

The Canadian Partnership for Tomorrow: An Overview



Marilyn Borugian, PhD
 Director, BC Generations Project
 BC Cancer Agency

CAREB Meeting – April 30, 2010

Agenda

Why a cohort ?

Canadian Partnership for Tomorrow

- National cohort plan, duration and funding
- Regions and Principal Investigators
- Scientific objectives
- Key tasks and progress
- Governance

Knotty Ethics Questions

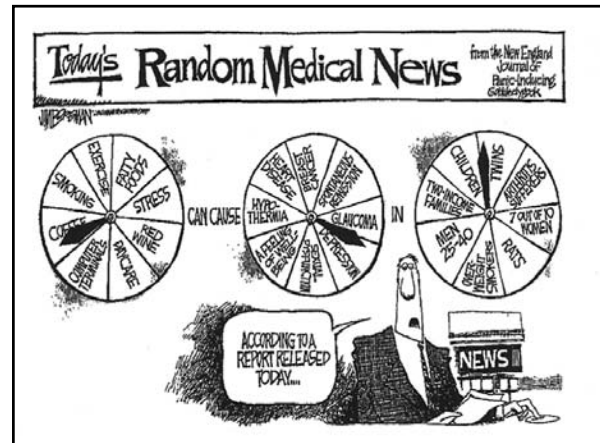
Population research

Most studies carried out by single investigator on single cancer

Because each cancer is 'rare' case-control methods used

Retrospective – open to bias

Often contradictory results due to differences in control selection, questions asked, etc.



About cohorts

Definition

Group of people sharing the characteristics (age 35-69) of a population (Canadian population) recruited and followed over time for the development of cancer and other diseases, in order to determine the origin of these diseases.

Advantages

- Assessment of exposures of interest in disease etiology (through questionnaires, measurements, biologic specimens) prior to development of disease rather than after.
- Higher quality exposure information
- Reduced bias

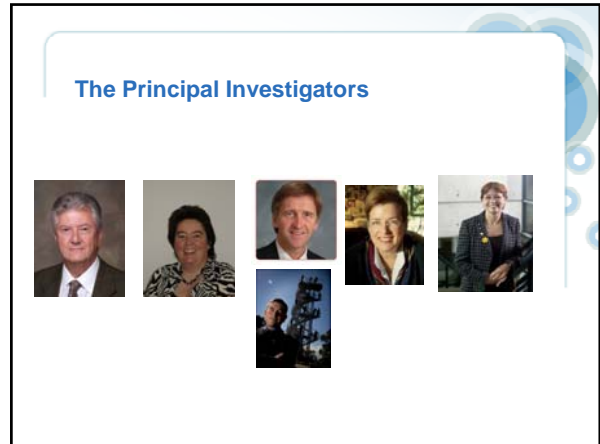
The National Plan, Funding and Duration

Recruit 300,000 Canadians age 35-69 from 2008-2012

Five provincial cohorts

Cooperative confederation approach

Major funding: \$42M from Canadian Partnership against Cancer



- ### The Team
- British Columbia - Richard Gallagher (BC Cancer Agency)
 - Alberta - Paula Robson (Alberta Health Services)
 - Ontario - John McLaughlin (PI) (Cancer Care Ontario)
 - Quebec – Bartha Maria Knoppers (McGill University/P3G)
 - Atlantic - Louise Parker (Dalhousie University)
 - ELSI and Privacy Task Force – Bartha Maria Knoppers (Lead)
 - IT Task Force - Vincent Ferretti (Lead)
 - Harmonization Task Force – Isabel Fortier (Lead)
 - National Coordinating Centre – Vivek Kurup (National Coordinator)
 - Senior Advisor – John Potter (Fred Hutchinson Cancer Research Center, Seattle)

- ### Scientific Objectives
- Research infrastructure to serve future studies
 - Bio-repository
 - Collaborations with other chronic disease researchers
 - Harmonization with other cohorts for data sharing

