



ALBERTA FAMILY WELLNESS INITIATIVE

CAN ONE STORY CHANGE EVERYTHING?

A TEN YEAR REPORT

How the Story of Brain Development
Is Creating Healthier Communities.

Alberta Family Wellness Initiative

Can One Story Change Everything? A Ten Year Report
How the Story of Brain Development is Creating Healthier Communities.

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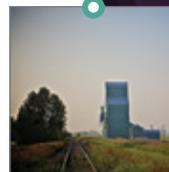
2005

Funding for research at University of Alberta, University of Lethbridge, University of Calgary, and other institutions begins.



2005

The Palix Foundation connects with a community of leading scientists and begins to build a knowledge base.



2006

Building on its exploration phase, the Foundation begins to incorporate feedback.



The Alberta Family Wellness Initiative (AFWI) is a dynamic, responsive program that continuously evolves by listening carefully to feedback and adapting to best achieve its ultimate goal: to contribute to improving outcomes in health and well-being for children and families across Alberta. When it launched the AFWI in 2007, the leadership of the Palix (formerly Norlien) Foundation (the Foundation) was convinced that Alberta could significantly improve its outcomes in the prevention and treatment of addiction and the promotion of mental health by better applying the latest scientific knowledge. Existing treatment programs were based on belief systems that often did not acknowledge the connection among early childhood experiences, mental health, and addiction; there was insufficient evaluation and little focus on evidence-based practice; programs didn't take behavioural addictions into account or deal with co-morbidities; and treatment often didn't include family members, who should be part of the recovery process when possible. Silos separated academics and policy-makers from professionals working in early brain and childhood development, mental health, and addiction; and from professionals in related areas of human development ranging from education and health to human services and justice. To improve outcomes, it was necessary to break down these silos and bring all of these people together using a common knowledge base and understanding. The AFWI was created and continually works to make these connections and to bridge the gap between what we know in science and what we do in policy and practice by building and leveraging relationships. As of 2017, the Palix Foundation has invested \$70 million into the initiative.



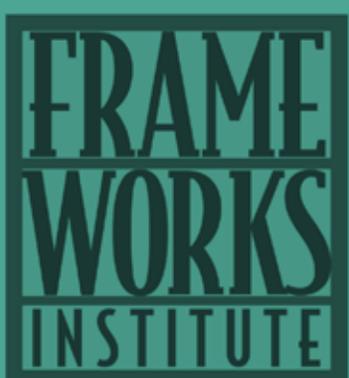
2006

The Harvard Center on the Developing Child and the National Scientific Council on the Developing Child release a major body of research.



2006

The Foundation commits funding to The Harvard Center on the Developing Child and makes this body of knowledge available in Alberta.



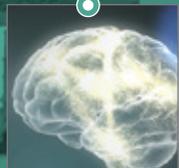
“Kids Must Have Mental Health ... But They Can’t, Can They?”

How Albertans Think About Child Mental Health

A FRAMEWORKS RESEARCH REPORT

Nat Kendall-Taylor • March 2010

CMH REPORT 1 OF 2



2006
With the Harvard Center, FrameWorks develops the core story of brain development to explain the scientific concepts to a broad audience.



2006
The Foundation commits funding to early intervention education centre CUPS One World Child Development Centre.



Young Children Develop in an Environment of Relationships

WORKING PAPER 1



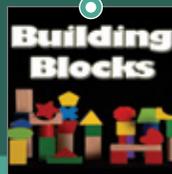
2007

The Foundation hosts the Building Blocks for a Healthy Future Conference to unite professionals and brain science experts.



2006

The Foundation receives a medal from the Centre of Excellence for Early Childhood Development.



2007

Building Blocks sets the agenda for the Foundation.

'05 – '08

THE EXPLORATORY PHASE

2005 – 2008



Achieving better outcomes for families across Alberta was an ambitious goal requiring a long-term strategy and a new approach. The Foundation began by devoting its resources to helping policy-makers, scientists, and practitioners close the gaps between them and between knowledge and practice. Major themes during this phase were the importance of brain development in the early years for lifelong health and well-being, and the intergenerational nature of addiction and mental health problems of many families.



2007

The Alberta Family Wellness Initiative (AFWI) is created to mobilize scientific knowledge into practice.



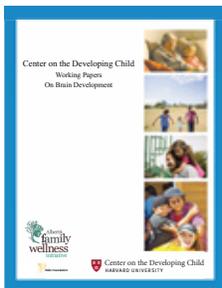
2008

A second Building Blocks conference welcomes professionals from Alberta's human, health, education, justice, and service systems.

'05 – '08

MAKING CONNECTIONS, ESTABLISHING KNOWLEDGE ASSETS

The Palix Foundation connected with the research community and funded research relevant to these issues at three key universities in Alberta (2005–2006): University of Alberta, University of Lethbridge, and University of Calgary, where it established the Fraser Mustard Chair in Childhood Development. It also looked beyond Alberta for knowledge assets that were credible and consistent with the Foundation's focus on mental health, including addiction and its roots in early childhood. One of these was the Adverse Childhood Experiences (ACE) Study, published in 1998. This major body of research provided evidence on the link between adverse childhood experiences and health issues across the lifecourse, including challenges with mental health and addiction.



