# STRATEGIC PLAN FOR RESEARCH FOR THE UNIVERSITY OF BRITISH COLUMBIA (UBC) DEPARTMENT OF FAMILY PRACTICE (DFP)

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*To be posted at: http://www.familypractice.ubc.ca/indexe.html*

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## A. BACKGROUND (CONTEXT AND GOALS)

### CONTEXT

FP research is an emerging field; there is now a climate of expectation that family medicine research should be done, that we must address gaps in knowledge by doing research in order to improve best practices. Research moves individual anecdotal family physician knowledge and wisdom into collective discipline knowledge.

Interdisciplinary research teams are now the successful models with national granting agencies (NCIC, CIHR, and SSHRCC). If our Department is one where people feel 'lone ranger researcher', isolated and not part of teams then this will not facilitate building research capacity in our department. The current successful research model is congruent with family physicians' role as inter-disciplinary team players because family physicians have always worked as members of teams. Hence, there are now fewer barriers to the curious family physician who wishes to do research than before.

Similarly, the increasing use of multi-method research allows us to approach a variety of problems and to use a variety of skill sets. Quantitative research validates family medicine research, situating it alongside the fields of basic scientific research, epidemiology and population health. In addition, the emergence of qualitative research as a legitimate research method resonates with intuitive family medicine wisdom. Family physicians have always juggled two paradigms: that of pathology & diagnosis on the one hand with that of bearing witness to patients' and families' experiences on the other hand. Qualitative research provides a way to articulate the dissonance that family physicians feel when trying to integrate evidence-based medicine into the realities of clinical, patient-orientated medicine.

Previously, the UBC DFP built research capacity based on philosophy and values illustrated by the following conceptual models.

1. The UBC DFP is a geographically dispersed site, with 600+ clinical faculty dispersed throughout the province. The UBC DFP aimed to support members in research, wherever their location, whatever their research topic and whatever their research skills (see Figure 1).
2. The UBC DFP aimed to build research capacity support for all members, regardless of their research level within the academic research hierarchy (see Figure 2).
3. The UBC DFP has promoted the concept of a primary care research network (see Figure 3).

### GOALS

The planning committee decided to invite department members to define and articulate their core philosophy and values for family medicine research, as they felt that

this process would facilitate the prioritization of research strategies within the UBC DFP. Accordingly, the planning committee generated the following goals:

**Primary goals**

1. to **define a vision** for the Research Community[1] of the UBC Department of Family Practice using a consultative process
2. to **develop a strategic plan** for attaining this vision

**Secondary goals**

3. to suggest **strategies for advancing** the Research Community of the UBC Department of Family Practice
4. to **assess research infrastructure** (financial: space, personnel, protected time, etc) that will be required by the Research Community of UBC Department of Family Practice

[1]We defined the Research Community of the UBC DFP as "All the research that is done by members of the DFP, and all the potential for research that is yet to be realized; all the programs, infrastructure and resources that weave together to sustain the research of the Department"

## B. METHODS

1. Dr Robert Woollard invited members to form a planning committee to develop a strategic plan for research for the UBC DFP; he suggested that the committee use Boothroyd's seven-step model as a guide for consultative process. (See Appendix 3)
2. The planning committee developed a consultative plan, posted the plan details on the UBC Department of Family Practice Webpage, and emailed and/or faxed an invitation to every member of the UBC DFP to participate in this process.
3. The planning committee obtained a certificate of approval from the UBC Behavioural Research Ethics Board for this process. (Certificate B05-076).
4. The following informed and contributed to, in an iterative process, the writing of the final document
    - all members of the UBC DFP were invited to participate in an on-line survey
    - a purposeful sample of UBC DFP members were invited to participate in an in-depth interview; in addition, all UBC DFP members who wished to could request an interview
    - a summary analysis of focus groups of family practice residents conducted in 2003
    - consultations with key informants by email and telephone
    - a review of relevant research documents the planning committee reflected on transcripts of their meetings, highlighted items and contributed residual issues and opinions to the final plan.
    - all members of UBC DFP were invited to a series of two meetings (in Nov and Dec/05) to collaborate in the writing of the document
    - in mid Jan/06, a summary document (outlining possible research planning strategies) was circulated to all UBC DFP members and posted to the Webpage for review; in addition, the completed analysis of in-depth interviews and the on-line survey will be posted to the Webpage for review.
    - all members of the UBC DFP are invited to attend the 7:30AM department meeting on Wed Jan 25$^{th}$, 2006, at which time we will strategize future directions for research infrastructure within the UBC DFP

## C. GATHERED FACTS

ON-LINE SURVEY FOR ALL MEMBERS OF THE DEPARTMENT

- See results, Appendix 5

IN-DEPTH INTERVIEWS WITH PURPOSEFUL SAMPLE OF MEMBERS OF DEPARTMENT

- See analysis findings, Appendix 6

FEED-BACK REGARDING UBC DFP RESEARCH OFFICE SERVICES

- See analysis compilation, Appendix 7

FOCUS GROUPS OF FAMILY PRACTICE RESIDENTS, 2003

- See analysis summary, Appendix 4

KEY INFORMANTS CONSULTED

- See list of key informants, Appendix 1

DOCUMENTS REVIEWED

- See list of documents reviewed, Appendix 2

## D. HOW UBC DFP MEMBERS DEFINE FAMILY MEDICINE RESEARCH

We used Boyer's language of scholarship[2] to encapsulate the key elements of family medicine research that were expressed by members of the UBC DFP. Boyer wrote, "*Scholarship is teaching, discovery, integration, application and engagement; clear goals, adequate preparation, appropriate methods, significant results, effective presentation, and reflective critique that is rigorous and peer-reviewed."*

### 1. OUR RESEARCH (SCHOLARSHIP OF DISCOVERY) RELATES TO THE DISCIPLINE OF FAMILY MEDICINE

- Research that answers the questions relevant to the discipline of family practice
- Scientific research in the area of family medicine
- That specifically intended to evaluate the role of the family physician or interventions that may take place within that role.
- Medical research done by family doctors or about family medicine.
- Process of being curious about the learning and application of family medicine.
- Family medicine research involves reflective evaluation and understanding of the multiple roles and responsibilities and activities of the family physician/patient/family/community
- I love the quote from??Larry Green-- "if we want more evidence-based practice we need more practice -based evidence" research in area of primary care and family doctors' interests
- Exploring questions about topics specific to or best evaluated, in FP and questions on the discipline.
- That which fps need to know to practice in their settings apart from what specialists do
- The process of organized curiosity that addresses the manner in which health is influenced by family, environmental and structural events and issues.

### 2. OUR SCHOLARSHIP BLENDS DISCOVERY WITH INTEGRATION, APPLICATION, ENGAGEMENT AND TEACHING

- Curiosity results in change management
- Models of care, evaluation
- Health policy
- Research that responds to the needs of health care organization

[2] Boyer, Ernest L. *Scholarship Reconsidered: Priorities of the Professoriate*. Princeton: Carnegie Foundation for the Advancement of Teaching, 1990.

challenges

3. **OUR 'LABORATORY' IS OUR COMMUNITY AND OUR CLINICAL PRACTICE**
   This concept is expressed by the diagrams of Green et al (see Figure 5).
   - Large denominators, wide inclusion criteria (this is different from specialist-research, which is tertiary care, referral-based research with narrow inclusion and small denominators.)
   - Slightly fuzzy edged (cameras, fuzzy logic, formal logic, define to a certain level, more flexible, grey instead of black and white)
   - Expansive
   - Wide open
   - Broad based research
   - Practical research which applies to a large number or patients and doctors.
   - Undifferentiated presentations
   - Potential for long-term studies, following over their life-span

4. **OUR RESEARCH CONTEXT IS PEOPLE, RELATIONSHIPS AND ENVIRONMENT**
   The isolated individual researcher is now the exception. Increasingly, we research with colleagues from our clinical practice and from our communities; we engage the voice of our practice communities to lead the research. Increasingly, family physician researchers work as members of multi-disciplinary and inter-disciplinary teams.
   - qualitative; quantitative
   - More social than many others
   - Good!
   - Relationships in an effort to understand and nurture healthy individuals and communities.
   - Multidisciplinary approach to Primary Health Care
   - Any research that has an impact on primary care provision/philosophy
   - Research which helps to answer questions about primary health care.
   - Research that responds to the needs of primary care and health care organization challenges
   - Relationships with community, family physicians, other family members, other health care providers (and self!)
   - Self-reflective practitioners and patients

5. **OUR RESEARCH SCOPE IS BROAD**
   Our research links across a diversity of specific areas

- Family doctors manage everything, so topics could include post-operative complications, CHF, HIV, palliative care, etc.
- Probably anything medical, except laboratory science.
- I think a huge range of research can qualify as FM research.
- Deals with any aspect of family medicine.

