

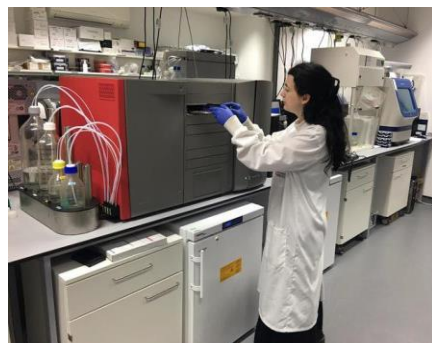
The International Wheat Yield Partnership

Annual Report

2015/16



We envisage a wheat plant with increased biomass and an optimized plant and root architecture that overall captures more sunlight; converts, distributes and applies the captured energy more efficiently; utilizes more of this energy to produce more and larger grains; and overall results in a new type of wheat plant with transformative levels of yield and productivity for adaptation to local environments.



**International
Wheat Yield
Partnership**

Research to Deliver Wheat for the Future

Preface

Following the first operational year of the International Wheat Yield Partnership (IWYP), we are pleased to publish our first Annual Report. It provides a summary of the establishment of our organization, our goals, how we are organized, and most importantly our science program, all of which have been developed in this first full year of operation. IWYP is now a progressive and novel international partnership with the mission of addressing a looming deficit in global food and nutritional security. Our management and governance systems have been designed to drive our expanding science program to produce innovations in the area of wheat yield improvement and thus provide necessary solutions that will be translated into tangible impact in world food production systems.

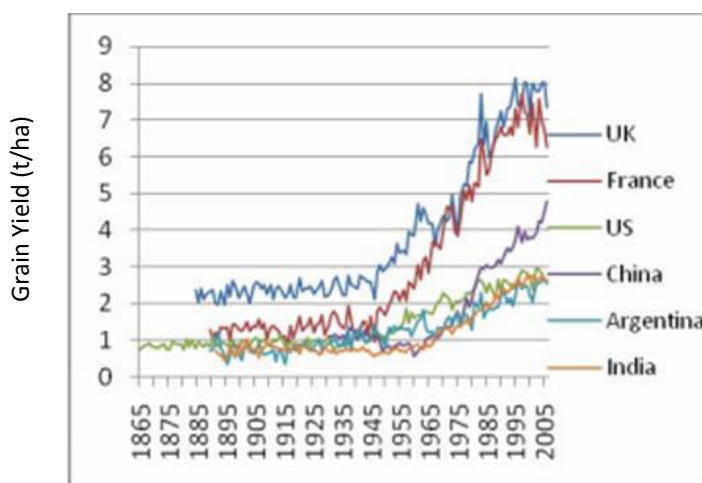
We hope that this Annual Report will provide evidence that IWYP has achieved much in its first year and made a strong start to finding the scientific breakthroughs necessary for feeding humanity. While our science is only just beginning, it is being built on the foundation of a distinguished history of achievements in leading research institutions around the world and support by leading Funding Agencies.

Summary of Achievements 2015-16

- Established IWYP as a new, leading organization for international wheat plant science and development
- Launched a US\$100 Million integrated research program targeted at enhancing wheat photosynthesis, energy efficiency and optimizing plant development
- Brought in new public and private partners
- Awarded eight grants after a competitive peer review process including 24 institutions in 7 countries
- Adopted five other projects aligned with IWYP goals
- Created and implemented an overarching science strategy for improving wheat yield potential
- Launched our redesigned website and other social media links
- Held a conference at CIMMYT for IWYP researchers
- Initiated the process of adding value by stimulating links between projects and tracking outputs
- Initiated evaluation of novel germplasm in field trials at the IWYP Hub, measured photosynthesis and evaluated respiration in thousands of genotypes, stacked yield genes, identified new genes regulating seed development
- Held an aligned Competitive Call with USDA NIFA to expand our research portfolio

Why IWYP?

Globally, wheat is the most important food staple crop providing about 20% of daily calories and protein, and is currently grown on approximately 230 million hectares. It is estimated that by 2050 there will be more than 9 billion people on earth, thus wheat demand is expected to increase by 70%. The annual rate of grain yield (see figure at right) has dropped considerably since the Green Revolution in the 1960s-80's and so research breakthroughs are critical to elevate it to the levels required in the near future, nearly double the current rate. Importantly, given the lengthy time necessary for research, development, evaluation and deployment of substantially improved crops (in wheat from research to "farmer ready cultivars" ca. 15 years), the time to start the research to make the required breakthroughs is now.