The Harvard Center on the Developing Child Working Papers presented first-rate synthesized science in a form usable by policy-makers and formed a fundamental knowledge base to support improvements in policy and practice. The Foundation established links to the Harvard Center in 2008 and advocated using the Working Papers in Alberta. It committed funding to the Center and also partnered with the National Scientific Council on the Developing Child. This multi-disciplinary, multi-university

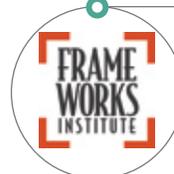
knowledge synthesis and translation initiative, led by the Harvard Center, aims to bring the science of early childhood and early brain development into public decision-making.

Also through the Harvard Center, the Foundation connected with the FrameWorks Institute, an interdisciplinary group of academics who use strategic frame analysis to help non-profits further public understanding about social issues. With the Harvard Center, FrameWorks developed the core story of brain and early childhood development (the Brain Story) based on scientific concepts from the Working Papers. The Foundation commissioned FrameWorks to conduct research and test the Brain Story in Alberta, comparing patterns of thinking regarding early childhood development and child and family mental health with those documented in a previous inquiry in the United States (U.S.).



2009

The Foundation becomes a founding member of the Science Policy Practice Network (SPPN) Working Group.



2009

FrameWorks research uncovers prevalent cultural beliefs about early childhood development, child mental health, and addiction in Alberta.

They found that the belief systems in Alberta were the same as in the U.S., but the values that underpinned solutions were not. While Americans focused on finding private solutions to mental health issues, Albertans valued an interdependent approach that included families, the community, business, and government. Taken together, testing the Brain Story in Alberta and understanding Albertans' values helped inform ways to effectively share the knowledge in the province and develop solutions based on it. The AFWI's engagement with FrameWorks aimed to establish a common language and understanding across the science, policy, and practice communities for the benefit of Alberta families. A fourth pillar of scientific knowledge for the Foundation was a 2008 article printed in the *British Medical Journal* reporting five-year outcomes in a cohort study of physicians treated for substance use disorders in physician health programs in the United States and Canada. About three-quarters of physicians in the study had favourable outcomes at five years. Such programs appear to provide an appropriate combination of treatment and support to effectively

manage addiction among physicians. Outcomes research in this area could also be instructive for treatment in the general population.

The Foundation also made a significant funding commitment to the Calgary Urban Project Society (CUPS) One World Child Development Centre, a local early intervention education centre where health and development services are integrated.

'06

LISTENING TO FEEDBACK

A key feature of the Foundation's work has been its openness to feedback. Early feedback from stakeholders, partners, and potential partners led the Foundation to a key decision: it would use the experience and information it had gathered to act as a facilitator. The Foundation would create and support a collaborative knowledge-mobilization effort to drive change and improve the Alberta system.




2009
The AFWI launches a scan of addiction-related content in undergraduate medical school curricula.



2009
The AFWI sends students to the Hazelden Betty Ford Foundation for education in addiction prevention, assessment, and treatment.



2010

Launch of the AFWI Model, Phase 1: Mobilizing Knowledge, EBBD and RFA.



2010

FrameWorks researchers talked to ordinary Albertans to gauge knowledge, values, and beliefs about mental health and addiction.

2007

THE AFWI IS CREATED

CAN ONE STORY CHANGE EVERYTHING?

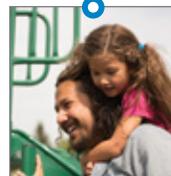


The Foundation funded and launched the Alberta Family Wellness Initiative (AFWI) in 2007. The Foundation had access to an interdisciplinary body of scientific knowledge that essentially told a single, powerful story (the Brain Story)—a story that could lead to substantial improvements in wellness outcomes if it could be mobilized and applied across all relevant systems in Alberta. In particular, it had to be delivered simultaneously through all levels of the Alberta human-serving system, including health, education, and justice. With a multi-disciplinary and multi-level approach, the AFWI could empower constituents to make the changes in research, policy, and practice needed for the wellness of Albertans.



2010

The University of Alberta School of Business establishes the Centre for Effective Business Management of Addiction Treatment.



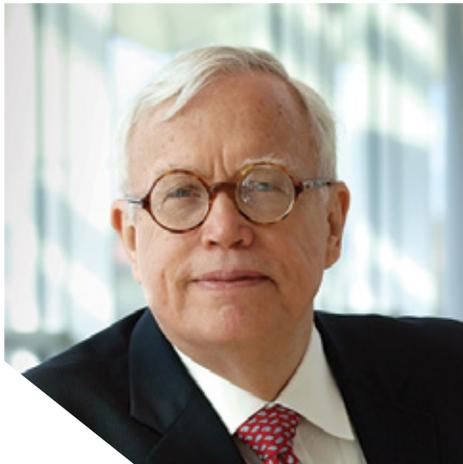
2010

The AFWI launches the Supporting Father Involvement (SFI) pilot program to strengthen fathers' roles in families and family outcomes.

'07 – '08

BUILDING BLOCKS SETS THE AGENDA

The Foundation held the first of two Building Blocks conferences in May 2007. The event exposed high-level government, university, and institutional people in the Alberta system to up-to-date science delivered by key people who were conducting research in early brain development and its connection to later health outcomes. A second Building Blocks conference in 2008 brought the latest scientific knowledge to 200 mid-level professionals. In April and May of 2008, the Foundation held two addiction summits in partnership with the Alberta Alcohol and Drug Abuse Commission (AADAC) and the Calgary Health Region. The summits involved 200 professionals from the addiction treatment community in Calgary. The conferences and summits helped set a new agenda around mental health and addiction; however, in order to effect change, a new model was needed. The Foundation drew upon the relationships, knowledge, and experience it had gained and developed a province-wide plan for knowledge translation and mobilization. The plan was backed by a five-year \$20 million initial commitment aimed at turning “what we know” about addiction and mental health into “what we do.”