## 6. THE LIFE CYCLE OF THE FAMILY MEDICINE RESEARCHER IS UNIQUE

- Research systems reward specialization. Family medicine researchers do not get rewarded in the current research structures because FP researchers engage in a variety of research interests that evolve over time. Family medicine researchers are interested in many areas of research as reflected by their variegated clinical practice; they rarely have one single research area.
- Many practicing family physicians become involved in research after they have been practicing for many years …consequently, they bring years of clinical wisdom and expertise, and leadership and networking skills, to multi-disciplinary and inter-disciplinary research teams. Currently, family medicine researchers are not eligible for part-time investigator salary support for 'mid-career' or 'late-career' family physician researchers.
- Gender issues add additional perspective to the life cycle of family medicine researchers.
    1) Many female family physicians, at the time of lessening domestic-life obligations, wish to start to combine family medicine research with their clinical practice. Hence, their interest in research may occur even later in their life-cycle than their male family physician counterparts. These older female family physicians would consider themselves 'early-career' or 'mid-career' researchers, in contrast with the traditionally male-research paradigm which would box them age-wise as 'late-career' researchers.
    2) Alternatively, for female physicians earlier in their life-cycle, who wish to combine part-time clinical research with part-time clinical practice, flexible, gender-sensitive, clinical investigator salary support options must be available.

## E. IDEAL WORLD FOR FAMILY MEDICINCE RESEARCH

Three themes emerged (from analysis of the on-line survey, the in-depth telephone interviews and the focus groups of DFP residents in 2003) as necessary to attain an 'ideal world' in which to conduct family medicine research: firstly, research community life; secondly, research knowledge base; thirdly, research resources

### 1/ Research community life

In the ideal world, the research community would have a formal and inclusive structure, in which everyone feels valued and has a role to play. It would have the following features:

- **Transparency**
  i. Consensus community discussions would generate prioritization of DFP research activities and needs
  ii. All researchers would understand how and when they might access research infrastructure support.
  iii. Accountability for resources would be transparent.

- **Expectations**
  I. There would be a formal research mentoring program available for every member of UBC DFP.
  **II.** Members would be expected to share their research gifts and knowledge with each other and be willing to learn collectively and with other disciplines

- **Opportunity**

  Opportunity associated with the research community might include, but not be limited to:
  I. regular times to share ideas and learn from each other
  II. collaboration with graduate students (Masters, PhDs) and fellows (CIs)
  III. a safe environment, created by the leadership, for trainees
  IV. celebration of successes at all level of research skill
  V. development of a trusting and collegial atmosphere;
  VI. acknowledgement of the wisdom of elders (researchers improve with age!) and a way to incorporate their gifts into UBC DFP in a sustainable way
  VII. opportunities to relate to, and collaborate with, multi-disciplinary researchers

VIII. opportunities to integrate research into one's clinical practice
IX. DFP research staff to support researchers

## 2/ Scholarly and research skills knowledge base

The ideal research world would provide opportunities to increase DFP members' research knowledge base. Suggestions included:

- providing structured academic research curriculum
    1. expectation that FP residents will learn research knowledge, make it part of residency training, a skill that will serve for the duration of FP career
    2. providing workshops
    3. Research toolbox, a research primer
    4. Courses, seminars, workshops
    5. Work-in-progress rounds, expectation that all trainees should attend, should be well facilitated so that feed-back is safe and supportive
    6. Develop UBC Dept of FP Masters program for FP research….make it very accessible for clinical FPs, flexible, on-line options, multi-disciplinary aspects
- Acknowledge that mature & elder clinical family physician researchers bring unique leadership and inter-disciplinary skills (e.g., as PIs or members of multi-disciplinary team)
- Provide opportunities for interdisciplinary collaboration: (e.g. Access to PhD and Masters, as members of interdisciplinary teams)
- For trainees (such as R3 Clinical investigators) need structured times of one-to-one mentorship, structured program of accountability, regular presentation of work

## 3/ Resources

Those surveyed and those interviewed provided many suggestions for how research resources would be allocated in the ideal research world. Funding would be available for the following

- Family physicians, as principal investigators or co-investigators, would have scholar awards for protected time for research. These awards would be gender-sensitive, and open to mid/late family physicians through until retirement.
- research assistance (RA): data collection, data entry and data analysis
- .to develop teaching and training (research curriculum)
- to administer the research community infrastructure

- to provide dedicated (even if short-term) secretarial support around the time of research application deadlines (for collecting signatures, Xeroxing, updating CVs, compiling applications, etc)
- Access to grant writers, to facilitate successful funding of FP research questions
- Access to scientific writers, to prepare manuscripts for publication
- Researchers would be supported with infrastructure in their geographic location, thereby strengthening their affiliation with their local DFP colleagues, including DFP trainees
- Research capacity would be built locally alongside the residency teaching; then, residents will see research-in-action, adult, life-long learning for them
- Maybe a central hub to act as clearing house of research information?
- There would be research linkages at local level with community agencies, community funders and local policy makers, with an emphasis on how to improve and evaluate community clinical care.
- Modest amount of 'seed money' funding would be available to medical students (who are interested in FP research), FP residents (whose Resident Project warrants more than $150/internal support) and DFP members who are starting to do research
- Decisions re.allocation of resources (space, grant writers, secretarial, etc) would follow consensus members' discussions of values and need; accountability of resource allocation would be transparent

## F. DEFINING OUR VISION

An over-arching theme that evolved from the consultation was the desire to build on the distinctive scholarly culture that is unique to family medicine research. We propose the following vision, which evolves from the definition of family medicine research that was generated by UBC DFP members:

Our vision is to:

1) foster and encourage members' individual curiosity, interest, passion and research skill to pursue research questions and discovery within the broad discipline of family medicine
2) encourage members to integrate their research and discovery with application, engagement and teaching, which will improve clinical practice and health policy through effective knowledge translation
3) have secure, flexible and sustainable research salary award funding such that members may combine clinical practice with research, thereby ensuring that our research will continue to be grounded in the clinical practice of family medicine
4) build bridges with patient communities, health care organizations and other disciplines, so that members' research is fostered and grounded in people, relationships and environment,
5) support members' research across a variety of specific areas
6) support members, in a gender-sensitive and age-sensitive manner, to pursue research at all stages of their research career

## G. DEVELOPING A STRATEGIC PLAN FOR UBC DFP RESEARCH

Members of DFP will collectively prioritize the following strategic options:

### 1/ To build a Research Community

a) To articulate expectations and opportunities of membership in the DFP research community
b) To collectively develop a transparent process for members to access research resources
c) To create a formal research mentorship program
d) To create frequent opportunities for members to share their research work in a safe environment and to provide mutual support
e) To provide supportive and nurturing leadership
f) To build more structured 'bridges' between:
    - research-generations of members (from medical students through active faculty researchers and to retired researchers)
    - members with diverse research areas & disciplines within DFP
    - members locally (at one geographic site) and members across the entire DFP (centrally organized events and/or video technology linked)

### 2/ To enhance the family medicine research culture by building scholarly skills and scholarly capacity

a) To develop research curriculum for DFP members
    - create a Masters program in primary health care research
    - develop more family physician research trainee positions (R3 clinical investigators)
        - provide structured feed-back for all trainees
        - weekly individual meetings of trainee with supervisor
        - provide regular evaluation and feedback
        - weekly meetings for trainees to share work-in-progress in a supportive environment
    - develop UBC DFP researcher toolbox, research workshops, etc
    - develop core research skill curriculum for residency program
        - to be included into FP residency basic academic curriculum
    - promote the integration of research teaching into all under-graduate and post-graduate medical teaching…
        - 5 minutes at the end of each session to discuss gaps in the clinical knowledge base and thus, potential research

b) To develop a formal UBC DFP research mentor program
    - include FP residents
    - include all DFP researchers

- Funding needed to administer this program

c) To provide research consultants as a resource for UBC DFP members

- Research assistant(s) to help with data collection and analysis
- Grant facilitator
- Statistical consultant(s)
- Quantitative research consultant(s)
- Qualitative research consultant(s)
- Scientific writers

**3/ To Improve Research Resources**

a) To seek more salary awards for family physician researchers, as the current dearth of salary awards is a major block to building UBC DFP research capacity:

- to work with national and provincial funding agencies, UBC administration, local health authorities, local foundations and charities to diversify our funding support
- CBCI (community based clinical investigator) program is very positive, but many more, longer-term positions are needed

b) To seek stable salary support for administrative staff to meet the following needs:

- liaise with UBC ORS and UBC Development office
- assist UBC DFP researchers in organizing their research funds
- develop long-term relationships with DFP researchers
- train & mentor geographic research staff in the art of grant facilitation and the secretarial support of researchers
- assist UBC DFP to develop a long-term, sustainable, research HR business plan
- fund-raise, and to liaise with potential funding sources, to build more sustainable research resources for items all items a) to g)

c) To develop UBC DFP research community life (see 1/ above)

d) To develop the UBC DFP scholarly knowledge base (see 2/ above)

e) To employ research staff in each geographic location to assist with the following needs:

- Grant facilitation for DFP researchers at each geographic location
- Administrative and secretarial assistance for DFP researchers at each geographic location, especially at time of research application deadlines (e.g., collecting signatures, collecting CVs, copying, couriering, etc)

f) To develop funding for 'seed money' for medical student FP research, FP residency research and beginning FP researchers

g) To identify office space to house UBC DFP research support staff in appropriate geographic locations.

- Decisions regarding allocation of the geographic research office space would be made collaboratively by geographic DFP members and researchers

## PROPOSED ORGANIZATIONAL STRATEGY

We propose that the research community be organized in a matrix, parallel to the UBC DFP post-grad residency program, as portrayed in the conceptual figures (See Figure 4a) and 4b)). For this model to be successful, every UBC DFP researcher could chose to be affiliated with one geographic site (Prince George, Victoria, Chilliwack, Rural (Kelowna), SPH, GVS or Aboriginal).

If every UBC DFP division researcher was affiliated with one DFP geographic location, divisions would more effectively permeate their research interests to all DFP members. For example, each DFP Division of International Health researcher would affiliate with their nearest geographical location (Victoria, SPH, PG, wherever) and would naturally access research resources at that location, mentor residents at that site, attend research work-in-progress rounds at that location and develop bridges and research relationships with DFP members at
that location.

***Enablers*** *of this model include*

1. *natural potential exists for fostering research-collaboration and research-bridges between site research faculty, site community practitioners, site FP residents and local health authority researchers*
2. *Site FP clinician researchers are motivated to meet with each other locally for writing groups, work-in-progress rounds and sharing their research work.*
3. *Ability of site CIs and CBCIs to build research-bridges with site clinical researchers and site FP residents*
4. *Decisions regarding allocation of research space would be made at local site level, where relationships between players are already being built*
5. *Site research capacity will develop according to the research interests and abilities of site DFP members and the needs of their local communities*

***Constraints*** *of this model might include*

1. *since research capacity at each site will develop differently, site research resource disparities may become accentuated*
2. *initially, certain sites will be disadvantaged if their site clinician researchers feel that their research skills are inadequate*
3. *sites are dependant on central research resources to build research capacity in their members (site members need RA support, statistician support, research design, grant facilitation)*
4. *central leadership must have the ability to engage consultative input from site research faculty regarding the allocation of research resources, in order to ensure that research resources (e.g., grant writing, research design, data analysis, secretarial assistance, financial officer, etc) are equitably available to all sites*

## ***ASSESSING RESEARCH INFRASTRUCTURE THAT WILL BE REQUIRED***

### ***1. Functions of DFP geographic research locations:***

*Faculty leadership roles would require primary care research experience, collaborative administrative skills, inter-personal skills and facilitation skills, for the following functions*

*a)To foster collaboration in the geographic location between health authority personnel, policy makers, granting agencies, communities/patients/families, and members of DFP (site DFP clinical researchers, site FP residents, site CIs and CBCIs, site residency ERI faculty, division researchers)*

*b) To support the research needs of DFP members in that geographic location*

*c) To organize DFP geographic/site writing groups, site work-in-progress rounds, site research presentation days, as needed by site members*

*d) To facilitate DFP research mentoring program*

*e) To facilitate site clinical faculty research in the pursuit of their research questions…to guide them to resources to develop their individual research skills, to assist their grant applications and all phases of their research*

*f) To attend regular central DFP research leadership retreats, to provide input into collective DFP decisions regarding allocation of research resources, to support central/departmental research presentation days*

*g) To work collaboratively with DFP site residency scholarly activity (ERI) faculty*

*h) To liaise with and report to central research faculty organizer*

### ***2. Functions of DFP central research organization:***

*Faculty leadership roles would require primary care research experience, collaborative administrative skills, inter-personal skills and facilitation skills, for the following functions:*

*a) To facilitate and organize all aspects of the UBC DFP research program*

*b) To decide collaboratively with DFP geographic research faculty on the allocation of research resources and personnel to provide research support for DFP geographic locations*

*c) To facilitate and organize regular 'central' celebratory UBC DFP research presentations'*

*d) To oversee and organize the CI and CBCI programs*

*e) To oversee the development of research curriculum (on-line research methods course and a Masters in primary health care research)*

*f) To introduce and oversee a DFP research mentor program*

*g) To work towards acquiring funding for protected time for FPs to do research*

*h) To work collaboratively with residency program research faculty (lead and site)*

*i) To be accountable to a UBC DFP research advisory board*

*j) To develop national and inter-provincial collaborations, with CFPC research director and national family medicine research networks*

### *3. **Administrative staff functions in central research organization***

*This role(s) is essential to building research capacity in DFP. It would require administrative, organizational and financial management skills, experience with grant generation and the ability to facilitate the growth of research-support skills in others, for the following functions:*

a) *To liaise with UBC ORS and UBC Development office*
b) *To administer ORS research accounts for UBC DFP researchers*
c) *To develop long-term relationships with DFP researchers*
d) *To manage the UBC DFP research finances and research administration*
e) *To train & mentor site research support staff (site research administrators, secretaries & grant facilitators)*
f) *To fund-raise, and to liaise with potential funding sources, to build more sustainable research infrastructure for DFP*
g) *To assist UBC DFP to develop a long-term, sustainable, research business plan and to develop 'overhead' policy for DFP grants*
h) *To assist UBC DFP to collectively develop transparent policies regarding access to research resources*