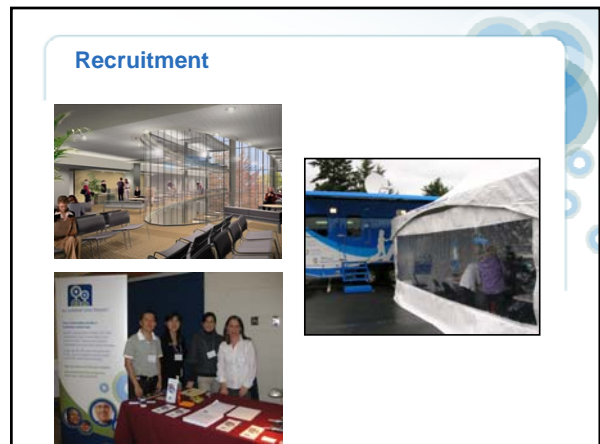
Progress to Date/National Level

Core questionnaire designed and agreed upon

Core physical measurements and instruments agreed on (blood pressure, height, weight, body composition, bone density, lung function).

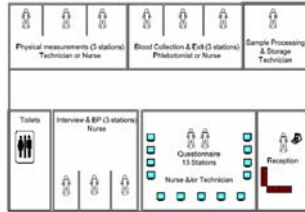
Basic blood/urine taking protocol agreed upon.

All cohorts now collecting data – almost 30,000 to date.



The Clinic Visit

Reception (including consent)
 Questionnaire (touch screen)
 Interview and blood pressure
 Physical measurements
 Sample collection
 Exit



Consent and Self-Admin Questionnaire



Measures



Height (sitting and standing), weight
 Waist, hip
 Body composition using BIA
 Blood pressure
 Grip strength
 Bone density using ultrasound
 Lung function using spirometry



Biospecimens



Blood:
 • Plasma
 • Serum
 • DNA
 • Red blood cells
 Urine
 Optional:
 Saliva
 Toenails
 Whole blood



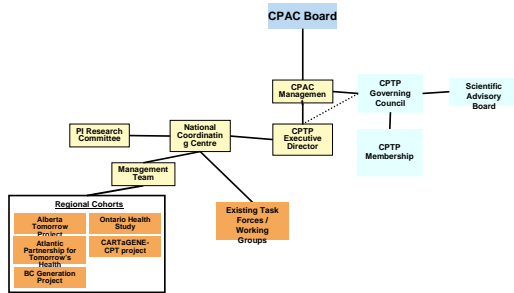
Overall benefits

World-class platform for cancer and chronic disease research for Canadian investigators.
 Platform for disease and exposure monitoring and surveillance
 Platform for training scientists
 Link with other cohorts in North America, Europe and worldwide

Potential immediate benefits

Specimen bank to assess baseline levels of environmental pollutants.
 Physical measurement data
 Risk factor data to predict future disease patterns
 Use of screening and prevention modalities
 Disease trajectories linked to specimens

CPTP National Governance and Organizational Structure



Examples of Knotty Ethics Questions

- **Multiple and unknown hypotheses:** How to write the consent to allow for research not yet defined?
- **Multiple jurisdictions:** How to structure access such that data and specimens can be combined across regions and be made available in a timely manner to researchers?
- **Long timeframe:** How to deal with potentially declining mental capacity in study participants?

Acknowledgements

- Canadian Partnership Against Cancer
- Alberta Health Services—Cancer Care
 - Alberta Cancer Foundation
- British Columbia Cancer Agency
 - Cancer Care Nova Scotia
 - Cancer Care Ontario
 - Dalhousie University
- Genome Canada / Génome Québec
 - McGill University
- Ontario Institute for Cancer Research
- Public Population Project in Genomics (P3G)
 - Université de Montréal

Thank you for your attention



<http://www.bcgenerationsproject.ca>



<http://thetomorrowproject.org>



<http://www.ontariohealthstudy.ca>



<http://www.cartagene.qc.ca>



<http://www.atlanticpath.ca>