James J. Heckman

is the Henry Schultz Distinguished Service Professor of Economics at the University of Chicago, a Nobel Memorial Prize winner in economics and an expert in the economics of human development. (Building Blocks 2008)



2010

Phase 1 of the Alberta Addiction Prevalence Study is completed, a survey investigating 10 problem behaviours in Alberta.



2011

The second annual Symposia bring together cross-sector Learning Teams of participants from a range of disciplines.

THE AFWI'S ACTIVITIES ARE CENTRED ON THREE CORE CONCEPTS:

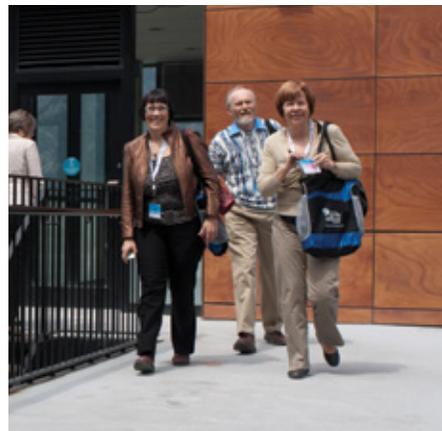
- There is a connection between early brain and biological development and later physical and mental health outcomes, including addiction.
- Addiction is more than drugs, alcohol, and gambling. It can also include food, sex, work, and other human behaviours.
- Brains can change.



'09 – '12

THE AFWI MODEL, PHASE 1: MOBILIZING KNOWLEDGE

At the heart of the AFWI's strategic plan was its knowledge-mobilization program targeted at a selected cross-section of decision makers at multiple levels in Alberta's policy and practice systems. The AFWI engaged these leaders in two cohorts of about 130 each in two streams of Symposia held in Banff over three years. One cohort concentrated on early brain and biological development (EBBD) and the other on recovery from addiction (RFA). Participants were drawn from academia, research, the not-for-profit sector, practice, policy, and government, and from across the spectrum of health, justice, education, and human services.



The EBBD Symposia, held in the spring, and the RFA, in the fall, featured some of the brightest minds in the fields of brain development, addiction, mental health, and institutional and systems change, who presented the latest science in plenary sessions and workshops. Over five days, participants absorbed this knowledge, discussed in smaller cohort groups its application to the Alberta context, and worked in interdisciplinary Learning Teams to tackle issues and create change in their own work environments.

After each Symposium, participants returned to their workplaces to share and apply their new knowledge. Each year, the same people returned to build upon and reinforce their progress. Members of Learning Teams kept in touch with each other between Symposia, and each was contacted by the Foundation Patron to discuss his or her work. In this way, the Foundation received valuable feedback to determine the impact of the Symposia and to align its programming with participants' needs. Over 80% of the participants remained engaged throughout the three-year initiative. They stayed connected and expanded their networks, creating change and innovation throughout the system in Alberta, and even beyond.



2011
Partner collaborations develop educational tools, curricula, and training programs for workers in child development, mental health, and addiction.



2011
The AFWI shares the Brain Story through lectures, presentations, and webcasts.

'09 – '12

THE AFWI CONTINUES INVESTMENT IN RESEARCH

The AFWI provided financial support for research at several universities across North America, and continued its support of research in Alberta related to brain and early childhood development. For example, Dr. Nicole Letourneau held a Palix/ Alberta Children's Hospital Foundation Research Chair in Parent-Infant Mental Health at the University of Calgary. Dr. Letourneau's research promotes understanding of the relationship among caregiving experiences, neural and endocrine systems, and children's cognitive and social development. Her Child Health Intervention and Longitudinal Development (CHILD) Studies Program develops and tests interventions that support the development of



vulnerable infants, children, and youth. The Foundation's gift to the University of Alberta has supported several research projects targeted at understanding the interplay among adverse childhood experiences, children's mental health, epigenetics and addiction, and developmental and behavioural neurosciences. The Foundation has also supported the development of a systematic research program at the University of Lethbridge to demonstrate the underlying neurobiological bases of adverse childhood experiences, and a knowledge-translation program designed to influence public policy and practice related to the role of experience in early brain and behavioural development.

FrameWorks researchers carried out surveys and talked to ordinary Albertans on the streets to gauge their knowledge, values, and beliefs about early brain and biological development, mental health, and addiction. They shared the results of their Alberta research at the Symposia and provided workshops on framing the scientific knowledge into a narrative, with the demonstrated potential to improve public insight and provide a common framework of knowledge capable of informing policy and program decisions. FrameWorks' research formed the basis for the way the science was presented in all of the AFWI's knowledge-mobilization efforts to ensure consistent messaging.

THE AFWI'S CORE VALUES The AFWI is:

Committed

Our commitment to Alberta families includes long-term funding for the Initiative, concrete action, and bringing the best minds from around the world together with the best and brightest Albertans to solve complex problems.

Proactive

We identify opportunities to act and bring together scientists, researchers, clinicians, policy-makers, funding organizations, and other stakeholders to achieve policy and practice outcomes.

Collaborative

We work collaboratively with leaders in policy, research, education, and service delivery to achieve measurable results.

Supportive

We support the efforts of scientists, researchers, clinicians, policy-makers, and other stakeholders in advancing and applying research into early brain development and children's mental health and best practices in addiction treatment to strengthen mental health and prevent addiction throughout the lifecycle.