***4. DFP geographic research staff***

a) *At each geographic location:*
    a. *Geographic research secretarial assistance…. to support DFP researchers with the mechanics of research (e.g. getting grant applications in, collecting CVs, copying, couriering, stuffing envelopes for surveys, etc)*
    b. *Geographic DFP grant facilitators…essential for building research capacity for DFP……to facilitate writing research grants that are successful and that incorporate sustainable research assistance and secretarial help*
b) *The geographic research staff will liaise with the central development & financial officer*

*5.* ***DFP research consultants***

a) *Site-based or centrally-based, or a combination?*
b) *Research assistant(s) to advise on drafts of research proposals, research design and data analysis*
c) *Statistician*
d) *Quantitative research consultant(s)*
e) *Qualitative research consultant(s)*
f) *Scientific writers*

***6. DFP geographic research offices***

a) *DFP research office space to be sought in each geographic site*
b) *To house geographic research support staff and research faculty*

Figure 1. UBC DFP support of researcher members

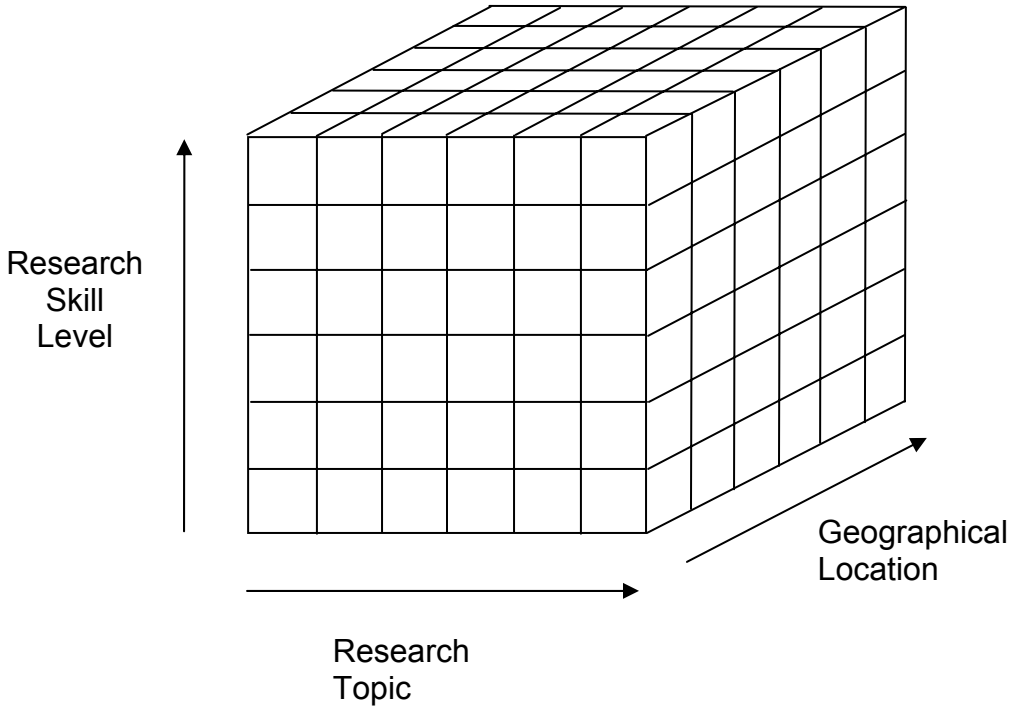


**Figure 2.** UBC DFP aimed to build research capacity support for all members, regardless of their research level within the academic research hierarchy

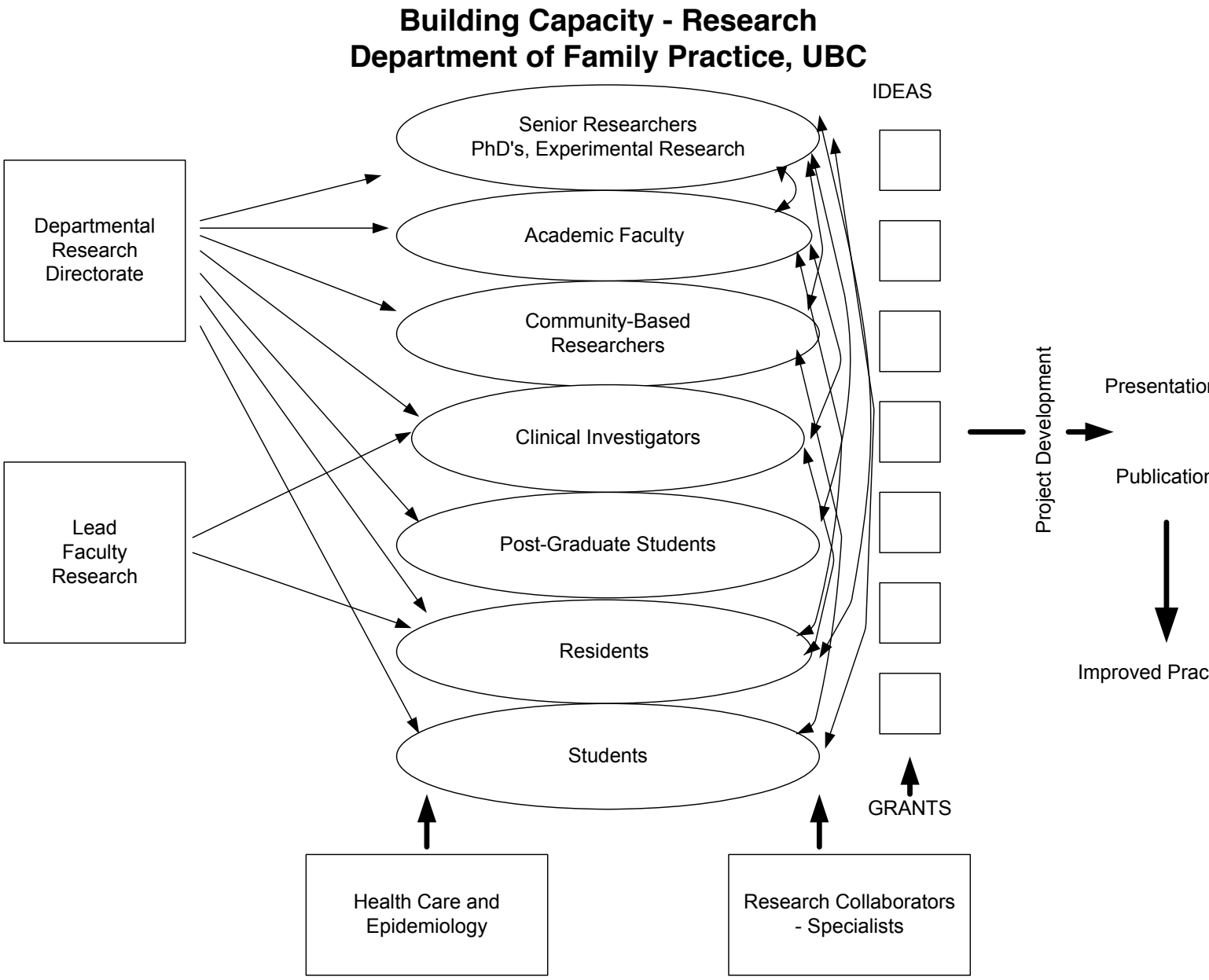


Figure 3. The UBC DFP has promoted the concept of a primary care research network

