IMPACT REPORT REGARDING:
UNIVERSITY OF TORONTO
TAPSCOTT CHAIR IN
SCHIZOPHRENIA STUDIES

Presented to: Dr. Don Tapscott and Mrs. Ana P. Lopes
Art Petronis  
Tapscott Chair in Schizophrenia Studies  
Department of Psychiatry  
University of Toronto  

Progress Report 2010-2014  

SUMMARY  

- Six publications with an impact factor >10; four in the *Nature* journals  
- External funding $13.2M (grants which were received or ended after 2010)  
- Over 50 national and international presentations  
- Seven graduate students receive training in the lab. Three of them are Vanier Scholars  

PUBLICATIONS  

Most important refereed papers:  


Books:  

SELECTED INVITED LECTURES

2010
3. Affymetrix, Santa Clara, California, USA. February 17, 2010.
4. The 8th Annual Scientific Meeting of the Broad Foundation. Los Angeles, California, USA. February 18, 2010.
11. 19th Meeting of the EAU Section of Urological Research (ESUR). October 7-9, 2010. Vilnius, Lithuania.

2011
4. The relevance of epigenetics to brain disorders. A Tribute to Dr. Erminio Costa. University of Illinois at Chicago, Department of Psychiatry, College of Medicine. Chicago IL USA. May 4-5, 2011

CONTACT INFORMATION
Gabrielle Duchesne, CFRE
Senior Development Officer, Psychiatry
6 Queen's Park Crescent West, Room 12
Toronto, ON M5S 3H2
T: 416-948-7993 F: 416-946-7722
gabrielle.duchesne@utoronto.ca
11. Department of Genetics, University of Chicago. Chicago IL, USA. November 1, 2011.

2012

2013
1. Department of Biology. University of Toronto, Scarborough Campus. Feb 15, 2013
2. 13th Annual Toronto Psychopharmacology Update. Department of Psychiatry, University of Toronto, Toronto. March 2, 2013
3. The Lithuanian Academy of Sciences, Vilnius, Lithuania. March 12, 2013

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11. Faculty of Biology, Vilnius University, Vilnius Lithuania. November 5, 2013.
12. Kaunas Medical University, the Lithuanian University of Life Sciences, Kaunas, Lithuania. November 6, 2013.

Research Awards

John Dewan Prize, Ontario Mental Health Foundation, 2013
Senior Research Fellow, Ontario Mental Health Foundation, 2009-2012

Review Activities. Funding agencies

PsychENCODE: Identification and Characterization of Non-coding Functional Elements in the Brain, and their Role in the Development of Mental Disorders (RFA-MH-14-020)
Canadian Institutes of Health Research (Behavioral Sciences B committee)
National Institutes for Health, Genetics of Health and Disease Study Section (GHD) 2012
Canadian Institutes of Health Research (Sex, Gender, and Health committee, 2012)
National Institutes for Health ZDA1 SXC-E 12 1, NIDA Cutting-Edge Basic Research Awards (CEBRA) (R21) December 02, 2011
National Institutes for Health (2010/03 ZDA1 GXM-A (13) 1 NIDA CEBRA R21; 2010/10 ZRG1 BDCN-N (04) M)
National Institutes for Health (2010/01 ZDA1 GXM-A)

Other scientific activities, including teaching

Chair, Epigenetics session. Third Annual Canadian Human Genetics Meeting. Saint-Sauveur, Québec, Canada. April 18-21, 2010
MSC1010Y MSc/PhD Seminar Course. Institute of Medical Science, University of Toronto, Toronto, Canada
Workshop on Schizophrenia and Related Disorders. Cold Spring Harbour Laboratory, NY, USA. June 6-12, 2012.

Consultant of biotech companies

Sigma – Aldrich, Sigma Life Sciences. St. Louis, Missouri, USA. 2010-12.
ThermoFisher USA. 2011-present

Audiotalks

Graduate student thesis supervision

5 MSc students
6 PhD students (3 Vanier Scholars)

Topics Include:
Animal models and epigenetics (Albert Wong, co-supervisor)
Circadian epigenomics
Epigenetic-genetic interactions
Epigenetics and cancer
Epigenetics and complex disease
Epigenetics and disease
Epigenomic methods
Epigenomics of DNA recombination
Epigenomics of major psychosis
Genetic – epigenetic interactions
Meiotic mapping in disease (John Strauss, co-supervisor)

Postdoctoral fellow and student supervision

11 Postdoctoral fellows
1 Visiting Postdoctoral fellow
1 Visiting student

Topics Include:
Bioinformatics and epigenomics
Chemical epigenomics
Epigenetics of psychosis
Epigenetics of type 1 diabetes
Epigenomics of cancer
Epigenomics of schizophrenia
Fine mapping of epigenetic factors
Microfluidics

M.Sc. and Ph.D. committee memberships

4 Students (2 PhD candidates, 1 MSc candidate)

Project Titles:
VEGF gene therapy for spinal cord injury. PhD transfer examination (external examiner), July 17, 2009
The temporal relationship between DNA replication and DNA methylation of endothelial-enriched genes (2008-2011)
Notch pathway blockade in human glioblastoma stem cells defines heterogeneity and sensitivity to neuronal lineage commitment. Institute of Medical Sciences, U Toronto. Nov 23, 2011 (chair of the defence meeting)
Animal model of prophylaxis and prevention of schizophrenia: prenatal seasonal influenza vaccine and postnatal valproate (examiner) July 3, 2012

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**GRANTS**

Epigenomics of major depression: dissecting environmental, heritable, and stochastic contributions  
Canadian Institutes of Health Research (CIHR)  
2014-2019

Epigenetic studies of Schizophrenia (MOP-77689)  
Canadian Institutes of Health Research (CIHR)  
2008-2011

DNA Methylome Analysis in Bipolar Disorder (1R01MH088413-01)  
National Institutes of Health (NIH)  
National Institute of Mental Health (NIMH)  
2009-2014

Epigenomic studies of twins discordant for Crohn's disease (MOP-97789)  
Canadian Institutes of Health Research (CIHR)  
2008-2013

DNA Methylome Study in Type 1 Diabetes (1DP3DK085698-01)  
National Institutes of Health (NIH)  
National Institute of Diabetes, Digestive and Kidney Diseases (NIDDK)  
2009-2014

Epigenomics of schizophrenia (MOP-119451)  
Canadian Institutes of Health Research (CIHR)  
2012-2017

Approaches for genomic mapping of 5-hydroxymethylcytosine,  
a novel epigenetic mark in mammalian DNA (5R21HG005758-02)  
National Institutes of Health (NIH)  
2010-2013

Epigenomic studies of single cells  
Krembil Foundation  
2019-2014