Action-Oriented

We act as a catalyst, bringing people and organizations together grounded in the Brain Story knowledge to achieve concrete results.



2011

Multi-sector network the Frontiers of Innovation (FOI) welcomes the AFWI as a member.



2011

The AFWI launches a website and a quarterly newsletter.

'09 – '12

PROVIDING PROFESSIONAL DEVELOPMENT SUPPORT TO FRONT-LINE PRACTITIONERS

While the AFWI carried out knowledge-mobilization activities, it also prepared to meet increased demand on the front lines for resources needed to apply the knowledge. The AFWI supported the development of resources such as practice tools, educational materials, and professional development programs, as well as a network of local professionals equipped to share and apply the Brain Story knowledge.

An example of this support is the adoption of the work of Dr. Kyle Pruett and Dr. Marsha Pruett, who had, in collaboration with Carolyn Pape Cowan and Phillip Cowan, developed the successful Supporting Father Involvement (SFI) program, which had improved outcomes for children in California. The Foundation funded pilots of the SFI program at four sites in Alberta. The Foundation also sponsored workshops by the Pruetts on parenting and early childhood development for family law lawyers and family justice staff in Alberta. In early 2012, the Parenting After Separation (PAS) course, a required program for every divorcing couple with children in Alberta, was revised



and facilitators of the PAS course were trained in the new model.

Another example is the AFWI's work to support the development of the Clinical Neuroscience Curriculum, an educational resource in preventive practices for healthcare professionals. A version of the curriculum designed for early childhood educators was ready in 2016 to be piloted by the Alberta Resource Centre for Quality Enhancement for key leaders of the

2011
The AFWI begins to support training through Alberta's Certified Sex Addiction Therapists (CSAT).

2011
The AFWI launches a project to provide e-resources for medical schools.

early childhood education community. After evaluation by Mount Royal University, it will be provided to licensed early childhood educators across Alberta.

The Foundation committed funds and began working with Alberta Health Services (AHS) to bring Certified Sex Addiction Therapist (CSAT) training to Alberta. It also sent undergraduate medical students from the University of Alberta and the University of Calgary to attend the Professionals in Residence program at the Betty Ford Center (now the Hazelden Betty Ford Foundation) and has sent numerous judges to Betty Ford Justice System training.

'09 – '12

THE AFWI SHARES THE BRAIN STORY THROUGHOUT THE SYSTEM



From 2009 through 2012, the Foundation sponsored numerous lectures,

presentations, and webcasts in Alberta by world experts in early brain development, child mental health, and addiction. Visiting speakers disciplined in telling the Brain Story addressed events and organizations such as the Canadian Conference on

Medical Education, the Alberta Psychiatric Conference, the Alberta College of Family Physicians, Alberta's Child and Family Services Ministry, and the Children's Advocate.

Staff from the AFWI spoke about the work of the Foundation and the story of child development, mental health, and addiction to professional groups, including the Society of Obstetricians and Gynaecologists of Canada, the Canadian Mental Health Association, the Action on Wellness Conference, and the Teaching Families Conference. The Foundation also distributed materials, including the Harvard Working Papers, to the Child Wellness Symposium, the Canadian Psychotherapy Association Conference, the College of Family Physicians of Canada Family Medicine Forum, and the Society for Neuroscience Annual Meeting. Many members of the Harvard Center and the National Scientific Council became frequent speakers in Alberta.



2011

The Initiative receives the Canadian Mental Health Association, Alberta Division President's Award.



2012

The third and final EBBD and RFA Symposia take place.

'09 – '12

TAKING THE BRAIN STORY TO THE PUBLIC

The AFWI launched a website in 2011 that has become a major source of information and learning for researchers, practitioners, and policy-makers as well as for families and individuals in the general public. The website continues to grow and evolve as new videos, reports, and presentations of the latest science are uploaded.

The Foundation has also developed "Science in Seconds" video clips and other video products that use vignettes that are accessible to the general public to explain scientific concepts about the brain and early childhood development. The vignettes appear on HUTV, an AHS partnership that uses video screens in health facilities throughout Alberta to reach nearly 600,000 people a month.

The AFWI worked with AHS to produce an issue of *Apple* magazine dedicated to the science of the brain and early childhood development. The magazine was released in 2012 and distributed in locations across Alberta, including

physicians' offices, hospital waiting rooms, grocery stores, community centres, and online. The magazine has continued to carry AFWI-funded content and a regular column ("Brain Builders") in each issue.

THE AFWI JOINS THE FRONTIERS OF INNOVATION (FOI) NETWORK

In 2011, the AFWI became affiliated with the Frontiers of Innovation (FOI), which was created by the Harvard Center on the Developing Child to accelerate the development and adoption of science-based innovations that achieve breakthrough impact at scale. FOI connects practitioners, policy-makers, and researchers in ideas-to-action groups and identifies pockets of activity—small innovating community-level programs and larger innovating jurisdictions—where a focused resource push could result in faster change. Alberta is one of those jurisdictions.



2012

The first in an ongoing series of Community Receptions launch in Calgary and Edmonton.



2012

The Fall 2012 issue of Alberta Health Services' *Apple* magazine is devoted to the Brain Story.

OUR EXPERIENCES ARE BUILT INTO OUR BODIES...