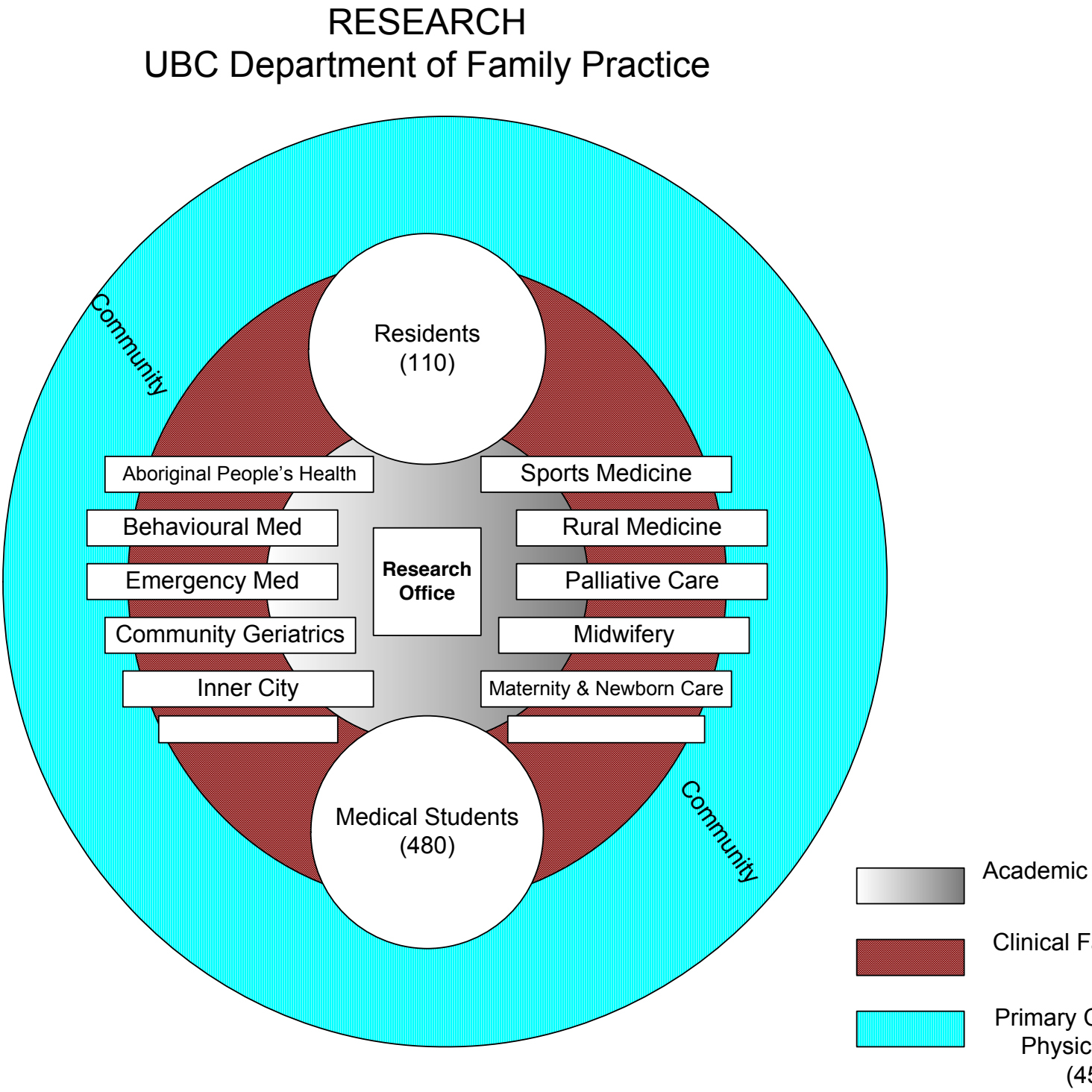
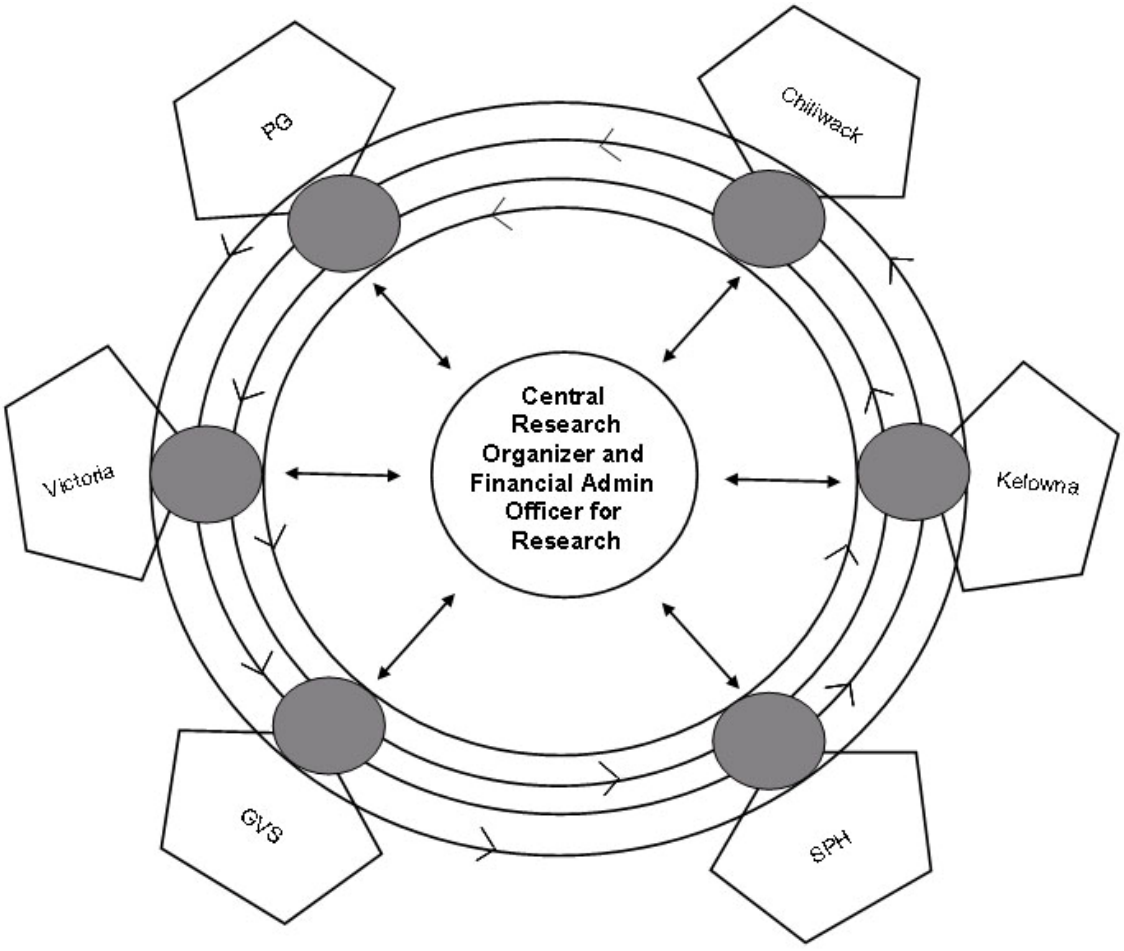


