TFRI Pancreatic Cancer Workshop

Project Name:	The Terry Fox Pan-Canadian Enhanced Pancreatic Cancer Profiling for Individualized Care (EPPIC) Project	
Date:	19 Sep 2015 9:00am-5:30pm	
Location:	Sheraton Wall Centre Hotel, Port McNeill Room, 1088 Burrard St, Vancouver BC	
Attendees:	Volkan Adsay	Emory University, Atlanta
	Oliver Bathe	University of Calgary and Southern Alberta Cancer Research Institute
	Candace Carter	Pancreas Centre BC
	Neesha Dhani	University Health Network and Princess Margaret Hospital
	Steven Gallinger	University Health Network and Princess Margaret Hospital
	Carman Giacomantonio	Dalhousie University
	Rachel Goodwin	University of Ottawa
	David Hedley	University Health Network and Princess Margaret Hospital
	Stephen Herst	Terry Fox Research Institute
	Rob Holt	Genome Sciences Centre
	David Huntsman	BC Cancer Agency
	Joanna Karasinska	Pancreas Centre BC
	Frédéric Lemay	Centre Hospitalier Universitaire de Sherbrooke
	Victor Ling	Terry Fox Research Institute
	Marco Marra	Genome Sciences Centre
	Anne-Marie Mes-Masson	TFRI Executive and Scientific Director of the Institute for Cancer Research at CHUM
	Malcolm Moore	BC Cancer Agency
	Gregg Morin	Genome Sciences Centre
	Chris O'Callaghan	Queens University and NCIC
	Eileen O'Reilly	Memorial Sloan Kettering Cancer Center
	Dan Renouf	BC Cancer Agency
	David Schaeffer	Vancouver General Hospital

	Intan Schrader	BC Cancer Agency
	Russ Watkins	Terry Fox Research Institute
	Hui-Li Wong	BC Cancer Agency
	George Zogopoulos	McGill University and Rosalind and Morris Goodman Cancer Research Centre

AGENDA:

8:30 am **Welcome**

8:45-9:15am **Highlights from the Canadian Pancreatic Cancer Research Strategy workshop and introduction of the TFRI proposal goals**
David Schaeffer and Dan Renouf (Pancreas Centre BC, Vancouver)

9:15-10:00am **Session 1:** Clinical significance of PDAC subtyping

PDAC subtypes and impact on prognosis and treatment response
Steven Gallinger (University Health Network, Toronto)

Not all "pancreas cancers" are equal: carcinogenetic pathways that lead to adenocarcinoma
Volkan Adsay (Emory University, Atlanta, USA)

Lessons from other cancers: ovarian cancer subtypes and treatment response
David Huntsman (BC Cancer Agency, Vancouver)

10:00-10:45am **Discussion**

10:45-11:00am **Break**

11:00-11:45am **Session 2:** Targeted developments in PDAC subtyping

Hereditary pancreas cancer
George Zogopoulos (McGill University, Montreal)

Linking molecular and clinical phenotype to genotype
Oliver Bathe (University of Calgary)

Deep proteomic profiling of pancreatic tumours
Gregg Morin (Genome Sciences Centre, Vancouver)

11:45am-12:30pm **Discussion**

12:30-1:15pm **Lunch Break**

1:15-2:00pm **Session 3:** PDAC subtyping in clinical trials

	Molecular signatures of long term survivors *Intan Schrader (BC Cancer Agency, Vancouver)*
	Biomarker guided therapy in PDAC *Eileen O'Reilly (Memorial Sloan Kettering Cancer Center, New York, USA)*
	Prospective clinical trials within EPPIC: COMPASS, PA7, and PanGen *Dan Renouf (BC Cancer Agency and Pancreas Centre BC, Vancouver)*
2:00-2:45pm	**Discussion**
2:45-3:00pm	**Break**
3:00-5:30pm	**Session 4:** TFRI Translational Program proposal
	EPPIC Project *David Schaeffer and Dan Renouf (Pancreas Centre BC)*
5:30pm	**Closing remarks and meeting adjournment**

SUMMARY OF DISCUSSION:

The Terry Fox Pan-Canadian Enhanced Pancreatic Cancer Profiling for Individualized Care (EPPIC) Project

Prioritized list of topics for a Project Outline to address with rationale:

1. Significant expertise exists in pancreatic cancer research in Canada, and the development of a **pan-Canadian pancreatic translational research team** has been identified as a priority to create synergies with existing infrastructure and expertise. Rationale: The 1st priority from a recent pan-Canadian pancreatic cancer meeting was to invest in collaborative, coordinating mechanisms and shared research infrastructure. This proposal directly aligns with this priority.

2. EPPIC has the unique opportunity to **leverage several funded initiatives** (COMPASS funded by OICR, PA7 funded by NCIC and POG funded by BC Cancer Foundation) and involve world class research centres throughout Canada. Rationale: Leveraging and connecting already funded initiatives will prevent duplication and ensure that the maximum research is being done with each dollar.