REDUCE the AMOUNT of TOXIC STRESS that GETS INTO the BODY



FOI
SCIENCE

the PROLONGED ACTIVATION of STRESS RESPONSE SYS

BUILDING STRONG PATHWAYS/
NEURAL CONNECTIONS

POVERTY ABUSE
ADVERSITY

TOXIC STRESS

FOI
CUBATING INNOVATION
EARNING NETWORKS



EXPERIENCE &



2012
FrameWorks releases Cracks in the Brain, a research report on enhancing Albertans' understanding of the developmental causes of addiction.



2012
The AFWI partners with the Association of Faculties of Medicine of Canada to create podcasts for medical education.

STRONG BRAINS ⇒ STRONG SOCIETIES



THE BRAIN STORY

The work of the Alberta Family Wellness Initiative (AFWI) is grounded in the core story of brain and early childhood development that the Harvard Center on the Developing Child and the National Scientific Council on the Developing Child created in collaboration with the FrameWorks Institute. The story is based on principles that experts in neuroscience and child development believe are important for citizens and policy-makers to understand to make informed decisions about broad societal concerns ranging from health and education to justice and social services.

A fundamental concept is the idea that experiences in early life interact with genetics and the developing brain to influence health outcomes throughout life, including mental health and addiction. The AFWI strives to mobilize this scientific understanding across multiple sectors in Alberta to influence decision-making at policy and practice levels.

THE AFWI VIDEO TELLS THE BRAIN STORY

The AFWI presents the story of brain development for public audiences in a visually engaging video on its website at www.AlbertaFamilyWellness.org. The AFWI developed the video with input from its partners at the Harvard Center on the Developing Child and at the FrameWorks Institute. "How Brains Are Built" tells the Brain Story with energy, accessibility, and high fidelity to the science.



2012

The Foundation supports University of Calgary study The Economics of Children's Mental Health Care in Alberta.



2012

ACEs-A launches, a large research project to screen the adult population in Alberta for ACEs.

THE STORY OF BRAIN AND CHILD DEVELOPMENT

- **Brain Architecture:** The basic architecture of the brain is constructed through an ongoing process that begins before birth and continues into adulthood. Brains are built from the bottom up: basic circuits lay the Foundation for more complex circuits and the behaviours that follow. Brain plasticity and the ability to change behaviour decreases as we mature: getting it right early is easier and less costly to society and individuals than trying to fix it later.
- **Serve and Return:** Interaction between genes and experience shapes the developing brain, and relationships are the active ingredient in the serve-and-return process. "Serve and return" describes the back-and-forth communication and interaction between a child and a caring adult. Cognitive, emotional, and social capacities built through serve-and-return interactions are inextricably intertwined: learning and behaviour are related to physical and mental health over the lifecourse. You can't do one without the other.
- **Air Traffic Control:** Executive function and self-regulation skills that develop in childhood are the mental processes that enable us to plan, focus attention, remember instructions, and juggle multiple tasks successfully. Just as an air traffic control system at a busy airport safely manages the arrivals and departures of many aircraft on multiple runways, the brain needs this skill set to filter distractions, prioritize tasks, set and achieve goals, and control impulses.
- **Toxic Stress:** This damages the developing brain and leads to problems in learning and behaviour and to increased susceptibility to poor physical and mental health over time. The accumulation of multiple adverse childhood experiences over time in the absence of a caring adult contributes to toxic stress.
- **Resilience Scale:** The combination of supportive relationships, adaptive skill-building, and positive experiences constitutes the Foundation of what is commonly called resilience. One way to understand the development of resilience is to visualize how protective experiences and adaptive skills both counterbalance significant adversity and produce positive outcomes on the resilience scale. Understanding the upstream and downstream influences that might tip the scale in a positive direction is critical to devising more effective strategies for promoting healthy development. Resilience can be built through serve-and-return relationships and through improving self-regulation and executive functions, preparing people to bounce back from significant life stresses.



2013
The Saving Brains Conference supports bold ideas to improve early brain and child development.

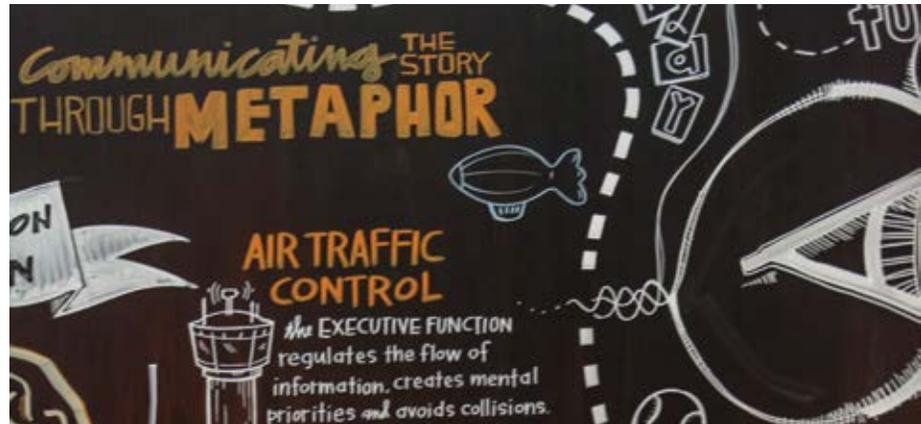


2013
The AFWI launches its Accelerating Innovation Symposia series on the intergenerational effects of stress and mental illness, including addiction.

