurpose Cameroonian medicinal plants and pharmaceutical compounds as new drugs for human African trypanosomiasis, leishmaniasis, and malaria. Thanks to the Consortium and the partnerships that BVGH has facilitated, I have new scientific publications, additional grant funding to pursue neglected disease R&D, and increased visibility of my research.

Professor Fabrice Boyom
University of Yaoundé I

I am grateful to BVGH for introducing me to a major pharmaceutical company — which might not otherwise have returned my calls! — to take my tuberculosis drug discovery research to the next level. We have received not only high-quality compound libraries for screening, but also scientific expertise and logistical support for our ongoing development of the most promising compounds. I am energized by our successes to date and by the prospect of improving tuberculosis treatment for millions of people worldwide.

Dr. Christina Stallings
Washington University in St. Louis

Providing Additional Value for Low- and Middle-Income Country (LMIC) Organizations and Researchers

• Peer-reviewed publications describing collaboration outcomes
• Increased eligibility and competitiveness for research funding

Increasing Scientific Recognition

• Access to cutting-edge R&D resources not available in their home countries
• Opportunities to develop new skills through mutually beneficial collaborations
• Career development enabled by publications and presentations on WIPO Re:Search activities
2018 COLLABORATIONS

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<th>Partners</th>
<th>Disease</th>
<th>Asset Shared</th>
<th>Phase</th>
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<td>Eisai, IDRI</td>
<td>Leishmaniasis</td>
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<td>Compounds</td>
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<td>Eisai, U Buea</td>
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<td>GRIDD, U Ibadan</td>
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<tr>
<td>GSK, UCSF</td>
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<td>J&amp;J, U of T</td>
<td>Soil-transmitted helminthiases</td>
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<tr>
<td>J&amp;J, U Yaoundé I</td>
<td>HAT, leishmaniasis, malaria</td>
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<tr>
<td>J&amp;J, WUSTL</td>
<td>Malaria</td>
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</tr>
<tr>
<td>MIT, U Buea</td>
<td>Onchocerciasis</td>
<td>Technology</td>
<td>Discovery</td>
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<tr>
<td>MIT, U Ibadan</td>
<td>Schistosomiasis</td>
<td>Technology</td>
<td>Discovery</td>
<td>Diagnostic</td>
</tr>
<tr>
<td>MMV, UCSF</td>
<td>Malaria</td>
<td>Assay</td>
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</tr>
<tr>
<td>MSD*, GW</td>
<td>Tuberculosis</td>
<td>Assay</td>
<td>Hit identification</td>
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</tr>
<tr>
<td>Novartis, PHRI</td>
<td>Other (nontuberculous mycobacteria)</td>
<td>Compounds</td>
<td>Screening</td>
<td>Drug</td>
</tr>
<tr>
<td>Pfizer, IDRI</td>
<td>Tuberculosis</td>
<td>Compounds</td>
<td>Screening</td>
<td>Drug</td>
</tr>
<tr>
<td>Pfizer, WUSTL, GW</td>
<td>Malaria</td>
<td>Expertise</td>
<td>Hit-to-lead optimization</td>
<td>Drug</td>
</tr>
<tr>
<td>Takeda, CIDR</td>
<td>Chagas disease, leishmaniasis, malaria, other (Cryptosporidiosis, toxoplasmosis)</td>
<td>Compounds</td>
<td>Screening</td>
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<tr>
<td>U Buea, U Melbourne</td>
<td>Onchocerciasis</td>
<td>Assay</td>
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<tr>
<td>UBC, U Buea</td>
<td>Onchocerciasis</td>
<td>Assay</td>
<td>Discovery</td>
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</tr>
</tbody>
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* MSD is a trademark of Merck & Co., Inc., Kenilworth, NJ, USA

These new collaborations align with BVGH’s targeted partnering strategy by addressing the greatest unmet medical needs through innovative approaches that maximize the likelihood of product success and uptake.
Collaboration Highlights

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Ongoing Collaborations

- MSD and the Walter and Eliza Hall Institute of Medical Research received a US $3.5 million award for antimalarial drug development
- 3 natural product drug discovery teams published peer-reviewed papers
  - University of South Florida and University of Yaoundé: *Parasitology Research*
  - Kwame Nkrumah University of Science and Technology and University of California, San Diego: *Journal of Parasitology Research*
  - UBC and University of Buea: *PLoS Neglected Tropical Diseases*

Welcome, New Members!