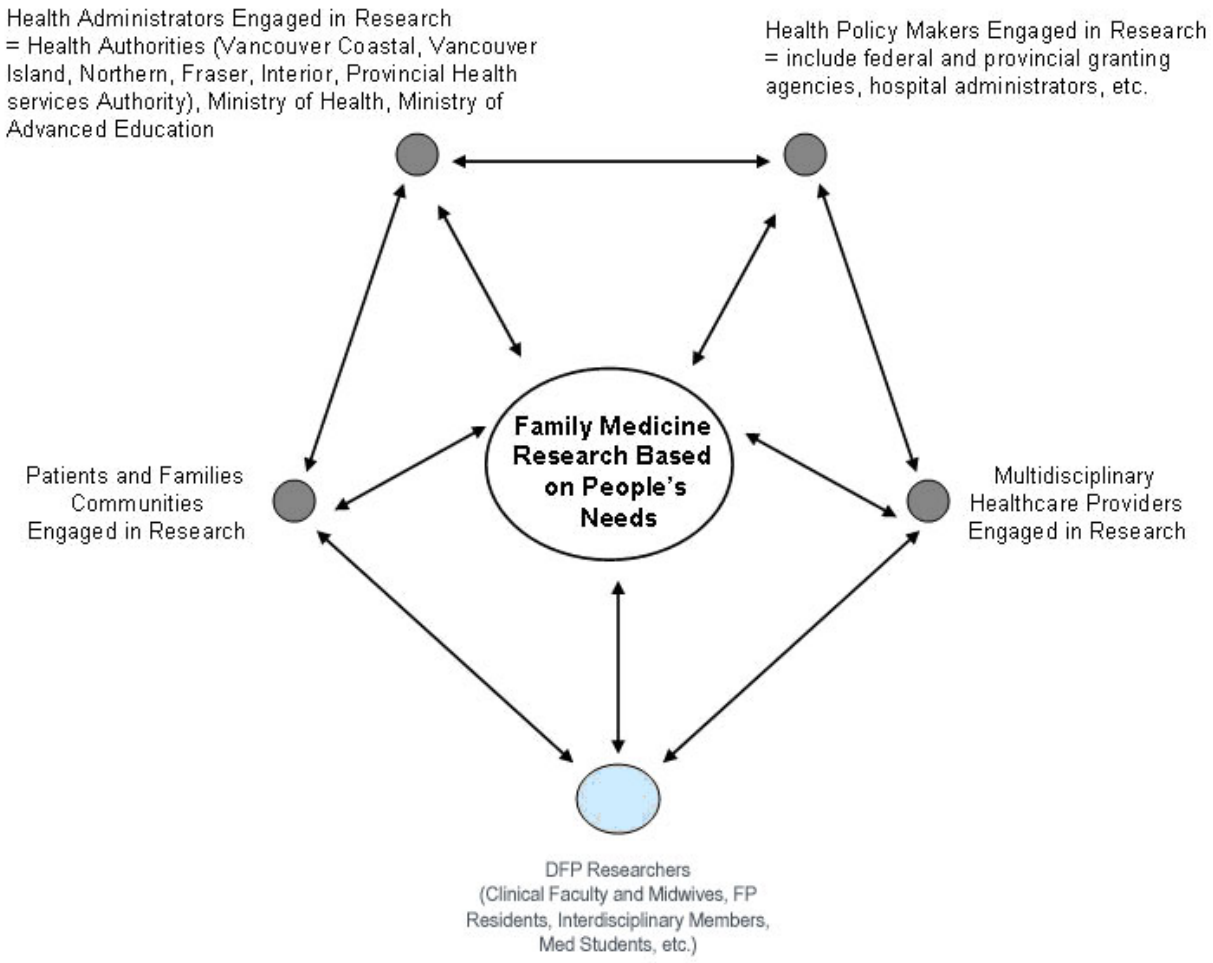
**Figure 4a). Matrix model: building research capacity in UBC Department of Family Practice**




Circles = DFP geographic locations: PG, Victoria, GVS, SPH, Kelowna and Chiliwack.

Orbitals = Divisions

**Figure 4b). Detail of Department of Family Practice geographic research pentagrams**



## Figure 5.

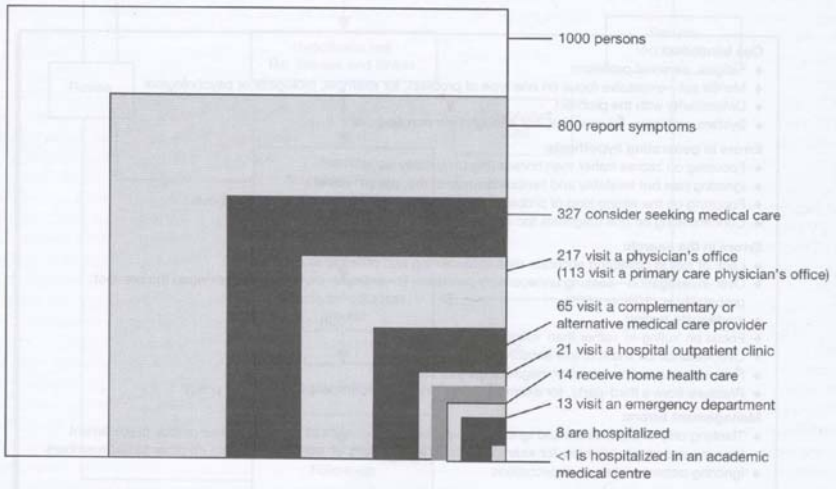



**Fig. 5** Results of a re-analysis of the monthly prevalence of illness in the community and the roles of various sources of health care. (*From:* Green, L.A., Fryer, G.E., Yawn, B.P., Lamier, D., and Dovey, S.M. (2001). The ecology of medical care revisited. *New England Journal of Medicine* **344** (26), 2022.)

## APPENDIX 1: a list of key informants that we consulted by email or phone

### Already consulted with:

- Martin Pusik, Dept of Pediatrics
- Garey Mazowita, Head, Department of Community and Family Medicine, Prov Health
- Brent Sauder, Office of Research Services
- Roslyn Hoad, Financial officer, UBC Department of Family Practice
- Three former employees of UBC Department of Family Practice
- Dr Bill Mercer, Applied Research & Evaluation Services (ARES), UBC
- Eva Cheung Robinson, Vancouver Foundation
- Dr Alison Buchan, will attend UBC DFP departmental meeting Jan 25, 2006

**We may also consult with the following**:
Barb Bothwick 604 822 5542 (Forestry)
Neil Kelly 604 827 5018 Research and Trust Accounting
Heather Burrarda " " "
Andrew Glin, 604 827 5018 " " "
Development Office, UBC
Stuart MacLeod, Children and Family Research Centre
UBC Development Office
Riyad Abu-Laban, Director of Research, UBC Division of Emergency Medicine
R Boakenhaven (VGH Research Centre?)
UBC Department of Education

## APPENDIX 2: a list of documents reviewed

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- Strategic Plan for Graduate Education at UBC, Jan 2002
- Fraser Health Research Strategic Plan document
- Northern Health's Vision, Mission and Values
- UBC Faculty of Applied Science (engineering), strategic plan 2005
- Summary of Western's Strategic Research Plan, May 2003
- UBC Library, "Furthering Learning and Research 2004-2007", strategic plan
- VGH Department of Emergency Medicine, Impact form for potential collaborative research projects
- Policies for Collaborative Research Studies in the VGH Department of Emergency Medicine

- Primary Care Research Infrastructure Development, April 2005, presentation to Dean Gavin Stuart
- Task force to Build Clinical Research Capacity in Primary Care in British Columbia, April 2005.

**Documents still to review?**
(McMaster DFP summary priorities)

Canadian DFP documents
American Academy (ACAM)
CFRI,
CGP,
UK,
Aus,
WHO Geneva www. Gfmer.ch )

## Appendix 3

**CHS Research Bulletin** **February 1991**

# Developing Community Planning Skills: Applications of a Seven-Step Model

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***An excerpt from the paper……***

***The Recursive Seven-Step Model***

In the shortest possible form, the model consists of seven steps:
TASK, GOALS, FACTS, POSSIBILITIES, OPTIONS, ASSESSMENT, DECISION

In teaching the model, each of the "seven magic steps" (as our graduate students' ironically term them) can be addressed at various levels of complexity, depending on the background of the students and the time available. For the purposes of this short paper, the nature of each step can be elaborated as follows:

1. Define your planning **TASK**, i.e., what you are going to plan, how (the process), when, and by whom. The task must be clear (preferably written out on flip chart) and everybody involved in the planning process must agree that this is the task (though they may later revise it). After this agreement, none is necessary until the final decision-making step.

