



ROYAL COLLEGETM
OF PHYSICIANS AND SURGEONS OF CANADA
COLLÈGE ROYAL^{MC}
DES MÉDECINS ET CHIRURGIENS DU CANADA

Early Brain and Biological Development and Early Learning

Educational tools and resources

August 27, 2015



Background

In June 2012, Council (Resolution No. 2012/13-13) directed the Royal College's Health and Public Policy Committee (HPPC) to examine the importance of early brain and biological development and early learning (EBBDEL) as a determinant of health, including the key issues, challenges, progress and initiatives in Canada and present recommendations for Council's consideration.

One of the recommendations presented was the creation of a micro-site for access to resources and educational modules. Pending the creation of the micro-site planned, the following document has been made available which lists a number of key resources and tools which were assembled by an extensive scan of existing resources including a number of recommendations from HPPC's EBBDEL working group.

The resources/tools have been grouped in 6 major categories. Each category also groups the resources based on the intended audience (that is, medical students, residents, and/or physicians in practice).

For further information on EBBDEL, please consult <http://www.royalcollege.ca/rcsite/health-policy/initiatives/early-childhood-development/early-brain-biological-development-early-learning-ebbdel-e>.

1 Language and Concepts

□ Medical Students

- Core Story Toolkit: Brain Builders Videos and Learning Cards

Alberta Family Wellness Initiative

- How Brains Are Built (4:05)
- Brain Architecture (2:35)
- Serve And Return (2:42)
- Executive Function (3:52)
- Stress (4:08)

<http://www.albertafamilywellness.org/building-better-brains>

- Early Brain & Biological Development and Addictions, UME Podcast Series
Canadian Healthcare Education Commons (AFMC)

Core Concepts of Early Child Development:

- 2 – Brain Architecture and Development (12:45)
- 3 – Early Experiences and Gene Expression (16:20)
- 4 – Building Cognitive, Emotional and Social Capacities (17:41)
- 5 – Positive, Tolerable and Toxic Stress (16:46)
- 6 – Brain Plasticity and Behavioural Change (16:00)
- 7 – Intervention and Treatment in Children's Mental Health (21:04)

<https://chec-cesc.afmc.ca/en/e-learning-resources-addiction-undergraduate-medical-education-canada/wikis/early-brain-biological-development-and-addictions-ume-podcast-series>

Medical Students, Residents and Practising Physicians

- Core Concepts in the Science of Early Childhood Development
Centre on the Developing Child (Harvard University)

Web-based Interactive Feature

http://developingchild.harvard.edu/resources/multimedia/interactive_features/coreconcepts/

- Encyclopedia on Early Child Development
Centre of Excellence for Early Childhood Development
Strategic Knowledge Cluster on Early Child Development
Topics: Behaviour, Education and Learning, Health and Nutrition, Pregnancy, Family, Services and Policy (Introduction/Synthesis/According to experts/Resources/Complete Topic for each)

<http://www.child-encyclopedia.com/>

- Clinician Toolkit (Anticipatory Guidance for Media Related Health Concerns)
Discussion Guide, Parent Tip Sheet, and References (Media in relation to Sexual Behavior, Social Behavior, Nutrition & Activity, Substance Use, School Performance, and Time Management)

Center on Media and Child Health (Harvard Medical School & Boston Children's Hospital)

<http://cmch.tv/clinicians/>

2 Epigenetics

Medical Students, Residents and Practising Physicians

- "You are What Your Genes Experience"
Dr Clyde Hertzman, Canadian Institute for Advanced Research, 2011

<https://vimeo.com/27559301>

Practising Physicians

- Epigenetics – What Your Patients are Asking and What You Need to Know
Webinar from Genetics in Primary Care Institute, 2012

<https://geneticsinprimarycare.aap.org/Provider%20Education/Pages/gpci-webinars.aspx#jump-3>

3 Adverse Childhood Experiences

Medical Students, Residents and Practising Physicians

- “How Childhood Trauma Affects Health Across a Lifetime”
Dr Nadine Burke-Harris, TEDMED Talk, September 2014

https://www.ted.com/talks/nadine_burke_harris_how_childhood_trauma_affects_health_a_cross_a_lifetime

Practising Physicians

- Centers for Disease Control and Prevention

<http://www.cdc.gov/violenceprevention/acestudy/index.html>
[http://www.ajpmonline.org/article/S0749-3797\(98\)00017-8/pdf](http://www.ajpmonline.org/article/S0749-3797(98)00017-8/pdf)

4 Literacy

Practising Physicians

- Canadian Pediatric Society
Promoting Literacy: A Guide for Physicians

<http://www.cps.ca/documents/position/read-speak-sing-promoting-literacy>

- American Academy of Pediatrics
Books Build Connections Toolkit

<https://littoolkit.aap.org/forprofessionals/Pages/home.aspx>

- https://www.aap.org/en-us/Documents/booksbuildconnections_whateverpediatricprofessionalcando.pdf

- https://www.aap.org/en-us/Documents/booksbuildconnections_evidencesupportingearlyliteracyandearlylearning.pdf

5 Resilience

Medical Students, Residents and Practising Physicians

- Resilience Guide for Parents & Teachers – 10 Tips for building resilience in children and teens
American Psychological Association

<http://www.apa.org/helpcenter/resilience.aspx>

- “Grit: A Character Trait Linked to Success”
Dr Ken Ginsburg, author of *Building Resilience in Children and Teens: Giving Kids Roots and Wings*
<https://www.healthychildren.org/English/healthy-living/emotional-wellness/Building-Resilience/Pages/Grit-A-Character-Trait-Linked-to-Success.aspx>

6 Tools for Practice

Practising Physicians

- Rourke Baby Record (birth – age 5)
<http://www.rourkebabyrecord.ca/default.asp>
- Greig Health Record (ages 6-17)
<http://www.cps.ca/tools-outils/greig-health-record>
<http://www.cps.ca/en/documents/position/greig-executive-summary>
- Nippissing District Developmental Screen
<http://www.ndds.ca/ontario.html>
- Ontario’s Enhanced 18-Month Well-Baby Visit
www.18monthvisit.ca
- Ontario College of Family Physicians
Workshops:
 - Healthy Child Development: Attachment
 - Healthy Child Development: Improving the Odds
 - Ontario’s Enhanced 18-Month Well-Baby Visit