3. The project aims were strongly supported by the workshop participants. The aims focus on **subtyping pancreatic cancer**. Rationale: Some work has been done to identify pancreatic cancer

subtypes but much more work is needed, especially on metastatic specimens with good outcomes data.

4. EPPIC should focus on **patients with metastatic disease**. Rationale: The majority of patients with pancreatic cancer are diagnosed with advanced disease but genomic research to date has focused on patients with resectable disease due to tissue being predominantly available from resected patients.

5. **Clinical trial grade prospective data collection is a key component of this project**. Rationale: Previous pancreatic cancer research has used retrospective data only which is difficult to collect, and has significant amounts of missing data from variable time points. If data is collected prospectively, the data points will be identified up front and will include detailed treatment and outcome data along with biospecimens collected according to specified schedules.

6. Prioritize the collection of **high quality tissue core biopsies.** Rational**:** the starting material is extremely important. Potential sites should be selected based on a variety of factors including the ability to collect, process and store high quality tissue biopsy samples. Potential sites can be assessed based on feasibility criteria such as having a dedicated clinical trials team, experience biobanking, processing and storage capabilities (trained staff, centrifuges, freezers). Training should be provided to the site staff that will be in the biopsy room collecting the tissue samples (at sites or via centralized training). Consideration should be given to limiting the number of collection sites. If additional sites wish to participate, the biopsy collection could possibly be performed at a central site nearby. Distant sites that are unable to collect high quality tissue samples could be given the option of participating in the archival cohort and/or being part of the review and/or analysis.

7. Identifying the **sequencing centres**: Rational: The platforms and coverage should be considered when selecting sequencing centres. Although the sequencing data generated is not a significantly variable, the analysis has been found to be variable. If more than one centre is used, the bioinformatics teams should come together to determine standards. For example, the sequencing data could be swapped between groups and the analysis compared. If rare events are to be identified, there should be consistency in the coverage. The business plan could include two sequencing centres as a pilot and evaluate the effectiveness during the study.

8. **Proteomic and metabolomics analysis may add to the data developed from genome and transcriptome sequencing**. Rationale: Much of the research thus regarding pancreatic cancer subtyping has focused on genomic and transcriptomic data. There have been significant advances in metabolomic and proteomic techniques and expertise exist with Canada.

9. **Understanding the germline aberrations** that may predispose patients to pancreatic cancer and have potential predictive implications is key. Rationale: There is significant data on the potential predicitive significance of germline BRCA mutations in predicting sensitivity to platinum chemotherapy and PARP inhibition. This project has the potential to significantly add to our understanding on the predicitive and prognostic implications of these germline aberrations.

10. The proposal should include **deliverables** and define what is the '**measure of success'**. Rationale: It is important to include milestones to track progress and to report to stakeholders including donors. Deliverables could include 1. Building a knowledge base with 360 fully sequenced and characterized samples, clinical data and outcomes data; 2. Bringing Canadian researchers together; 3. Making the genomic data (and some clinical data) public. Milestones/Metrics could include numbers of patients recruited and quality of samples.

11. An effective **biobank and clinical trials database** should be incorporated into the study planning. Rationale: All databases should be compatible so that the clinical trial data (patient demographics, treatment, and outcome), biospecimen data and genomic data are all linked appropriately. ATiM (designed by CTRNet specifically for biospecimen tracking) includes sample selection and searching as well as tracking of samples, studies, shipping, receipt and SOPs. ATiM does not store large genomic data however. The biobank database could be cloud based without identifiers or set up at each site.

Identification of Researchers, Groups, Centres to be involved

1. Volkan Adsay, Emory University, Atlanta
2. Oliver Bathe, University of Calgary and Southern Alberta Cancer Research Institute
3. Neesha Dhani, Princess Margaret Hospital
4. Steven Gallinger, University Health Network and Princess Margaret Hospital
5. Carman Giacomantonio, Dalhousie University
6. Rachel Goodwin, University of Ottawa
7. David Hedley, University Health Network and Princess Margaret Hospital

8. Rob Holt, Genome Sciences Centre
9. Frédéric Lemay, Centre Hospitalier Universitaire de Sherbrooke
10. Marco Marra, Genome Sciences Centre
11. Malcolm Moore, BC Cancer Agency
12. Gregg Morin, Genome Sciences Centre
13. Chris O'Callaghan, Queens University and NCIC
14. Eileen O'Reilly, Memorial Sloan Kettering Cancer Center
15. Dan Renouf, BC Cancer Agency
16. David Schaeffer, Vancouver General Hospital
17. Intan Schrader, BC Cancer Agency
18. George Zogopoulos, McGill University and Rosalind and Morris Goodman Cancer Research Centre