

CBS Research & Development: A Strategic Plan

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Memorandum of Understanding

- The deployment of an effective Research and Development Program is intrinsic to the safety and security of the blood system.
- Annex A, functions and responsibilities of CBS
 - “setting of priorities and supporting both research and development activities to promote (NBA) objectives”
- Annex B, NBA Governance Model
 - “coordination of a national program in research and development for blood, blood products and transfusion medicine”



Overall Goals

- Goal #1: To develop and implement a research & development program that enables CBS to ensure the safety, quality and supply of donor-derived and alternative blood products through innovative research in transfusion science.
- Goal #2: To achieve national and international leadership in transfusion science research and development through the establishment of a national research network.



Key Result Area: Human Resources

- **Outcomes:** To hire 5 of the best researchers possible in each of the next three years to address R&D areas new to CBS and strengthen existing R&D areas.



Key Result Areas: Human Resources

- **Strategies:** Develop a clear, attractive career path for researchers by offering:
 - A competitive salary and benefits packages,
 - an appropriate research environment and sufficient infrastructure support,
 - well-defined performance expectations with reward for meritorious performance,
 - a mentorship program, and
 - an opportunity for university linkages.
- Engage in an aggressive recruiting campaign both nationally and internationally.



Key Result Area: Human Resources

- **Outcome:** To have an expanded training program for young researchers and clinician scientists by March, 2001.
- **Strategies:** Make CBS a preferred training ground for young investigators by offering:
 - CBS-based training awards for graduate students (10/yr.), transfusion medicine (medical) fellows (4/yr.), and Ph.D. postdoctoral fellows (6/yr.) or equivalent on a competitive basis,
 - in partnership with the Canadian Institutes of Health Research, training awards for clinician scientists (4/yr.), scholars (5/yr.) and postdoctoral fellows (6/yr.) at full implementation, and
 - an organization-wide summer internship program for university undergraduates who will work on projects in any area of the CBS organization.



Key Result Area: Network Centre for Applied Development

- **Outcome:** To evaluate emerging technologies and validate novel processes in a responsive, timely and organized manner by September, 2000.
- **Strategy:** Establish an applied development group that:
 - is responsible for the evaluation of new technologies applicable to CBS,
 - assists with validation of processes and procedures prior to implementation,
 - contains a troubleshooting 'rapid response group' linking Operations, Regulatory and Research & Development,
 - has a coordination Centre in Ottawa, under the direction of the Director of Transfusion, that is linked with Blood Centres that have/will have dedicated developmental space, and
 - is linked to pilot project in Saint John, NB.



Key Result Area: Research Priorities

- **Outcome:** To answer important research and development questions for the blood system.
- **Strategy:** Identify and address research priorities for CBS in a timely manner by:
 - utilizing the expertise of the R&D Advisory Committee, internal advisory groups and ad hoc committees to define research priorities as well as emerging issues with respect to blood safety,
 - seeking to meet research needs through a 'request for proposal' program that funds research both inside and outside of CBS R&D laboratories, and
 - maintaining a modest intramural operating grant competition with well-defined research priorities.



Key Result Area: Research Effort

- **Outcome:** To have CBS Centres in all provinces participating in R&D activities.
- **Strategy:** Strengthen internal research linkages to create synergy by:
 - wherever possible, encouraging Centre medical staff to participate in transfusion science research, either independently or as part of defined research teams,
 - creating cross-departmental committees addressing common issues (e.g., the Intellectual Property Working Group), and
 - maximally utilize IT opportunities for idea and information exchange among departments, system-wide access to medical and scientific literature, and the development of 'in-house' educational programs.



Key Result Area: Innovation

- **Outcome:** To have an Intellectual Property protection program in place by July, 2000.
- **Strategies:**
 - Create policy that fosters and encourages innovation and allows appropriate recognition and reward for innovation.
 - Provide clear guidance for and assistance to CBS inventors in the process of intellectual property protection, patents and licensing, and business development.



Key Result Area: Research Effort

- **Outcome:** To have established a 'hub-and-spokes model' of research excellence by December, 2001.
- **Strategies:** Create a 'critical mass' of CBS researchers in specific locations ("hubs") by:
 - investing in research hubs that are created around a specific research area, e.g.,
 - CBS Head Office (infectious diseases)
 - Hamilton (clinical research)
 - Toronto (transfusion immunology)
 - Vancouver (substitutes, product storage)
 - focusing an initial investment of resources where strong research programs already exist, and
 - creating formal linkages with local university and hospital expertise.