'13-'14

THE AFWI MODEL, PHASE 2

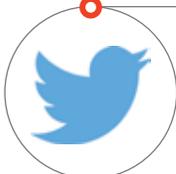
ACCELERATING INNOVATION:
TELLING THE BRAIN STORY TO INSPIRE ACTION



The AFWI launched Phase 2 of its multi-year strategy in 2013, merging EBBD and RFA. The Accelerating Innovation Symposium: Telling the Brain Story to Inspire Action engaged a new cohort of over 200 change leaders, including mentors from Phase 1.

Two Symposia, one held in Edmonton in 2013 and one held in Calgary in 2014, focused on:

- Mobilizing and linking the science of brain development with mental health and addiction.
- Developing a shared understanding of the intergenerational effects of toxic stress, mental health, and addiction at different ages and stages of development, and the implications related to policy, practice, and research.
- Fostering Communities of Purpose that will be able to apply the knowledge to develop innovative and integrated approaches for the prevention, intervention, and treatment of mental health and addiction issues across the lifecycle.



2013

The AFWI launches a multi-platform social media engagement strategy.



2013

Three sites involved in Supporting Fathers Involvement extend the program for another two years.

'13 – '14

STRATEGY EVOLVES TOWARD DISTRIBUTED LEADERSHIP AND COLLABORATION

The Accelerating Innovation Symposia represented a pivotal change in the AFWI's strategy, shifting activity toward distributed leadership and collaboration, and moving participants from knowledge to action. In addition to attending plenary sessions, workshops, and interdisciplinary cohort discussions, participants worked on Innovation Teams tasked with identifying innovative ways to apply new or known information to the prevention, intervention, and treatment of mental health and addiction issues. Innovation Teams were integral to continuing the mobilization of knowledge learned at the Symposia into systems and services, which will ultimately create positive change in outcomes for Alberta's children and families. As Innovation Teams took the lead in their respective areas, the AFWI communicated regularly with them and remained up to date on their work to find out what support they needed.



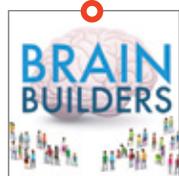
Throughout both Symposia series, the AFWI's governmental partners—including Alberta Human Services, Alberta Health Services, and Alberta Innovates—provided funds and freed up staff to attend as participants.

At the end of 2016, Innovation Teams evolved into groups and individuals focusing on innovation projects as well as into larger innovation practice communities.

The AFWI also developed resources aimed at supporting change agents who are integrating the science into their practice. The Core Story Tool Kit includes a short video, "How Brains Are Built: The Core Story of Brain Development", which has been viewed and downloaded over 260,000 times by viewers in Alberta, in Canada, and internationally. This video was also translated into French and Spanish.

The Core Story Tool Kit also includes "Brain Builders," a series of four short videos that dive deeper in demonstrating brain architecture, serve and return, stress, and executive function. Presentation slides demonstrating the science, a serve-and-return fun tool, learning cards, and posters were all created to support conversations in both professional and public settings.

In 2015, the AFWI teamed up with FrameWorks and some talented filmmakers to create the "Life Coach" series: three short comedic videos that explore popular misconceptions about addiction and offer alternative frames for where addiction comes from and how it can be treated.



2013

How Brains Are Built, an accessible video that explains the Brain Story, is released.

'13-'14

HOW ARE WE DOING?

DEVELOPMENTAL EVALUATION
COMPLETED 2014



The AFWI is a long-term initiative aimed ultimately at system-wide improvement and better outcomes for Alberta's children and families. Systems change requires a long-term approach. However, it is possible to assess the return on investments to date and determine in the short term what is working and what isn't. The Foundation commissioned a developmental evaluation in 2013 to answer these questions and to generate new knowledge that might inform its future decision-making. In addition to the evaluation, in 2014 the Harvard Center on the Developing Child published *A Decade of Science Informing Policy*, describing the story of the National Scientific Council on the Developing Child and the process of synthesizing and translating the knowledge in the Harvard Working Papers into the core story of brain development in collaboration with the FrameWorks Institute. The AFWI and Alberta are featured in the report as a change platform and constituency that have actively mobilized this knowledge to successfully influence policy and practice in ways and means not previously envisioned.



2013

The Alberta government releases *Together We Raise Tomorrow: An Alberta Approach to Early Childhood Development*.



2013

The AFWI and *Apple* magazine develop a new column about early brain development and lifelong health outcomes.

'13 – '14

THEORY OF ACTION SHOWS CHANGE AGENTS ARE KEY



Phase 1 of the evaluation produced a theory of action (TOA), which shows how the AFWI has worked through individual change agents in the system who are able to influence and/or make change in policy and practice. The AFWI provided the tools—relationships, a scientific knowledge base, and the Brain Story—as a way to translate the knowledge into language understood by policy-makers, practitioners, and the public. The change agents spread knowledge and ideas through their organizations and systems, producing a ripple effect. Ultimately, better-informed systems should result in better decision-making that, in turn, will contribute to improved policy and practice and, ultimately, to better health and wellness outcomes for Alberta’s children and families. The Symposia series were at the heart of this strategy.



AFWI RECEIVES AWARDS AND HONOURS

- Canadian Medical Association, Award for Excellence in Health Promotion, 2015
- Alberta’s Lieutenant Governor’s Circle on Mental Health and Addiction True Leadership Award, 2014
- Canadian Academy of Child and Adolescent Psychiatry, Certificate of Special Recognition for outstanding contributions and important leadership in the field of children’s mental health, 2013
- Canadian Mental Health Association, Alberta Division President’s Award, 2010–2011
- Centre of Excellence for Early Childhood Development, Medal for Exceptional Contribution to Early Childhood Development, 2006



2013
The Foundation wins a Certificate of Special Recognition from the Canadian Academy of Child and Adolescent Psychiatry.