Source: FAO STAT and World Bank report

About IWYP

A New Model to Coordinate International Research

IWYP, established under the Wheat Initiative (<http://www.wheatinitiative.org/>) is a new and unique coordinated international research initiative with a goal to generate the breakthroughs that will raise the genetic yield potential of wheat by up to 50% in the next two decades with the ultimate goal of generating significant yield improvements in farmers' fields.

IWYP is a voluntary consortium of international public funders, research organizations and private industry partners who share the common goal of significantly increasing the genetic yield potential of wheat in the near future. IWYP embodies an integrated, multi-disciplinary, international research program involving a combination of public and private funded research, in-kind support, and where possible, aligned with other current relevant research programs worldwide. To reach its goal, IWYP deploys a new and efficient model for funding and coordinating a large applied international research effort that is focused on delivery. Specifically, the operational model links funding and research organizations to collectively and efficiently achieve goals via:

- ◇ An overall strategy to “approach it differently”
- ◇ A research program that seeks step-changes, takes risk and is metrically driven to coordinate, plan and integrate results
- ◇ A commitment to collaboration, and the overarching objectives and goals
- ◇ Coordination, transparency and inclusiveness facilitated by independent management
- ◇ A focus on delivery with a strong sense of urgency
- ◇ A structure that enables flexibility and responsiveness
- ◇ A commitment to competitive funding processes
- ◇ Synergistic approaches to avoid duplication of activity and competition, internally and externally
- ◇ Open communication of results and exchange of germplasm, data and materials as necessary to achieve the overall research and delivery objectives
- ◇ Coordination and integration of the overall program to generate added value beyond what can be realized from individual research projects
- ◇ Utilization of a central downstream development platform to deliver discoveries in elite germplasm and push them toward deployment

- ◇ Linkage with the private sector to ensure commercial relevance and facilitate deployment of discoveries

IWYP Operational Strategy

Key Tactics

- Successfully deploy a new model for internationally coordinated research funding that enables scientific breakthroughs
- Combine the best ideas internationally
- Maintain focus (avoid scope creep)
- Exploit our coordinated Science Program with a unique open-access structure, inspired and led by an independent management team, linked with the private sector and developed with state of the art technologies
- Use project management practices to track progress of research projects and our integrated program against timelines, milestones and deliverables
- Coordinate discoveries and outputs, linking breakthroughs to validation and assessment, pushing delivery to breeding programs
- Create significant added value by integrating discoveries

IWYP Members and Their Roles

The success of IWYP relies on the involvement and commitment of its members. From management to research these include:

- **Funding and research organization partners** – provide the resources
- **Private industry partners** – provide strategic direction for research, deployment, commercial products
- **Science and Impact Executive Board (SIEB)** – responsible for overall strategy, operational direction and recommendation of research projects to funding organizations
- **Independent managers** – SIEB Chair, Program Director and Manager, Secretariat – guide the administration, operations, coordination, science strategy implementation
- **Scientific Advisory Committee (SAC)** – advises IWYP Management on elements of the IWYP Science Program and certain operations

- **Scientists** – most essential team member stakeholders that are selected and held to be, creative, engaged, responsible, focused on delivery with a sense of urgency, collaborative and sharing
More about the IWYP Members can be found on our website (www.iwyp.org).

IWYP Uses Internationally Competitive Calls to find the Best Relevant Science

To achieve its goals, IWYP seeks to commission the best relevant science worldwide and be as comprehensive and inclusive as possible. This is being accomplished firstly through international Competitive Calls for research proposals. The submitted responsive proposals are peer reviewed by scientific experts, projects are selected for funding and those deemed fit-for-purpose by the SIEB and Funding Agencies are added to the overall IWYP Science Program. Secondly, we continually seek relevant research that is funded outside of IWYP to join with IWYP as “Aligned Projects” thereby expanding our overall research effort. Lastly, IWYP aligns with other national or international research initiatives where appropriate. Aligning with IWYP benefits these research projects by giving them early access to the IWYP science team and most importantly to our central development platform (IWYP Hub) to develop their research outputs through to delivery.

