



Developing Collaboration Among Researchers and Research Users in Functional Foods and Natural Health Products

**Larry Martin (PhD) and Fiona Stirling (MBA)
George Morris Centre**



February 2005

Developing Collaboration Among Researchers and Research Users in Functional Foods and Natural Health Products

Larry Martin (PhD) and Fiona Stirling (MBA)¹
George Morris Centre
February 2005

This document reports on the outcome of a two-day process that brought together researchers, suppliers, trade associations, and government. The common interest of the group is to enhance the quality and amount of research on natural health products (NHP) and functional foods (FF), and to encourage dissemination of the knowledge from research to those who need it. Hence the purpose of the two days was to determine whether there is an interest in linking these people formally.

The session was not set up as a formal strategic planning process, but rather as an exploratory session that identified potential objectives, actions, responsibilities and time lines to initiate a formalized relationship. This, in turn, will likely lead to a more thorough planning session in the future. Given the exploratory nature of the two days, it was organized as a series of linked conversations, as follows:

- Conversations for relatedness
 - These were designed as presentations that allow those represented to know who each other are and what each other do
 - The purpose was to allow the group to consider common interests and the potential for synergies in their work programs.
 - To lead to the next phase, presenters were asked to address in their presentations the question “what will have made it worth your while for you to be in this process?”
 - Notes from those are in an appendix.

- Conversations for possibility
 - These started as break-out group discussions to address specific questions about possibilities. The first two were facilitated that way, but the third, regarding sustainable funding, was facilitated as a discussion of the whole group.
 - The three sets of questions were:
 - What can we gain from collaboration – what are our objectives if we collaborate?
 - What are practical strategies to enhance communications among groups – how do we do it? What are the instruments? Who might do it?
 - Strategies to ensure sustainable funding – how do we pay for the products of collaboration?

¹ The authors are CEO and Business Manager of the George Morris Centre.

- Conversations for action
 - The final set of conversations was, in essence, the synthesis of the foregoing three things, and identification of an action plan for putting them in place. Therefore, the group as a whole decided on a set of objectives, the major activities of a collaborative effort, and identified potential sources of funding. The group also identified a steering committee to be responsible for putting together the organizational structure, the operating plan and the financing to achieve the objectives.

The results of the foregoing are reported below.

Objectives of the Collaboration

The conversations among the participants were quite positive about the potential for collaboration among the various groups and organizations. It appears that there is a bright future for research in FF and NHP. More information will be required for consumers as the product areas evolve. Regulatory processes will change and research will be required both to drive the requisite change and to respond to the needs of regulation. While NHP's and FF's have major differences (primarily regarding regulatory environments), they also have many things in common, thereby offering synergies through collaboration.

Those synergies can bring improvement to the scientific stature of the product areas. In particular, the collaborators see benefits in “encouraging method validation and laboratory harmonization”, and “promoting regulatory cohesion” for FF's and NHP's. The former will extend the scientific strengths of leading researchers to add depth and precision to research on claims and causal mechanisms in PHPs and FFs. Better scientific research will streamline and bolster regulatory decisions.

The discussion groups identified a number of desired outcomes from collaboration. These were combined into focused areas and then priorities were established, resulting in four objectives of the collaboration. They are to collaborate to:

- Build capacity for quality research
 - Enhance the ability to leverage resources
 - Enhance financial support for quality research in NHP and FF
 - Encourage method validation, laboratory harmonization
- Enhance communications:
 - Between researchers in FF and NHP
 - Between researchers, government and “industry”
 - Between researchers, “industry” and consumers
- Provide a mechanism to profile the NHP/FF researchers and industry – Who are they, what do they do, where do they do it?
- Promote regulatory cohesion for NHP's and FF's.

Operations of the Collaboration

The next area of agreement by the participants was to define the major actions that would be carried out by a collaborative arrangement among them. These are the actions that will be done to achieve the objectives. They were refined to the following:

- General
 - Identify all stakeholders in the industry, including those who should and may be interested in being part of this collaboration
 - Find ways to partner/piggyback on existing systems to improve economy in providing communication and information
 - Develop a longer term steering committee of stakeholders to govern the collaboration and take responsibility for achieving its objectives.
- Building Capacity
 - Identify joint research priorities in NHP and FF
 - Organize an annual FF and NHP conference to enhance capacity
 - Encourage FF/ NHP curriculum development in educational institutions
- Enhance Communication
 - Develop a newsletter, and/or gather and distribute newsletters of interest from a central source using various existing providers of communication.
 - Develop a media clearing house for reliable communication between the industry, researchers, government and consumers
- Develop an Industry Profile
 - Hire consultant to identify gaps/ weaknesses in existing database and link/merge/develop new and existing databases to fill these gaps
- Regulatory Cohesion
 - Invite regulators to roundtable discussions.