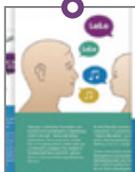
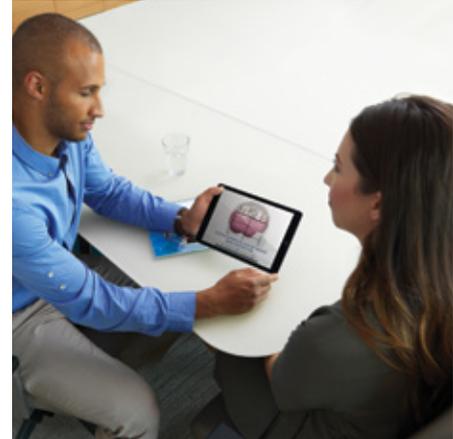
2014
The AFWI hosts Community Luncheons in Alberta communities.

'13 – '14

INDIVIDUAL CHANGE IS WIDESPREAD

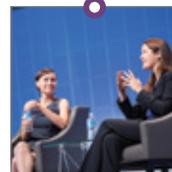
Phase 2 looked at changes in individuals' knowledge, understanding, viewpoints, and practice. The AFWI is influencing changes in how participants interact with clients and patients, develop strategies or plan their work, decide what programs to offer, focus their research, and share their work with others.

- Participants said they had a better understanding of the range of professionals and organizations working in early childhood development, mental health, and addiction, and a better understanding of how addiction and mental health issues can affect multiple generations in a family.
- Participants felt empowered to help their organizations to adopt and reflect up-to-date knowledge from brain science in their programs.
- Participants' networks grew in size and scope, and often evolved into collaborations across sectors.
- A significant percentage of participants who work directly with patients or clients changed their approach, using AFWI materials and asking different questions.



2014

The AFWI launches a Brain Story Tool Kit, a collection of educational resources.



2014

The second annual Accelerating Innovation Symposium is held in Calgary.

About 40% of those working in university or research institutes reported changes to their research programs, with some considering the practical implications of their research and the needs of the ultimate beneficiaries.

'14

ORGANIZATION AND SYSTEM CHANGES ARE EVIDENT

The AFWI is tracking changes in organizations and systems. Individual change is building capacity at the organizational level; as individuals apply new knowledge and take an evidence-based approach to their work, they identify desired outcomes and measure the performance of their organizations in light of those outcomes. Increased understanding of early childhood influences on mental health and addiction and of the intergenerational transmission of outcomes is leading to a chronic-disease management model of treatment and a system-wide continuum of care. The AFWI is still in its early development, but it is tracking evidence of scaling, in which knowledge that is pilot-tested in small localized programs is moving forward and becoming embedded in programs across the province.

funding is the Alberta Adverse Childhood Experiences (ACE) Study, a research program that is designed to increase the capacity to identify and clinically manage adverse childhood experiences (ACEs) and their associated physical and mental health consequences in primary care. Phases 1 and 2 involved constructing and validating a screening tool for use by ACEs in primary care settings for an adult Alberta population. In Phase 3, a treatment protocol for adults with elevated ACEs scores is being developed for use in family medicine clinics. Phase 4 will compare outcomes and health costs for people who receive the treatment protocol with those who don't. Among expected outcomes, Alberta's primary care practitioners will be better equipped to identify and manage ACEs-related issues in their practices and will become more capable of responding to the effects of childhood adversity in their patients.



A key program that the AFWI is



2014
The AFWI launches a series of vignettes explaining key concepts in early brain development using explanatory metaphors.



2014
The AFWI completes an extensive progress evaluation, which shows evidence of change in individuals, organizations, and systems.

'15-'16

IMPACT TO DATE

CHANGE IS UNDERWAY



Programs designed or influenced by the AFWI are increasing, expanding, and moving forward at every level to catalyze individual, organizational, and systems change. AFWI-inspired change agents are conducting community meetings and outreach to spread the Brain Story to the general public and to identify resources and gaps at local levels. Community Engagement Days, which are collaborative efforts between the AFWI and local change agents, are reaching people who have not yet been involved in AFWI activities or heard the Brain Story. They include presentations, discussion, networking, and real-life examples to help participants become more familiar with the work of the AFWI, and to show them how the Brain Story can be used in policy and practice to make a difference for children and families.



2014

The AFWI becomes a partner in Change in Mind: Applying Neurosciences to Revitalize Communities.



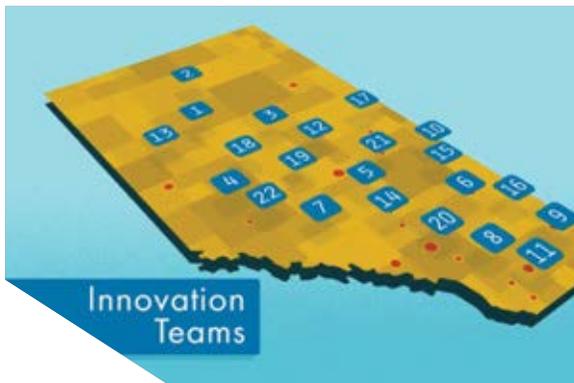
2014

The AFWI receives Alberta's Lieutenant Governor's Circle on Mental Health and Addiction True Leadership Award.

