Canadian Tumour Repository Network (CTRNet)
National Biobank Certification Program

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Dr. Peter Watson
Executive, Canadian Tumor Repository Network
Director, BC Cancer Agency Tumor Tissue Repository

www.ctrnet.ca
Origins:
• established fall 2004
• six founding programs
• funded by ICR-CIHR

Focus:
• enhance access for research
• promote national standards
• provide education and training

www.ctrnet.ca
Available Materials

<table>
<thead>
<tr>
<th>Tissue Type</th>
<th>Cases</th>
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<tbody>
<tr>
<td>Breast</td>
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<tr>
<td>Brain</td>
<td>Cases</td>
</tr>
<tr>
<td>Central Nervous System</td>
<td>Cases</td>
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</tbody>
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Standard Operating Procedures

CTScan's latest development includes web-based tools for an easily accessible Problem and Standard Operating Procedures. All the downloads are in PDF format. If you wish to modify these SOPs for local use please contact us and the original Word document can be sent.

*Note: As of November 15, 2017, all CTScan SOPs are undergoing a full review. New versions will be available for download early 2018. If you wish to be notified when new SOPs are ready, please use the contact us form.

ATiM - Advanced Tissue Management

ATiM is a software management system designed and developed by CTFscan in conjunction with Canadian Cancer. For more information about ATiM, please visit our ATiM documentation site.
System issues

Capacity issues
- Scale
- Demand

Quality issues
- Adoption of best practices
- Lack of standardization

Governance issues
- Inefficiency between biobanks
- Public confidence

References
Hughes SE, et al. Biopreservation and Biobanking. 8: 89-97. 2010
Human Tissue Authority, UK http://www.hta.gov.uk/
• ISBER:
  - Established Best Practices and a biobank self-assessment tool
  - Annual meetings, educational workshops, QC testing program

• OBBR:
  - Established Best Practices
  - Biospecimen Science initiative

• BBMRI
  - Registry and web-catalogue

• HTA (UK Human Tissue Authority)
  - Licencing

• Accreditation Canada
  - Qmentum Accreditation program for health care quality

• Canadian Standards Association ISO 9001
  - Norms for quality management systems and quality improvement

• Research Ethics Boards
  - Expanded consideration of biobanks in TCPS

• Canadian Association of Pathologists
  - Biobanking special interest group
Key elements of the program

**Process**
- To promote *common standards* across biobanks and support all biospecimen based translational research
- To provide *educational resources* for new and existing biobanks to facilitate adoption of these standards
- To foster *public confidence* that biobanks strive to meet best practice standards in Canada

**Mechanism**
- Appropriate for *all entities* that conduct biobanking
- *Scaled and tuned* to the type of biobank
  - involves self evaluation and encouragement to learn and to adopt key principles
Biobanks: spectrum

Better Health

People | Patients | Donors | Biobanks | Health Research

Research tools

Focus

Participants

Approaches
The key elements

- Enrollment Scheme
- Practice Standards
- Classification Tools
- Education Course
- Resource Center

http://www.ctrnet.ca/registration
The key elements

- Enrollment Scheme
- **Practice Standards**
- Classification Tools
- Education Course
- Resource Center

<table>
<thead>
<tr>
<th>#</th>
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<tbody>
<tr>
<td>1</td>
<td>Ethics</td>
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<td>2</td>
<td>Privacy and Security</td>
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<td>3</td>
<td>Governance</td>
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<td>4</td>
<td>Access and Release</td>
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<td>5</td>
<td>Quality Systems and Process Improvement</td>
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<td>6</td>
<td>Education and Training</td>
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<td>7</td>
<td>Informed Consent</td>
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<td>8</td>
<td>Biospecimen Collection and Processing</td>
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<td>9</td>
<td>Biospecimen Storage and Retrieval</td>
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<td>10</td>
<td>Maintenance of Storage Equipment</td>
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<tr>
<td>11</td>
<td>Facility Design and Security</td>
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<tr>
<td>12</td>
<td>Safety and Biosafety</td>
</tr>
<tr>
<td>13</td>
<td>Data Systems and Records Management</td>
</tr>
</tbody>
</table>
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http://www.biobanking.ca
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Common/neutral portal for
- resources, information, tools
- non-tumor biobank registration-certification program
- International biobank registration-certification program

http://www.biobanking.ca
Biobank Certification Program

http://www.ctnet.ca/registrationandcertification
Registration Phase

1. SUBMISSION OF REGISTRATION FORM
   • Submitted by a representative of the biobank
   • Collection of baseline biobank data for a register

2. COMPLETION INTRODUCTORY/OVERVIEW EDUCATION MODULE
   • Completion by single representative
   • Web-based, interactive, 60-90 minutes

3. REGISTRATION RECORD ISSUED
   • Link to Required Operational Practices (ROPs),
   • Link to Standard Operating Procedures (SOPs)
Certification Phase

1. CERTIFICATION FORM SUBMISSION
   • Review of registration and extended data
   • Allows for classification of the biobank

2. CERTIFICATION PRE-ASSESSMENT
   • Category determined using classification tool
     • Documentation required determined using assessment tool
     • Education module assignment determined using education tool
     • Assessment type determined on basis of category
   • Directed to support provided through ‘Resource center’ to complete certification materials as necessary

3. CERTIFICATION ASSESSMENT
   • Assessment type determined on basis of category (desk, telephone, video conference, or site visit)
   • Review of completion of education and documentation and commitment to adopt ROPs
• Initiated with broad national input (REBs, researchers)
• Created with grass roots input across Canadian biobanks
• Designed to be applicable to all entities conducting biobanking
• Founded on adoption of required practices (ROP’s) not specific SOPs
• Enabled by education materials created in english and french
• Targeted to address biospecimen quality and governance

http://www.ctnet.ca/registrationandcertification
Overview and Timelines

2010 - 2011 - 2012 - 2013

- Input:
  - ISBER
  - MAWG
  - CTRNet
  - ISBER

- Standards:
  - SOPs
  - ROPs
  - SOP updates

- Classification tools:
  - Schema
  - Decision tools

- Education:
  - Intro module
  - Special modules

- Resources:
  - Docs, templates, operations tools
  - Registration
  - Certification
Contacts

Canadian Tumor Repository Network
www.ctrnet.ca

Canadian Biobank Resource Center
www.biobanking.ca

UBC Office of Biobank Education and Research
www.pathology.ubc.ca/education-resource/ober

Information Survey
http://survey.biobanking.ca