These Members will be critical to expanding the breadth and impact of WIPO Re:Search collaborations.
- Ahmadu Bello University
- Burnet Institute
- LifeArc
- Public Health Research Institute
- University of Florida
- University of Papua New Guinea School of Medicine and Health Sciences
- Usmanu Danfodiyo University, Sokoto

New Collaborations

Expanding the Diagnostics Collaboration Pipeline

An MIT researcher has shared Ampli Blocks, a set of blocks that provide the platform for diagnostic technology, to support a University of Buea researcher’s development of a point-of-care (POC) diagnostic device to detect *Onchocerca volvulus* and a University of Ibadan researcher’s development of a POC diagnostic device to detect *Schistosoma haematobium*.

Sharing Industry Expertise to Advance Drug Development

A Pfizer scientist provided expertise on transdermal drug delivery to investigators from WUSTL and GW who are exploring alternative administration techniques for their antimalarial drug candidate.

Repurposing Pharmaceutical Compounds for Drug Discovery

Eisai provided investigators at IDRI with selected compounds to screen for activity against *Leishmania donovani* and *Mycobacterium tuberculosis*. 
The WIPO Re:Search Fellowship Program is building an international community of researchers to catalyze R&D for neglected diseases. In 2013, the Government of Australia funded training and research fellowships for six African scientists in industry and academic laboratories. Following the success of these fellowships, a second round was initiated in 2017, with 14 researchers selected from East Africa and the Indo-Pacific region.
Key Impacts

- 20 fellowships totaling 100+ months of training
- Grant funding - over US $750,000 for one fellow
- Career development
  - Promotions
  - Acceptance into Ph.D. program catalyzed by fellowship
  - Adjunct professor position at host institute awarded to fellow
  - Publications and presentations to international audiences
- Continued and new research collaborations

1st Malaria World Congress

Supporting the Congress’ aims of convening myriad stakeholders for united and cooperative action against malaria, BVGH organized a colloquium and Congress panel session to

- Present the WIPO Re:Search Fellowship Program to a global audience as a model of best practices for international research collaborations
- Highlight program benefits for fellows, hosts, and funders
- Foster development of a regional network of current and future research leaders from the fellowship cohort

Fellowship Highlights

Dr. Deus Ishengoma developed three grant proposals, published seven papers in peer-reviewed journals, and actively shared his learnings with his students in Tanzania during his fellowship. His collaborations are expected to continue with a pilot study in 2019, which will provide preliminary data for additional joint grant proposals. He will also continue to apply the methods and skills acquired from the fellowship to train the next generation of scientists.

The aim of Dr. Abdirahman Abdi’s collaboration was to uncover the key molecular mechanisms underlying the human response to infection by malaria parasites. The data obtained during his fellowship will form the basis of a collaborative grant application. He plans to transfer the skills learned to Kenyan researchers and increase the capacity to conduct disease research in Kenya.

During her fellowship, Ms. Dulcie Lautu used novel genomic approaches to investigate drug resistance genes in malaria parasites that were collected from Papua New Guinea. Facilitated by her fellowship, her Ph.D. program at the University of Melbourne focuses on developing diagnostic tools for genomic surveillance appropriate for developing countries.
Developed Communications Strategy:
Roadmap for outreach to partners and stakeholders

Publications

- Partnership Hub Snapshot newsletter and 2018 Mid-Year Report
- How to Accelerate Pharmaceutical R&D: A New Framework for Sharing IP with Global Health Researchers
- Creating, Managing, and Advancing Collaborations: The Road to Successful Partnerships

Presentations

- Japan Pharmaceutical Manufacturers Association
- Licensing Executives Society Global Technology Impact Forum
- Malaria World Congress
- MedChemNet Interview
- WIPO General Assembly Side Event

People are Talking about WIPO Re:Search

- Access to Medicine Foundation
- Biotechnology Innovation Organization
- EurekAlert!
- Intellectual Property Watch
- WIPO Re:Search Members

Social Media Promotion

Peer-Reviewed Publications by WIPO Re:Search Investigators

- Conditioned Media and Organic Elicitors Underpin the Production of Potent Antiplasmodial Metabolites by Endophytic Fungi from Cameroonian Medicinal Plants, Parasitology Research
- Effect of Phenotypic Screening of Extracts and Fractions of Erythrophleum ivorense Leaf and Stem Bark on Immature and Adult Stages of Schistosoma mansoni, Journal of Parasitology Research
- Filaricidal Properties of Lantana camara and Tamarindus indica Extracts, and Lantadene A from L. camara Against Onchocerca ochengi and Loa loa, PLoS Neglected Tropical Diseases
Collaborations
Establish 12 targeted collaborations
Support ongoing collaborations

Recruitment
Recruit 5 new Latin American Members

Communications
Promote WIPO Re:Search through:
- Collaboration storybook
- Advancing collaborations brochure
- Partnership Hub Snapshot newsletter
- Partnership Hub Mid-Year and Annual Reports
- Social media

WIPO Re:Search Fellowships
Manage ongoing and new fellowships