

# The Grains for Health Foundation, AACC International, and the Historical Minnesota Miller

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## A Lesson from the Historical Minnesota Miller

In 1901, Colonel George D. Rogers presented a “History of Flour Manufacture in Minnesota” at the annual meeting of the Minnesota Historical Society. At the time of his presentation, Minnesota enjoyed the peak of her milling heyday, exporting flour internationally and winning prizes for the quality of the product (9). Rogers details the ingenuity of Minnesotans along with their ability to take on key partnerships, both domestic and international, that made the Minnesota milling industry thrive. Because of grain business’s successful past in this region, Minnesotans live uniquely positioned among multiple grain-based businesses and excellent institutions of grain research. It is a natural result that the Grains for Health Foundation (GHF) formed in February 2009 in Minnesota (U.S.A.) through the cooperation of multiple grain business partners, both domestic and international, and in collaboration with AACC Intl.

## Grains for Health—First-Year Achievements

The first year of the foundation (although not quite finished at the writing of this article), has been a year of laying infrastructure and building relationships. GHF became a legal entity to conduct business in November 2008 through the work of Len Marquart and other founding partners. Within the next several months, the team created the organizational structure for the GHF Board of Directors (BOD), Scientific Advisory Committee (SAC), staff, and members, and continued to secure initial funding.

Throughout startup, Scientific Societies ([www.scientificsocieties.org](http://www.scientificsocieties.org)) has collaborated with the foundation, providing administrative services. In mid-2009, the foundation also established its website, [www.grainsforhealth.org](http://www.grainsforhealth.org).

Beginning in February 2009, at the first meetings of the BOD and SAC, the foundation focused much effort on defining programs and formulating research priorities. Out of this first meeting of SAC, the foundation commissioned the Critical Gaps Group Subcommittee (CGGS), a volunteer group of six member representatives led by Lee Anne Murphy (Manitoba Agri-Health Research Network [MAHRN]). Over the next several months, the CGGS formed recommendations that met the needs of industry, including to advance the knowledge of the goodness of whole grain/fiber foods, complement (not duplicate) existing efforts, and focus action, with achievable milestones for the pur-

pose of advancing understanding of whole grain/fiber foods and health (8). These recommendations have been categorized under three focus areas: development, delivery, and consumption. Each focus area has been assigned to a volunteer subcommittee, newly commissioned during a September 2009 meeting of SAC. These subcommittees spearhead further definition and prioritization of next steps in each focus area. The subcommittees work by frequent conference calls and meetings to define research activities that will promote greater understanding of each category.

In between categorizing focus areas and beginning to prioritize research agendas, the foundation named its first official director of scientific affairs in order to help facilitate and convene the subcommittees for the focus areas. Jodi Engleson joined the GHF team, starting July 1, 2009. Engleson brought seven years of experience working at Cargill, Inc. in the bakery solutions business where she led the development of their gluten-free products. She also holds a Ph.D. in food science from the University of Minnesota. She immediately expanded the GHF network and brought new perspectives to the programs of GHF.

September brought the GHF to Baltimore, MD, U.S.A., to attend the AACC Intl. 2009 Annual Meeting. The meeting provided excellent networking venues and many opportunities to learn cutting-edge scientific knowledge (1). Engleson was the program chair of the meeting this year. The foundation sponsored two symposia, a premeeting workshop, three poster exhibits, a networking breakfast, and an interactive exhibit during the opening session (2–5,7,9). The second meetings of the BOD and SAC were also held in conjunction with this meeting, which allowed for more international representatives to be present. Other successes during 2009 include the development of monthly status reports for improved communication; a business plan, including specific granting strategies; several journal publications; the facilitation of two summer undergraduate student internships; and a school nutrition workshop in November at the International Market Square in Minneapolis, MN, U.S.A. The foundation is proud of the progress that has been made and is looking forward to a productive and highly successful 2010.



*An example of grain business’s success in the Minnesota region.*

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### **GHF Support Team**

Len Marquart, president  
Jodi Engleson, director of scientific affairs  
Denise Hauge, executive director in training

### **Key Strategies for the Future**

Throughout the year, the foundation has been continually strengthening its mission, vision, and goals based on feedback from its members. While the words have continued to be tweaked for clarity and brevity's sake, the overall meaning has remained unchanged—People. Working together. To improve health. Development of the foundation's key messages has also facilitated defining key strategies for the future. GHF has four major initiatives, including grain research, institutional nutrition, developing communities, and sustainable training (Fig. 1).

The foundation's grain research initiative works to increase understanding of how whole grain/fiber foods deliver health benefits; investigate the production and processing of whole grain/fiber foods for optimal nutrition, while maintaining highly acceptable taste and cost; understand the characteristics of whole grain/fiber foods that drive consumer preference; and evaluate the success of gradual introduction and increased consumption. The Development, Delivery, and Consumption Subcommittees of SAC are currently focusing and prioritizing research initiatives that the foundation will pursue. Updates on these subcommittees' discussions are made available through the GHF's monthly status reports.