Financing the Collaborative Effort

The conversation about financing was a brainstorming session to provide ideas for follow-up to the steering team (see below). Discussion underlined the need for sustainable funding for staff to administer and coordinate the work of the group, very specifically including the work on a data base which includes industry, government and academic profiles, infrastructure (research organizations, funding agencies), and industry and NGO associations. Therefore, the discussion addressed financing the development of the database separately from other activities of the collaboration.

The ideas generated by the brainstorming session include the following:

- Database Development for the industry profile
 - SSHRC
 - NHPD (maybe workshops)
 - Health Policy Research Program
 - Industry – Contact Canada, for example
 - CIHR
 - Industry Partnerships (maybe workshops)
 - Members of AFMnet
 - Provincial governments

- Stable funding for administrative/coordination support of collaboration
 - A benefactor – e.g. foundations,
 - Provincial government for staff assistance, meeting attendance, etc
 - NHPD
 - APF (benchmarking)
 - ACAAF (the initiative formerly known as CARD)
 - In kinds – from existing groups
 - RCFFN offered to coordinate newsletters
 - Name: Natural Health Products and Functional Food Research Coalition

A Plan to Bring the Collaboration into Being

The participants decided on next steps, tasks and time lines required to bring the collaboration into being. They are as follows:

- Preliminary name for the collaboration:
 - Natural Health Products and Functional Food Research Coalition

- A Steering Committee was appointed. It's members are:
 - Rickey Yada and Allison McCutcheon – Co-Chairs
 - Peter Jones
 - Allan Paulson
 - Heather Boon
 - Pierre Haddad
 - Connie Kehler/Anne Wilke
 - Kelley Fitzpatrick
 - Advisory and Observers– NHPD, CIHR, Wellness West

- Role of the Steering Committee
 - Responsible for developing policy and procedures to implement objectives
 - This includes developing who (in terms of their professional interests) should be members of the coalition.
 - It also includes developing a long-term structure for governance of the coalition – i.e. the final structure of any board or steering committee
 - Responsible for finding staff to implement the operating plan of the coalition
 - Responsible to find funding for staff or consultants to carry out the actions in the operating plan

- Actions, accountabilities, and timelines for the Steering Committee

The steering committee agreed to take the following actions by the following dates.

- Rickey and Allison will call a meeting of the steering committee by February 21
- The steering committee will meet by March 15 to begin developing policies and procedures for the coalition, including the longer term governance structure, establishment of priorities on activities, obtaining funding, etc.
- The steering committee will ask for and receive advice on who else should be included as part of the coalition by March 15
- The steering committee will ask for and receive advice on who should be included in the steering committee by April 15.

- Priorities and initial policies and procedures will be completed by April 15 and report back to membership for approval at a meeting in Vancouver on April 25.

Appendix I: Notes from Presentations on What the Represented Organizations Do

Background/Opportunity

Rickey Yada

AFMnet

- Identify commonalities/differences between nutraceuticals, functional foods, advanced materials, bio-material
- *Worthwhile*
 - *Leave with actionable items (including assigned responsibilities and timelines)*

Michael Smith

Health Canada

- Focus is research (emphasising the “our understanding” slide)
- Meeting will not define a “functional food”
- Key areas:
 - Herbal medicine – attractive to research funders
 - Product quality
 - Functional foods, nutraceuticals community (well established) – link to natural health products community (opportunity to learn)
- His org is focused on funding natural health products research
- *Worthwhile*
 - *Gain an understanding of where they (his org) should be focusing their funding efforts*
 - *See how two communities can work together*
- *LGM* – saw three objectives: assist group develop research network to identify research that will enable NSP to be better regulators, provide support to network for NHP type research (can champion this is there is a tie-in, if not, can't), bring communities together for learning opp.