Two Competitive Calls have occurred during the first year, one conducted by IWYP and another aligned with the USDA National Institute of Food and Agriculture (NIFA). Several Aligned Projects have also been brought into the IWYP project portfolio.

More about the Competitive Calls, Aligned Projects and the IWYP Hub can be found on our website (www.iwyp.org).

IWYP Operations

All components of the IWYP operations were established over the first year. The IWYP Science and Impact Executive Board (SIEB) is the top level of governance and decision making body for IWYP and is led by an independent Chair. The SIEB is comprised of representatives from our Consortium Partners (funding and research organizations) and executive level members from private industry.

The administration and operations of IWYP, as well as the coordination of the Science Program, is managed by an independent management team led by the

Program Director. The Program Director is assisted by the Secretariat which consists of the Program Manager and Program Assistant. For the technical and delivery aspects of the Science Program, the Program Director is advised by the IWYP Scientific Advisory Committee (SAC) which has met twice during this first year.

More about the IWYP Partners and management can be found on our website (www.iwyp.org).

Partnering with the Private Sector

Private companies play a key role in IWYP by helping guide overall strategic direction, maintaining commercial relevance, selecting projects and commercial deployment of IWYP research innovations. The private sector is expert in identifying grower needs, building and managing complex research portfolios, identifying gaps, product development, the latest in technology development and deployment, and knowing the areas of ongoing research throughout the industry. Further, IWYP seeks to link private industry with projects as early as possible to create robust and durable public-private partnerships thereby enabling strong commercial pull. Private Members with large research and development capabilities therefore have access to research proposals at an early stage.

Private Members get several additional benefits by joining IWYP that include access to a unique network of wheat research organizations, early insights and access under license to tools and technologies developed within IWYP, early access to and information on improved germplasm and the possibility to proactively engage in the research program. During the first year, the number of IWYP Private Members has grown from two to seven.

More about our Private Partners and Private Membership can be found on our website (www.iwyp.org).



The IWYP Science Program

A Strategic Plan and Research Portfolio to Drive Success and Deliver Outputs

The Science Strategy to Achieve our Goals

Research and breeding programs pursuing the genetic improvement of crop plants typically rely on proven processes consisting of hybridizing parents with desirable traits followed by an inbreeding generation to allow genetic recombination to occur at random, naturally. This is followed by a selection step, typically based on visual plant characteristics, choosing desirable plants within a large genetically diverse population. Although this process continues to be successful to improve crop plants, the rate of yield improvement has slowed overall to less than 1% per year which is not enough on its own to generate the yield levels necessary in the coming decades.

However, crop improvement processes have evolved rapidly in the last 1-2 decades and today more commonly utilize new technologies and an increasing knowledge of traits and their genetic basis to become more precise, efficient and faster. The process of selecting parents and offspring with desirable traits and better yield performance is now routinely assisted by cost effective molecular genetic markers that are associated with known genes and traits. New precision high-throughput phenotyping technologies enable researchers to quickly and accurately identify plants with certain desired characteristics on a larger scale



than previously possible. These new tools are the heart of IWYP's technical strategy.

IWYP initiated its "Science Program" with several key end point targets / traits defined from the outset. These traits, selected for specific effects, were chosen by an international team of experts based on their collective

experience and findings from past and current research. The traits were judged as potentially able to lead to significant gains in the genetic yield potential of wheat beyond what current plant improvement programs can produce. Importantly, improvement of these traits is only possible due to the innovations, discoveries and technological advances in plant sciences that have been made in only the last few years.