Key Result Area: Public Relations

- **Outcome:** To meet the expectations of our funders (Public, Provincial and Territorial Members).
- **Strategy:** Get the R&D message out by:
 - establishing 'provincial outreach' programs to inform provincial MOH staff of overall R&D activity in CBS as well as CBS-affiliated R&D in their province,
 - increasing communication to public concerning CBS R&D through both published and Web-based format, and
 - seeking positive media exposure for R&D, and
 - maximizing participation by CBS R&D staff in youth-focused science events.



Key Result Area: Leadership in Transfusion Research

- **Outcome:** To be a strategic partner for research initiatives with the Canadian Institutes of Health Research (CIHR).
- **Strategy:** Lead a transfusion science initiative within the context of CIHR by:
 - creating a transfusion science focused personnel support program,
 - exploring the opportunities for CHIR committee peer-review of all CBS funded grants, and
 - sponsoring strategic planning sessions to discuss a national transfusion research agenda.



Key Result Area: Leadership in Transfusion Research

- **Outcome:** To be a recognized source of authoritative voices in transfusion research.
- **Strategy:** Increase the profile of CBS R&D by working to promote CBS staff membership and leadership in provincial, national and international research committees, organizations and peer-review agencies and on editorial boards.



Key Result Area: Leadership in Transfusion Research

- **Outcome:** To have established effective partnerships with other agencies involved with the blood system that facilitate transfusion research in Canada.
- **Strategies:**
 - Place a CBS representative on the Medical Scientific Advisory Committee of Hema-Quebec and a Hema-Quebec representative on CBS's R&D Advisory Committee.
 - Hold regular meetings with the Hema-Quebec scientists and actively seek areas of collaboration.
 - Meet regularly with LCDC* science group.

*LCDC: Laboratory Centre for Disease Control



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Key Result Area: Leadership in Transfusion Research

- **Outcome:** To have taken advantage of all strategic opportunities to leverage CBS investment in transfusion science.
- **Strategies:**
 - CBS will be a partner wherever possible for initiatives under appropriate provincial research funding opportunities, the Canadian Foundation for Innovation, the 21st Century Chairs for Research Excellence and any other new federal initiatives to support research.
 - We will seek opportunities for partnership with other non-profit organizations engaged in health research (e.g., National Cancer Institute, Heart and Stroke Foundation, Canadian Hemophilia Society, hospital research foundations).



Key Result Area: Leadership in Transfusion Research

- **Strategies Continue:**
 - Formal affiliation agreements will be sought with research-intensive universities housing CBS staff scientists or in which medical staff are faculty members.
 - We will seek co-development partnerships and technology licensing agreements with industrial partners where appropriate.
 - Initiate discussions around the establishment of university-associated Centres to support research and development in specific blood-related areas.
 - Seek to partner with industry, hospital foundations and universities in the establishment of Endowed Chairs in Transfusion Science.



Key Result Area: Leadership in Transfusion Education

- **Outcome:** To be recognized as the authoritative voice for transfusion medicine education.
- **Strategies:** Ensure that wherever possible CBS medical and scientific staff:
 - Participate in university medical school curriculum planning and teaching,
 - participate in continuing medical education programs and hospital-based educational activities,
 - participate in training residents/fellows in transfusion medicine, and
 - identify and publicize a roster of 'content experts' among CBS medical and scientific staff.



Key Result Area: Leadership in Transfusion Education

- **Outcome:** To initiate and organize at least two consensus conferences and two regular scientific conferences in transfusion science on an annual basis.
- **Strategies:**
 - Assume a leadership role in continuing medical and scientific education by
 - formalizing our relationship with the Canadian Society for Transfusion Medicine in order to maintain a key role in programming for the CSTM meetings, and
 - seeking an opportunity to participate in programming for the AABB, Royal College meetings, and meetings of specialists with interest in transfusion medicine (e.g., intensivists, anaesthesiologists, surgeons).
 - Identify and pursue opportunities for consensus development conferences.