Susan Lutz

Functional Foods and Natural Health Products (AB)

- Functional foods and NHPs – commercialize products that have a science-health claim
- Increase R&D capacity in Alberta
- Business development – benchmarking, ind. profile
- Databases – what studies have been done/\$ value/where in world, also who are the players (consultants, where to get labelling, etc)
- Focus on commercialization – but do look for research opportunities
- *Worthwhile*:
 - *To gain linkages to others who are in same field (i.e., access to clinical trial facilities)*
 - *Find funding opportunities/linkages*
 - *See where other opportunities are in both generic and specific research.*
- Hurdles:

- Industry learning that there is need for clinical trial
- That there is industry need for this type of regulatory process
- Communication/collaboration between researchers in industry (comment)

Estell Carson

Alberta Natural Health Agricultural Network

- Work with farmers/growers to understand what this (NHP, functional foods, etc.) means for them/what should be grown/how should this information be disseminated.
- *Worthwhile*
 - *Learning opportunity that can be used to let their members know what is going on and understand what is being done*

Barb Findlay

IN-CAM – Canadian Interdisciplinary Network for Complementary and Alternative Medicine Research

- National CAM (complementary and alternative medicine) research network (incamresearch.ca)
- Members – CAM researchers, CAM practitioners, and individuals interested in CAM research
- Develop research priorities, build CAM research capacity, promote CAM knowledge transfers, develop strategic partnerships
- Research priorities – CAM health care delivery and policy, methods to study the safety, efficacy and effectiveness of CAM (special focus on knowledge transfer)
- Want to understand policy/social science/cultural impact of NHP research go to IN-CAM (comment)
- *Worthwhile*
 - *Cross communication opportunities between networks and between CAM practitioners/researchers and NHP research*
 - *Research collaboration opportunities*
 - *Opportunity to recognise product research expertise*

Maureen Hatanaka

NRC – IRAP (Industrial Research Assistance Program)

- Key enabler in Canada's innovation system
- Four main components:
 - Technology expertise and advisory services
 - Financial assistance for R&D activities
 - Networking
 - Partnership
- Provide contributions for R&D activities (non repayable)
- Technology Partnerships Canada program - (repayable) for projects at pre-commercialization stage
- Youth Employment Strategy Program
- In NHPs facilitate collaboration among companies and connect companies to network of researchers and facilitate tech transfer. (connector between researchers and industry)
- *Worthwhile*

- *Help companies be in contact with researchers, so will gain understanding of where the expertise is.*
- *What type of research is being done (are there fits)*

Maureen Hatanaka (same as above)

WellnessWest

- Collaborative partnership among W. Cdn Prov and fed gov't departments and agencies dedicated to development of economically viable functional foods, nutraceuticals and NHPs in Western Cda.
- Commercialization roadmap - understanding which route to take and what is required
- *Worthwhile*
 - *Seeing how they can network with other research orgs*
 - *Be a conduit between industry and gov't*
 - *Understand what type of research is being done – where to access this info.*

Connie Kehler

Canadian Herb, Spice, and Natural Health Products Coalition

- Address product quality, traceability and safety (field to shelf), Consumer confidence, and Supports economic/community sustainability
- Group of industry leaders, not a group of grower, support the provinces
- Do: link, translate and help - Help people play nice together (ie link Health and Ag Cda)
- *Worthwhile (implicit)*
 - *Understanding of how to address “fuzzy products”*
 - *Emphasis on promotion of economics/community sustainability*

Anne Wilke

Canadian Health Food Association

- Trade association
- Promotion (conference, trade shows, symposiums), Education, Regulations/Government Relations
- Regulatory affairs/advocacy – low carb claims, NHPs for Animals, Bill C-420
- Self Care Coalitions - Stimulate research to demonstrate the health care benefits/savings of NHPs
- Challenges – communications, targeting information, means of distribution
- Looking forward - collaboration, identify partnership opportunities, better use of resources, media relations (message)
- *Worthwhile:*
 - *Advance credibility of the industry through knowledge transfer and science*
 - *Link Association and its members with opportunities and funding*

Benoit Lamarche

Institute on Nutraceuticals and Functional Foods, Université Laval

- A structured research network
- Mission - Research, development, training & education, transfer of technologies, knowledge transfer
- Research pillars:
 - Studies of mechanisms and functionality
 - Food technology and engineering

- Nutrition, health and consumers
- Work with industry – including patents and licences, try to have student converse/work with industry
- *Worthwhile:*
 - *Better articulate research in areas of foods and health*
 - *Maximize investment in research funding (minimize duplication)*
 - *Take advantage of expertise from centres across Canada*
 - *Enhance quality of qualified personal*
 - *Exchange ideas about strategies on how to facilitate and improve transfer of technology*
 - *Help achieve international leadership*
 - *Facilitate lobbying in Canada*
 - *Role of INAF – contribute to more efficient networking (bring networking expertise from Quebec)*

Paul Belanger
CIHR-INMD

- Focus on creation and support of knowledge transfer
- Support research to enhance health in relation to diet, digestion, excretion and metabolism ... - current focus on obesity
- *Worthwhile:*
 - *Know who the key people are, become familiar with research community needs, become familiar with researchers/research capacity*
 - *Collaborate on common goals [reducing obesity] – knowledge exchange/creation, leverage funds*
 - *Promote understanding that issues/research is long term - takes time to evaluate impact*