IWYP is supporting research that targets enhancing the process of photosynthesis, known to be limiting in



wheat plant productivity today. This goal will be achieved by improving wheat's ability to capture and process the sun's energy and ensuring that

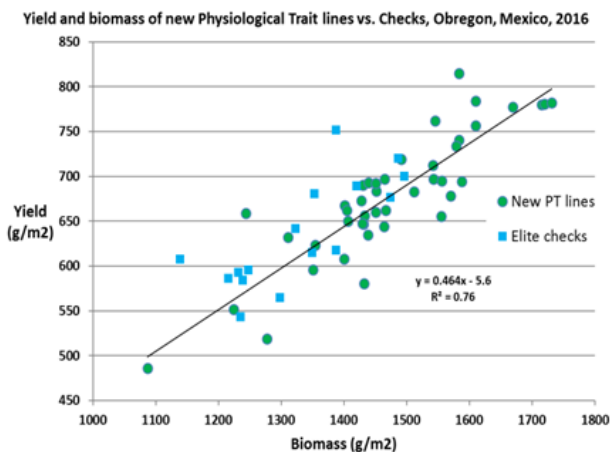
some of the additional captured carbon ends up in the wheat grain. Wheat uses only about 1% of available sunlight to produce the parts that we eat, compared to corn's 4% efficiency and sugarcane's 8% efficiency. Even increasing wheat's photosynthetic efficiency from 1% to 1.5% would enable farmers to dramatically increase their grain yields on the same amount of land, using no more water, fertilizer or other inputs.

IWYP's research targeting photosynthesis includes several approaches. Some selected research projects seek to optimize photosynthetic efficiency by improving key enzymes or substrates along essential biochemical pathways. There are projects that are attempting to alter different genes and mechanisms to boost carbon fixation and then enhance its partitioning to developing grain. Other research is seeking to discover traits that increase the plant's biomass or alter the plant's architecture so that more light is captured on larger surface leaf area so that more of the additional energy gained can be channeled into producing more and larger grain.

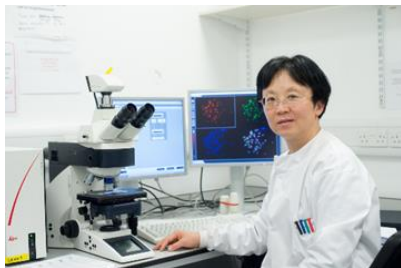


Amongst wheat elite germplasm collections today there are examples that exhibit enhanced radiation use efficiency and these have been shown to be associated with larger plants at flowering. Thus, our approach is

supported with positive evidence. Also, the results from CIMMYT in the Figure below show clearly the relationship between the biomass and the grain yields of wheat plants.



Wheat plants containing pieces of chromosomes introduced from wild relatives are being scored for increased rates of photosynthesis and growth with the hope of finding new genetic elements that produce larger effects than those in wheat today. The first results from these introductions will be gained in 2016/17. There is already some evidence that these wild relatives are sources of higher rates of photosynthesis, and they have contributed genes for many other important traits in the past, so this approach also has support. We plan to move these sorts of plants to the IWYP Hub at CIMMYT in 2017 for analysis in their field conditions in comparison with other germplasm.



Some projects are seeking to enhance mechanisms that determine grain size and number in order to produce more yield per unit of energy. There is considerable support for the hypothesis that the efficiency with which sugars are incorporated into grains influences the rates at which more photosynthate is made. Therefore, IWYP is exploring whether plants with more and larger grains, due to the presence of known defined genes, fix carbon at a greater rate and vice versa. We should have some answers to this during 2016/17.



Harvest index, or the proportion of the total plant mass that is harvestable grain, is of particular interest to IWYP in that discoveries made in the Green Revolution increased this trait to achieve yield levels not seen before. Some projects are targeting optimization and timing of wheat plant development and growth to improve harvest index and overall yields.

To facilitate the exploitation of IWYP discoveries, defining the underpinning genetics and developing tools to efficiently incorporate and track our innovative traits in breeding programs have been made requisite in our research projects. This is also essential to enable us to combine discoveries more easily to get larger effects.

Most importantly, we have started to integrate both outputs and opportunities of IWYP sponsored research projects to create an overall coordinated applied Science Program. We want to ensure that IWYP research outputs do not become “academically terminal” and not effectively applied to reach our goals and objectives.

Building from the separate discoveries of improved traits, to their field validation and creation of optimum combinations we hope to succeed in building a wheat plant with increased biomass and an optimized plant and root architecture that overall captures more sunlight; converts, distributes and applies the captured energy more efficiently; utilizes more of this energy to produce more and larger grains; and overall results in a new type of wheat plant with transformative levels of yield and productivity for adaptation to local environments. Some candidates with improved biomass have already been planted in the field in CIMMYT in this first year in the hope of gaining early advances.