   Planning groups find it useful to consider whether their task is to plan the substantive solution to some problem (and if so whether at the policy or project level), or whether it is to plan a process for planning the substantive solution. Frequently they begin with a substantive task and, correctly, regress to a process task once they realize they have neither the mandate nor the information to solve the substantive problem.

2. Identify your **GOALS**, i.e., what the legitimate parties in the planning ultimately want for whatever is being planned. While other models urge unanimity at this step, this model accepts goal variety and conflict as virtually inevitable in community (as opposed to corporate) planning. In later steps tradeoffs will be resolved, ideally by finding win-win solutions.

   Distinguishing steps 1 and 2 was an important step in the evolution of the model: many other models are confusing in combining process goals (step 1) and substantive goals (step 2) under one heading.

   "Goals" and "objectives" are not distinguished in this model. Other models define objectives as sub-sets of goals (or vice-versa) and simplistically suggest proceeding from goals to *positing* object-ives without recognizing that a full 7-step planning process is needed to select optimal means ("objectives") en route to goals.

3. Appraise the relevant **FACTS**, e.g., in terms of present and predicted future internal Strengths and Weaknesses and external Opportunities and Threats (to borrow the SWOT categories).

   Many other models (often implicitly) have factual analysis as step 1 rather than step 3. The predictable result is that data are collected and analyzed without any criterion of relevance and therefore without any use being made of the data. The waste of resources on unfocussed community profiles and information banks is scandalous.

4. Generate many action **POSSIBILITIES**, i.e., things you *could* do to reach the diverse goals given the facts. Brainstorming works very effectively at this step, as do many brainwriting techniques as well as refinements of the basic brainstorming approach.

   Teaching this step not only teaches ways to synergistically generate ideas. It also teaches people to move from a debate-orientation, where the first idea on the table becomes the focus of ego-serving criticism or support, to a more reflect-ive, objective planning orientation in which one may *offer* ideas without feeling called on to defend or challenge them.

5. Package the possibilities in terms of compatible and mutually exclusive **OPTIONS**. Decision-tree diagrams are often helpful here.

   The point of step 5 is to reduce the chaos of step 4 into a manageable set of choices which have to be made (i.e., options). In a simpler version of the model, where the ideas generated at step 4 are few in number or on the same continuum (e.g., ideas for fund-raising), Step 5 can be omitted: in the simpler version, the possibilities in raw form become the options.

6. **ASSESS** the pros and cons of each option. Many techniques are available, or can be developed ad hoc, for participatively taking this step with rigour. The simplest technique is listing pros and cons of each option. Others are goals achievement and cross-impact matrices, and in special circumstances cost-benefit analysis.

   Techniques for taking this step form a core part of the curriculum in professional planning schools. The trick is to contextuate the techniques within a logical planning process and to adapt them to community participation.

7. **DECIDE** on an option to adopt (or to recommend) using culturally appropriate procedures (consensus, voting, leader decides, etc.).

At any step people can, and often do, revert to a previous step. The model encourages reflection at each step to determine whether the planning group needs to back up. The point of the sequence of steps is not to straitjacket discussion but to provide some clarity about the direction of the discussion and to help people relax in the knowledge the discussion is leading to a decision even though it seems open-ended within a step. ("We're brainstorming ideas now; later we'll be assessing them in order to select the best one." "We're talking about our visions [goals] now; later we'll be talking about how 'practical' they are.")

The decisions taken at step 7 lead either to physical action, and/or more likely further planning to implement the decisions. The follow-up planning follows the same 7 steps. The result is a recursion of broadly identical processes leading, for example from planning-for-planning-for-planning (N-2) to planning-for-planning (N-1) through substantive planning (N) to implementation planning (N+1) to physical action. In this sequence, the decision of one process sets the planning task for the next process.

The N-1, N, etc., symbol system works very effectively to guide discussion at the task definition stage. It is not unusual to hear people exposed to the model saying such things as "we've made a mistake here--this is an N-1 problem, not an N problem," or, "our mistake was back at the N-2 stage in not thinking carefully about the right people to plan the planning." Thus, the recursive nature of the model increases the planner's power on the one hand (because it conditions the planner to think about getting leverage on a problem by planning

the planning [N-...] and about carrying on the planning [N+..] until action results), and it simplifies learning about planning on the other hand (because only 7 steps need to be understood for undertaking any kind of planning, including the planning of processes themselves).

While the model sees the planning process as complete after a decision is made, the projects which teach the model also emphasize that planners must be responsible for monitoring and evaluating the implementation of the decision.

To encourage implementation of complex decisions and to facilitate monitoring, students are encouraged to use a modified Gantt bar chart. The chart not only illustrates the break-down of tasks and their timing relationships, but most importantly for volunteer groups, the persons responsible.

Students are also taught to think of evaluation less as an accountability tool and more as a component of the planning → action → evaluation trinity. To teach this trinity is to teach an experimental action-research attitude to life, an attitude that "failure" does not consist of making mistakes: one has "failed" when one fails to try to avoid mistakes, or when one fails to make a decision and act, or when one fails to learn from mistakes. People responsible for planning the development of their communities respond to this concept because so much of their frustration lies in trying to create harmony among dreamers, doers and critics.

In fact, the strength of the 7-step model in all its components lies in its potential to synergize the dreamer, doer and critic in all of us, through a process which clarifies which persona is appropriate at which time.

### *Critique of the 7-Step Model*

UBC graduate students have taken to calling the model the "seven magic steps" because they are bemused by my claim that following the steps will produce an optimal decision in any problem area requiring a group or community decision (or even an individual decision). They are bemused, I think, because in planning theory textbooks they are told that rational comprehensive planning is impossible, undesirable or passe, and that planning process cannot be separated from substance. For example, Chris Paris claims that "to view planning theory as a separate, internally coherent set of procedural logics, operating in 'given situations' is....[a]t best [to make it] a cookbook of instructions for doing planning-as-a-job but at worst it could be a deliberate attempt to focus on the uncontroversial and the mundane..."(12)

More specifically, five types of concerns have been raised about the recursive 7-step model from various quarters: (i) the model may be inappropriate to some cultures and to foist it on them is imperialistic; (ii) the model may be overly ambitious in its claim to general application in all substantive areas; (iii) the model may be trite, linear, mechanical and if taken seriously, intellectually confining; (iv) the model may be too complex because of the fine tuning involved in separating so many steps and because of the recursive concept and language; (v) the model can be exhausting to use at so many levels of recursion and is unnecessarily powerful for planning for planning.

I share all five concerns. Indeed, (i) the model is derived from a particular culture, (ii) my generic substantive claims for it are ambitious, (iii) it is linear insofar as the steps are sequential, (iv) in parts it can be difficult to learn, and, (v) it can be tiring to use.

On the other hand: (i) people from a wide variety of cultures have found it useful when confronted by the need for planning to deal with conflict, complexity and change; (ii) the model has worked, i.e., has helped people (including graduate students) come up with creative, realistic, consensual, implemented plans in a wide variety of substantive fields including economic development, organizational development, land use planning, resource management, curriculum develop-ment, structuring of volunteer committees, and planning for self-government; (iii) the model allows, and encourages, cycling back to rethink at previous steps and even previous (N-...) processes; (iv) the model can be used simply (e.g., by omitting the options step or by simplifying the assessment step to a discussion) then refined with richer understanding and practice according to the demands of the planning problem; (v) the model need not be followed slavishly --an understanding of

the principles it incorporates can be helpful in organic unstructured planning discussions; furthermore it becomes, like any other tool, increasingly easier to use with practice; and, its use even if tiring can in the end prevent the wasted energy and frustration which results from poor planning.