Tim Durance

Food Nutrition and Health Program, UBC

Faculty of Land & Foods Systems – Food, Nutrition & Health (FNH), Agroecology, Landscape Architecture

- Unifying Research theme – “How does food contribute to human health and well being?”
- Seeing record enrolments, especially in FNH – going to changing program structure and are building more lab capacity for students
- *Worthwhile:*
 - *Direction of functional foods – what should UBC be looking at for development of academic programs*

Tim Durance (same as above)

BCFN – B.C. Food Network

- Well established (since '98)
- Analytical division, Functional foods division,
- Do seminars, workshops, annual conference, web-casting
- Part of industry alliance with other BC associations (i.e., herb growers, ginseng, other)
- *Worthwhile*

Digvir Jayas

RCFFN - Richardson Centre for Functional Foods and Nutraceuticals (part of UoM)

- Facility to bring researchers, grad students (collaborating between departments – not just ag. sciences) together
- Contains foods lab and pilot processing plant, theatre for symposiums, etc.
- Activities
 - Identification/enhancement of new functional foods and nutraceutical bioactives from W. Canadian crops
 - Determination of safety & efficacy
 - Early stage clinical testing using animal models
 - Determination of optimum processing and packing to maintain the quality and bioactivity
 - Consumer acceptability
- *Worthwhile:*
 - *Research Centre playing a role in building capacity/linkages in industry – how can this be achieved?*

Paula Brown

Technology Centre, BCIT

- Mission - support economic development in BC
 - applied research, tech transfer, development of industry
- Food Process Resource Centre - expertise in tech development and transfer, includes a pilot plant and lab facilities
- NHP Research Group – support all aspects of NHP development,
 - Farm trials with communities trying to develop viable agricultural alternatives
 - NHP analytical lab proficient programs
 - Safety and efficacy of NHPS
- Want to create a BC leadership position by trying to align BC research priorities with national priorities
- *Opportunity* - Facilitate collaborative research and resource sharing while coordinating communication and promoting leadership among all relevant shareholders
- *Worthwhile*
 - *To see development of a Canadian research network that would bring together clinicians and NHP researchers to allow for collaboration and resource sharing*

Peter Jones

School of Dietetics and Human Nutrition, McGill University

AFMnet Activities & Mary Emily Clinical Nutrition Activities

- AFMnet allows for collaboration and furthering research – getting the tech and info out there
 - Development and Efficacy Assessment of Functional Fats and Oils
 - Development and Efficacy Assessment of non-fat Functional Food and Nutraceutical Ingredients
- *Comment* – looking for a synopsis (easily accessible) of IP structures/policies for each university

- Mary Emily Clinical Nutrition Research Unit
 - Allows for controlled environment to test bioactives
 - Have focused on obesity/weight loss in addition to other response to nutrition
- *Worthwhile*
 - *Bring overlapping sectors together*

Pierre Haddad

Chagnon Foundation

- Non-profit philanthropic org. - Anticipate spending \$60 mil/year on projects
- Contribute to improving poverty/health/disease prevention by focusing on children and their parent (prevention is key)
- Focus - bringing people together (research and activities), prevention, and health promotion
- His Dept – focused on integrative medicine (includes NHPs) – training and education, knowledge transfer, research
- Foundation wants to
 - Encourage self-sustainability (not duplicating current efforts/funding)
 - Foster collaboration and consultation of excellence
 - Promote innovate approaches
- *Worthwhile*
 - *See above*
 - *Understand how foundation can play a role in networking*

Allison McCutcheon

Natural Health Products Research Society of Canada

- Non-profit org
- Facilitate and support meaningful scientific research on NHP - Knowledge transfer, product quality & efficacy, etc.
- Advocate & uphold ethical standards in NHP research
- Priorities – quality standards, research database, national research network
- NHPRSC Vision – to have an integrated national research network – org is to provide the infrastructure for an NHP virtual research network
 - Raise profile of NHP research
 - Build research capacity
 - Promote interdisciplinary collaboration
 - Appropriate peer-review
 - Their action items:
 - Researcher database
 - Infrastructure database
 - Standards of evidence committee
- *Worthwhile*
 - *Integrated national research network conducting meaningful, high quality research*
 - *Research and infrastructure database*
 - *Improved quality of research/research capacity*
 - *Funded research nodes*
 - *Product quality*
 - *Traditional medicines*
 - *But, how is this all funded?*