We are continuing to expand our research portfolio by identifying gaps, building on current projects and seeking new opportunities as they arise.

More about IWYP research projects can be found on our website (www.iwyp.org).

Current IWYP Research Projects

From the IWYP 1st Competitive Call, projects that were chosen involved institutions and research teams from the United Kingdom, Australia, United States, Mexico, India, Argentina and Spain. The total value of this first IWYP funded research is around US\$20 million.

Funding agencies include the Biotechnology and Biological Sciences Research Council of the UK (BBSRC), Grains Research and Development Corporation of Australia (GRDC), United States Agency for International Development (USAID), United States Department of Agriculture - Agricultural Research Service (USDA-ARS),

Department of Biotechnology of India (DBT), and Consultative Group for International Agricultural Research (CGIAR) through the International Maize and Wheat Improvement Center in Mexico (CIMMYT).

IWYP also seeks to expand its research base by formally engaging relevant research projects funded outside of IWYP (“Aligned Projects”). This research enables IWYP to be as inclusive as possible and also potentially gain some “early wins”. To date, IWYP has aligned with 5 fit-for-purpose ongoing research projects from Mexico, Australia and Canada.

More about current IWYP research, Aligned Projects and the scientists involved can be found on our website (www.iwyp.org).

Science areas of the first 8 IWYP funded projects

- Finding and employing traits and genes to increase photosynthesis
- Discovering genes to boost spike development
- Reducing respiration and thereby enhancing photosynthetic efficiency
- Optimizing canopy architecture to increase carbon capture and conserve nitrogen
- Using selected genes from other species to increase biomass and yield
- Optimizing phenology leading to increased harvest index

Science areas of the first 5 IWYP “Aligned Projects”

- Defining the underlying genetic regulatory factors for increased photosynthetic efficiency and their functions, then developing markers to facilitate breeding with best alleles
- Selecting traits for increased biomass and increased canopy photosynthesis from diverse populations
- Selecting traits that increase harvest index and developing efficient selection approaches to identify them
- Employing upright canopy architecture to enhance radiation use efficiency

Expanding the IWYP Research Portfolio

As IWYP continues to build its partnership and expand its Science Program, we are constantly seeking new partners. As the IWYP brand grows through our activities and progress, we hope to leverage our success to reach our goals in collaboration with many international partners, both public and private. This is

important to increase the number of relevant discoveries and have more options for achieving impact.

Currently, an IWYP Aligned Competitive Call is in progress with USDA NIFA (United States Department of Agriculture, National Institute of Food and Agriculture) in the USA with an anticipated budget of ca. US\$15 million. The research areas were defined in conjunction with IWYP and focused on using new technologies to discover novel yield-enhancing traits, and increasing grain numbers and size (sink). Results of this Call will be made available towards the end of 2016. We anticipate that at least 7 new research projects will be selected and added to the IWYP Research Portfolio.

Also, IWYP is planning another IWYP sponsored Competitive Call potentially in later 2016 or early 2017. The exact timing, research areas sought and targeted funding amounts are to be determined in the next few months.

Other national Competitive Calls sponsored by IWYP partners, such as the one mentioned above with USDA NIFA, are likely to be determined in the next 1-2 years.

Lastly, as previously stated, IWYP will continually seek to engage and align with relevant research projects funded outside of IWYP to increase the chance of overall success.

More about the current NIFA IWYP Call can be found on our website (www.iwyp.org).

Linking our Research to Maximize Impact

It is essential to IWYP and its partners that our Science Program is not conducted as a series of unconnected research projects. The IWYP strategy is to coordinate the researchers and projects, and combine their outputs in order to build a unified stakeholder team while generating added value over and above the impact of individual project innovations. The IWYP Hub, described below, serves an integral function to this end. However, other tools are being developed to link our researchers from the early stages of research in order to share ideas, data and information, and also to seek to leverage outputs to find innovations not specifically sought or envisaged in individual projects. Sharing and integration of research will increase the likelihood of success of the individual projects themselves and enable IWYP to generate added value towards our overall goals.