The most recent empirical example which convinces me to carry on using, developing and teaching the model is provided by the report of a senior administrator for a B.C. Indian band, who was becoming quickly exhausted by her workload and the confusion in the multifarious band operations. After being introduced to the model in a two-day workshop, she happily found that she could personally use the model to set priorities, could use it with her staff to plan the full band's annual planning meeting, and could use it as the basis for the agenda of the planning meeting itself.

### *Conclusion: Lessons Being Learned From Using the 7-Step Model*

From the responses of students in the various planning education projects which use the 7-step model we have learned the following about teaching planning process to people engaged in community development planning.

First, at the most general level, we have learned that community leaders, staff and advisors, are hungry for planning process concepts and techniques which will help them help their communities plan to manage change, complexity and conflict. Community leaders appreciate being introduced to, and practicing, systematic thought about group dynamics, the logic of problem-solving, relations among planning and decision-making, the role of research, decision-making criteria and methods, and the function of evaluation.

Second we have found that a rational planning model, for all its defects, is useful at a minimum for its heuristic value, and at a maximum as an off-the-shelf tool for day-to-day use. More specifically, we have found that the recursive 7-step model can be readily communicated, understood, used, practiced, and appreciated for its effectiveness.

Third, we have discovered which planning concepts seem to be most useful to people coping with change, complexity and conflict. Some of these are:

- planning is an ongoing activity, integral to ongoing community management;
- good planning does not just happen, it has to be planned;
- planning is planning, one does not need to learn different processes for different tasks;
- planning (N-1) to involve community members in planning results in plans that are acceptable and implemented;
- the planning process itself has impacts on a community --both the process and the product are important;
- goal-directed planning is more effective and efficient than planning which starts with a survey;
- creative planning can lead to win-win solutions in conflict situations;
- brainstorming (mutually generating ideas without criticism) produces more creative solutions than debate and rhetoric;
- practicing brainstorming encourages people to be intellectually cooperative and mutually reflective;
- there are usually pros and cons to any idea, and both should be considered to avoid both macho optimism and cynical despair;

- planning may result in a decision to continue planning (N+1), but planning should not cease until there is action;

- actions should be monitored and evaluated, planners should take an experimental approach to their work;

Finally, and perhaps most importantly, community leaders and planners have appreciated receiving the overall message the 7-step model attempts to convey: people can successfully and enjoyably plan for themselves. They discover that planning is a fine art that takes practice, reflection and use of techniques, but that it is not an esoteric art. Like any other creative work, planning is often frustrating and time-consuming, but ultimately richly satisfying.

### *References and Notes*

1. cf. the Strategic Choice model as described in, e.g., A. Hickling, Aids to Strategic Choice (Vancouver: Centre for Continuing Education, University of British Columbia, 1975).
2. The keywords in our library that yield the most literature on techniques useful for community planning are "Problem Solving" and "Group Process". The social science field of social psychology and the applied field of management respectively offer rich insights and practical techniques. As an example of the latter see A. B. Van Gundy, Managing Group Creativity (New York: American Management Associations, 1984).

3. The concept of "recursion" comes from mathematics. It has been used to effect by systems theorists such as Stafford Beer. The idea is that the elements/functions of a system are mirrored in its sub-systems and containing system.

Douglas Hofstadter's book, Godel, Escher, Bach: An Eternal Golden Braid (New York: Basic Books, 1979), is a long rambling discussion of the concept of recursion and its applications in art (Escher), music (Bach), and computers. Like others, Hofstadter credits Godel with the discovery of recursion as a powerful concept: "[Godel's] idea was to use mathematical reasoning in exploring mathematical reasoning itself. This notion of making mathematics "introspective" proved to be enormously powerful..." (p. 17).

In the case of the planning model discussed in this paper, the recursive idea is that planning processes need to be planned by planning processes; and moreover, that planning processes are homologous (i.e., involve the same steps) throughout the infinite regression of planning, planning for planning, planning for planning for planning, etc.

4. See for example, R. Pecarski, "Comprehensive Community Planing within B.C. Indian Communities," M.A. thesis. Vancouver: University of B.C., 1987.

5. For philosophy of the UBC courses see P. Boothroyd, "Enhancing Local Planning Skills for Native Self-Reliance: The U.B.C. Experience," The Canadian Journal of Native Studies, VI, 1 (1986): 13-42.

6. As reported in Boothroyd, op. cit.

7. Course brochures are available for most years.

8. P. Boothroyd, "Scripts for Thirteen 4-hour Sessions of a Teletraining Course in Band-Planning." Regina: Saskatchewan Indian Federated College, 1986.

9. P. Boothroyd, Handbook on Community Planning Process. (mimeo). Regina: Saskatchewan Indian Federated College, 1986.

10. Course and workshop reports provide details on how the model has been used in courses delivered in the field.

11. P. Boothroyd, "Learning from a Project to Strengthen Planning Capabilities in Rural Thailand," presented to spring meeting of the Association of Canadian University Planning Programmes, Calgary, 1989.

12. C. Paris (ed.) Critical Readings in Planning Theory (Oxford: Pergamon Press: 1982) p.7.

## Appendix 4

**General themes across Family Practice Residents and Paediatric Residents and Fellows Focus Groups, 2003**

1. There is a **great variation in research experience**. Some participants have virtually no experience to some with Masters degrees. **Irrespective of level of training, all participants want more research skills.**

2. There are two different markets for this course: 1) The specialist who wants to have sufficient skills necessary to complete their project and 2) The generalist who wants to learn about research for the sake of research. The former group would like the course tied to their own individual research project and only do relevant modules, the latter group would be interested in the entire course and would not mind Jonathan's idea of a story line threaded throughout the course.

3. **Not all of the participants want to be professional researchers**. They do not feel they need to be experts at statistics, they just want to know how to **ask appropriate research questions and how to do critical appraisal of others research.**

4. This research course is a good start but it is not enough. There is a common concern among participants that **there isn't enough programmatic support given for research**. Participants **want more mentoring/modelling of the scientist-practitioner model and more resources made available**. Examples of such support include: 1) an **orientation to resources on site, 2) a list of faculty and their research interests, 3) more administrative and clerical support, 4) recognition that research is an important component in their training and respect for the time it takes to conduct such research (especially from preceptors)**.

5. Participants mentioned that **time is a real issue**, both in taking the course and in conducting their research. This course is well received because it allows them to manage their own pace but the peer evaluation component is seen as unnecessary and an extra work load which takes up too much of their time.

6. The course schedule, starting in September and the one-month module length, may be problematic. If the course is tied to student projects, it should start earlier and there should be time consideration give to students who might have to go back and readdress potential problems in designing the study and collecting data. Some participants might want to do more than one module per month if they have the time—as the course is currently configured, this is not an option.

7. **An ethics section and more critical appraisal skills** should be built into the course.

8. Not everyone has **required software or familiarity with software** such as Access and to a lesser degree Power Point. Not everyone uses databases like Access for their data.

**9.** There are **mixed feelings about needing a "community of learners**". Some participants feel they benefit from it and others do not find it to be useful. **Some find collaboration to be helpful for the creative side of research (e.g. asking the question and designing the study) but not for the technical side (e.g. learning stats).**

**Appendix 8**

## ACKNOWLEDGEMENTS

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Ruth Elwood Martin, MD, FCFP
January 18, 2006