The institutional nutrition initiative encourages gradual societal level changes in various food service settings, including school food service, elder care facilities, and others in order to improve overall healthfulness of foods. The foundation will work with school food service in 2010, testing various models of increasing consumption of whole grain/fiber foods, while building partnerships and knowledge bases in other food service settings for potential collaboration and projects in the future. The foundation's focus on child nutrition in 2010 will be to improve school nutrition to encourage the long-term consumption of whole grain/fiber and nutrient-dense foods by forming preferences at a young age. There are significant granting opportunities in the areas of school nutrition and preventing childhood obesity. School food service offers food manufacturers a low-risk opportunity to test new products and an opportunity for responsible marketing to children. Our experiences in school food service represent a model that will be applied to different population segments and food service settings. In June 2010, the foundation will convene experts from government, industry, and academia within the school food supply chain as a means to address the major barriers of taste, convenience, cost, and health to developing healthier school meals.

Developing communities have fewer resources or less income than others within a society or country, or compared to worldwide averages. They often lack basic human needs, such as nutrition, clean water, health care, clothing, and shelter, because of the inability to afford them. Often there is a lack of corporate and entrepreneurial investment in these communities. The United States exports its diet to communities worldwide. Two billion people in the developing world suffer from diets lacking essential vitamins and minerals. The foundation is starting to identify partners, including other NGOs, research institutions, investors, and government officials, that have ongoing projects and initiatives to improve food supply and nutrition in developing communities. Through networking and collaboration, the development and production of fortified foods can likely be accelerated as well as increase access to all. The foundation can also work with researchers to facilitate the development of crops with higher levels of nutrients for all communities.

GHF offers unique opportunities for students to develop interdisciplinary thinking and communication skills by working with members who represent many diverse sectors and disciplines. The foundation values the development of young scientists,

business, and health professionals and supports this initiative through internships, post-docs, and multidisciplinary projects.

### AACC Intl. and the GHF Working Together

GHF and AACC Intl., working together, have the ability to successfully connect grain research across the continents in order to focus and prioritize grain research. Through collaboration on the Wisdom in Science Project (WiSci), AACC Intl. and GHF will have the capacity to increase communication, collaboration, and action among grain researchers on a global basis. Currently, a feasibility study is being written to determine the scope of technology and other logistical items that are needed to successfully carry out this project. The feasibility study will also examine the contribution of a virtual space for connecting grain researchers. The boards of directors for both AACC Intl. and GHF will examine and jointly discuss the viability of a collaborative effort focusing on this project in 2010.

GHF also looks forward to working with AACC Intl. in 2010 on at least two symposium/conferences that are in the planning stages, a meeting in April focusing on delivery of whole grain/fiber products, and a conference in June bringing together experts from across disciplines and sectors to examine the school food supply chain. At the delivery meeting in April, participants will discuss the barriers and opportunities associated with growing, milling, manufacturing, transporting, and storing whole grain foods versus traditional refined grain foods. The expertise related to milling, baking, product development, etc., found in members of AACC Intl. will be essential to accurately define strengths, barriers, and opportunities at this workshop, as well as the meeting in June. In June, multisector, interdisciplinary experts will convene in Minneapolis to learn about the food supply chain and identify child health issues related to diet. About 40% of school lunch entrees are preprepared and supply the greatest percentage of energy, fat, and sodium (11). Recent recommendations by the Institute of Medicine for school meals continue to highlight the need for increasing whole grain/fiber consumption and decreasing excess fat, sodium, and calories (6). One desired outcome of the June conference is a renewed focus on the role of small changes to processed foods as a means to improve the ratio of “healthier foods” to “others” in the food supply. One significant

outcome will be the commissioning of a task force to plan and develop a model supply chain infrastructure for improving the healthfulness of processed grain foods in school food service.

### The Minnesota Miller’s Example

GHF enjoyed a successful first year because its mission and vision were championed by the foundation’s members, collaborators, and support team. The coming year promises new opportunities for working together as a grain community, cascading along a progressive continuum of projects to accomplish our vision of improved consumer health. Moving forward, those working in grains—researchers, millers, manufacturers, distributors, and others—all have the opportunity to participate as change agents for better health. The grain community will greatly benefit from the attitudes and actions of those who persisted in laying the foundation and working together in the years of “modern millings” as narrated by Rogers (9): “But geography and differences of language and customs are no obstacles to the Minnesota miller. He obliterates time, distance, and nationality, if there is a mouth on the globe that can eat bread; and Minnesota flour is the most cosmopolitan thing on the earth today.”

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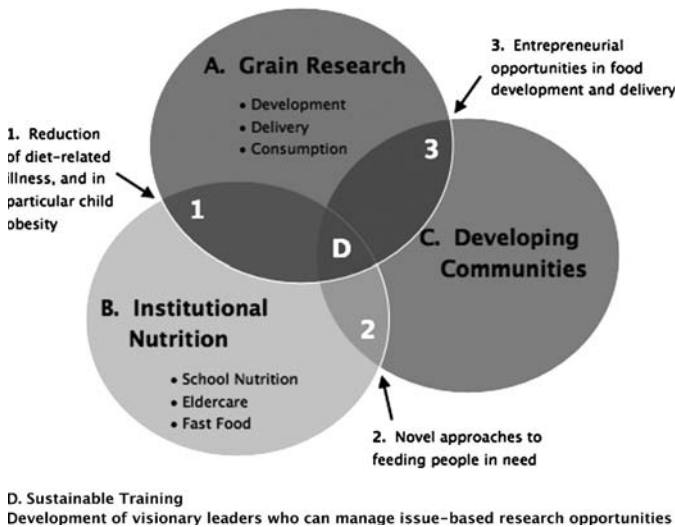


Fig. 1. Continuity among key strategies.