IWYP has put in place systems for regular meetings, annual conferences and field tours whereby researchers can share progress, ideas, data and information and showcase discoveries; a dedicated central data

management system where researchers can store and share data and information as it becomes available; a private collaborative workspace, accessible through the IWYP website, that provides links to data management software, a shared drive housing data and information, a calendar of important dates and events; and last but not least, a mechanism for IWYP Management to continuously track progress through project plans and reports, and communicate to the team in various formats. Very importantly, the IWYP Hub, described in detail below, also serves an integral late stage function for linking research and integrating results to generate added value and to deliver outputs to breeding programs so that our discoveries can be built into products and create impact.

The IWYP Program Conference

A major step to solidify IWYP research links was achieved via the first annual IWYP Program Conference held in March 2016 in Obregon, Mexico. It was attended by more than 40 delegates from all over the world. During the conference, IWYP Management, researchers and private industry members spent 3 days learning the details of the IWYP research projects, how IWYP is integrating the projects and outputs, brainstorming on how to be cohesive and efficient as a research group and finally touring the IWYP Hub in the field at the CIMMYT



research station. The conference was a great success and served as an important building block for the coordinated IWYP Science Program.

The IWYP Hub *A Translational Research and Product Development Pipeline to Enable Delivery*

IWYP supports fit-for-purpose research that will result in discoveries that can be practically applied and make real impact on wheat yields. As previously mentioned, IWYP research projects are also charged with determining the underpinning genetics of their

trait discoveries and to create tools that facilitate their efficient use in breeding programs.

The IWYP Hub is a central technical platform where IWYP research discoveries are brought for comparative testing, then integrated / combined together in various iterations, validated and the best traits and trait combinations are then incorporated into elite germplasm for rapid dispersal to breeding programs worldwide.

Thus, the IWYP Hub provides a pivotal resource for the IWYP Science Program as a whole. It is a unique, fundamental and distinguishing feature of IWYP relative to most other research initiatives. This aspect of the IWYP Science Program is considered a critical asset by funding organizations, private industry and the wheat research community.

This key development step also creates the opportunity for generating added value through the integration of innovations to identify synergies and create impact greater than the sum of individual parts. To accomplish this, IWYP actively tracks research progress, and plans and actively manages the delivery of all of our research innovations to the IWYP Hub. Here, the different discoveries are compared and validated side-by-side, incorporated into elite germplasm, tested in relevant environments, combined to optimize the impact on yield and then the novel traits and germplasm are distributed to breeding programs worldwide as quickly as possible.

The IWYP Hub is managed by CIMMYT (International Maize and Wheat Improvement Center), which brings several advantages that fit IWYP's needs and goals such as: a long established expertise in breeding elite wheat germplasm with demonstrated global economic impact; world renowned breeding facilities with a critical mass of physiologists, geneticists, breeders and support staff; the necessary expertise in trait validation through field trials and precision phenotyping plus genotyping; a full-time dedicated IWYP Hub manager with reporting obligations to IWYP; connection to the well-established and



successful International Wheat Information Network (IWIN) for distribution of traits and germplasm to worldwide breeding programs; and as the CIMMYT site(s) represent the major global wheat production

environments, validation and deployment of research outputs are likely to have a larger impact.

The IWYP Hub formally began operations in the fall of 2015. Traits and germplasm currently being developed at the IWYP Hub involve the outputs of Aligned Projects originating from the previous work of the former Wheat Yield Consortium and contributed to IWYP by CIMMYT. These traits and germplasm are perfectly aligned with the research objectives of IWYP and we hope to gain some “early wins” with these innovations.

More about the IWYP Hub can be found on our website (www.iwyp.org).



Communication Enhancements

Communication and regular interaction is essential to build, maintain and actively manage the IWYP Science Program as a coordinated and cohesive team of focused stakeholders. As the IWYP brand grows through our activities and progress, we hope to leverage our success to reach our goals in collaboration with as many international partners, both public and private, as possible.

As electronic communication drives the world today, we view the IWYP website as our main introduction and global communication vehicle. Therefore, the IWYP website has recently been completely redesigned in



response to our growing needs and now includes much more detailed information regarding our organization, objectives and goals, ways to join our partnership, important news and most importantly our science. We believe that this is an essential information conduit to enable us to attract and inform funding and research organizations, government agencies, scientists, private industry, and the public at large about IWYP's mission and progress. An important component of our new website is the addition of a private portal that is accessible only to IWYP Members. This private area includes several types of tools to

facilitate information and data management and exchange, not only among IWYP researchers, but also for IWYP Management and committees, and private industry members as well.

Social media are an extremely important tool to disseminate information today. There are many platforms that are used extensively by people all over the world to quickly and continuously gain the information they seek. IWYP is currently active on Twitter, Facebook, LinkedIn and YouTube. This is a relatively new development and a work in progress.

Lastly, IWYP routinely meets with the scientific community by attending and presenting at conferences, meetings and trade shows all over the world. Expanding the general awareness of IWYP, growing the IWYP brand and attracting more scientists, and research and funding organizations to our partnership to help achieve our goals will continue.

Looking Forward

IWYP has had a very successful first year and we are excited about building on these successes with tangible results and more science. We continue to seek and recruit funding organizations as new partners as we strive toward our goal of US\$100 million invested. We will further build on our public-private partnerships by reaching out to more companies to help them realize the benefits of IWYP and join us in our mission. We will continue to build our Science Program to make our science portfolio more powerful and to reduce the risk of failure. We will do this with additional international Competitive Calls as well as recruitment of relevant research that is funded outside of IWYP but aligned with our objectives and goals.

Importantly, the most mission critical facet of IWYP that will deservedly receive the most attention is to drive the discoveries and innovations coming from our Science Program toward delivery to breeding programs worldwide.

The global challenge to feed the world gets greater every day and IWYP must play its part in finding breakthroughs to enable farmers to grow more wheat on the same area of land. We believe the steps taken in this first year represent a sound beginning on this quest.

In conclusion, thank you for taking time to read our Annual Report and learn more about IWYP. Please periodically check our website to learn the latest on our scientific progress towards our goals as well as that of all the scientists and institutions involved.

QUOTES FROM IWYP PARTNERS ...

"BBSRC sees IWYP as an exciting and ambitious approach to international research collaboration with the clear and challenging focus of raising the yield potential of wheat by 50% in 20 years. The synergy from coordinated linking of new and existing research projects, led by outstanding international research teams, represents excellent value for money and increased prospects of success. IWYP offers the flexibility of both collective international investment and closely aligned national actions, plus the linking of public, NGO and private partners in pursuit of global benefits in food security."

Steve Visscher, CBE, Deputy Chief Executive – International of the BBSRC

"GRDC invests in R,D&E to ensure the ongoing profitability of Australian grain growers. IWYP's goal of increasing the genetic yield potential of wheat by 50% in 20 years clearly aligns with the GRDC's purpose. GRDC is excited that we are a member of a consortium that is focusing on a key issue that is of importance to our industry. Connecting globally is essential as no one organization nor one country can succeed alone, it requires a global effort."

Brondwen MacLean, Executive Manager for Research Programs, GRDC

"As a global seed company with wheat breeding activities in Europe and North America, KWS fully supports IWYP. Essential to achieving the goals set by IWYP is the translation of novel technologies and discoveries from the funded projects to farmers' fields throughout the world. At KWS we look forward to participate in this phase and feel that this is best achieved through membership of IWYP."

Jacob Lage, Head of Wheat Pre-Breeding, KWS

IWYP Funding and Research Partner Organizations

- Biotechnology and Biological Sciences Research Council of the United Kingdom (BBSRC)
- Grains Research and Development Corporation of Australia (GRDC)
- United States Agency for International Development (USAID)
- United States Department of Agriculture (USDA) Agricultural Research Service (ARS)
- United States Department of Agriculture (USDA) National Institute of Food and Agriculture (NIFA)
- Department of Biotechnology in the Ministry of Science and Technology of India (DBT)
- International Maize and Wheat Improvement Center (CIMMYT)
- Agriculture and Agri-Food Canada (AAFC)
- Institut National de la Recherche Agronomique of France (INRA)
- Syngenta Foundation for Sustainable Agriculture (SFSA)
- Secretariat of Agriculture, Livestock, Rural Development, Fisheries and Food of Mexico (SAGARPA)

IWYP Private Industry Partners

- Syngenta (multinational)
- Pioneer (multinational)
- Bayer CropScience (multinational)
- Limagrain (multinational)
- KWS (multinational)
- Mahyco (IND)
- LongReach (AUS)

*IWYP is an Associated Programme of
the Wheat Initiative*