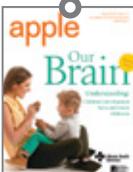
'15 – '16

The AFWI has partnered with the Robert Wood Johnson Foundation and the Alliance for Strong Families and Communities on Change in Mind, a three-year initiative involving five Alberta sites and ten U.S. sites. The goal is to create an American and Albertan cohort of non-governmental, human-serving organizations committed to deepening and applying their knowledge of brain science within their organizations, their communities, and the public sector systems intersecting with their work. The Alberta cohort sites are CASA Child, Adolescent and Family Mental Health, and the Boyle McCauley Health Centre in Edmonton. In Calgary, the Alberta sites are CUPS Health Education Housing, Big Brothers Big Sisters of Calgary and Area, and the Sheldon Kennedy Child Advocacy Centre. Cohorts in the United States include Children and Families First in Wilmington, Delaware; Children's Hospital of Wisconsin in Milwaukee, Wisconsin; Wellspring Family Services in Seattle, Washington; LaSalle School in Albany, New York; KVC Health Systems in Olathe, Kansas; the Family Partnership in Minneapolis, Minnesota; the Martha O'Bryan Center in Nashville, Tennessee; East End House in Cambridge, Massachusetts; the Family Service Association of San Antonio in San Antonio, Texas; and the Children's Home Society of Washington in Seattle.

As of fall 2016, published is a document called *Using a Brain Science-Infused Lens in Policy Development*. Also developed are four reports about integration, the collection and use of ACEs data and rapid testing evaluation, internal organizational change, and systems and policy change, that highlight the importance of this process.



The AFWI is tracking several knowledge-embedded programs that are scaling up across Alberta.



2015
The Spring 2015 "Our Brain" issue of Apple magazine is dedicated to brain development.



2015
The AFWI creates "Life Coach", a comedy series designed to dispel misconceptions about addiction.

SYSTEMS CHANGE: EARLY RESULTS SHOWED CHANGE TAKING ROOT

Within the first 18 months of the AFWI strategy, the government of Alberta produced two major policy documents incorporating key learnings from the AFWI Symposia.

Let's Talk About the Early Years, a report by Alberta's Office of the Chief Medical Officer of Health, incorporated elements of the early brain and child development story and many key concepts from EBBD 2010. This included the far-reaching effects of toxic stress on brain architecture and function, the importance of the serve-and-return interaction that builds the brain through secure attachments between parent/caretaker and infant, and the gene-environment interaction that influences development from pre-birth and underscores the need to invest more wisely in the early years.

Creating Connections: Alberta's Addiction and Mental Health Strategy, which was published in 2011, strongly reflects learnings from the 2010 EBBD and RFA Symposia. Many Symposia participants were involved in building the Strategy, which adopts a family-based, comprehensive approach to prevention and treatment. The Strategy features prenatal and at-birth screening, ongoing parenting support, a continuum-of-care model, chronic-disease management for addiction,

and improved access to quality addiction and mental health services within the primary healthcare environment—which are key concepts discussed at the Symposia. The Strategy is being implemented throughout the system in Alberta. Elements of the Brain Story and learnings presented at the AFWI Symposia were also incorporated into *Together We Raise Tomorrow: An Alberta Approach to Early Childhood Development*, a province-wide Alberta government initiative launched in 2013. The initiative was aimed at supporting the well-being, security, education, and health of all children in Alberta. The government invited Albertans to be involved in conversations and activities in their communities to identify local solutions for, and support of, an integrated early childhood development system in Alberta. Response to the initiative indicated that Albertans at the grassroots level are prepared to make and support system changes that reflect the up-to-date scientific knowledge on child development and addiction that has been presented, discussed, and disseminated through the AFWI. Specific targeted early changes within the Alberta government system include the following: Alberta Health Services has embedded the Brain Story in its early childhood and parenting resources, and the Alberta provincial courts have embedded the Brain Story in their Family Justice Services.



2015

The AFWI launches a Brain Story campaign targeted at seniors.



2015

The Harvard Center on the Developing Child releases a retrospective report covering the last decade.



THE AFWI CONTINUES TO INSPIRE ALBERTA SYSTEM CHANGES

The government of Alberta released *Valuing Mental Health*, a report from the Alberta Mental Health Review Committee, in early 2016. The AFWI had made a submission with recommendations for action. The priorities and principles in the report reflect the AFWI's recommendations, and the AFWI is explicitly mentioned. A major system-wide development is the government of Alberta's Human Services Contract Alignment Project, which requires potential contractors to fill out a pre-qualification form in which

they commit to aligning their services with values outlined in the Prevention and Early Intervention Framework for Children, Youth and Families, or in the Child Intervention Practice Framework, and with the Foundations of Caregiver Support document that cites the Harvard Center's Working Papers. Part of this required alignment includes a commitment to using knowledge about child and brain development in the delivery of their services. This is a significant indication of the uptake and integration of the Brain Story knowledge in the human-serving system in Alberta.



2015
The AFWI attends the Sundance Film Festival and presents a panel on the myths of addiction.



2015
The Palix Foundation commissions FrameWorks to create two reports on developing a new, scientifically accurate narrative for Albertans.

2016

NEXT STEPS

DISCOVER, ADAPT, AND EVOLVE



The AFWI's theory of philanthropy, a grounded theory developed through empirical research, sees the Foundation performing the roles of knowledge entrepreneur, catalytic convenor, and partner on a learning journey in collaboration with community and public systems. The Foundation achieved significant results as a knowledge broker and convenor of large Symposia to spread information through engaged change agents. It has now evolved to support a distributed leadership of AFWI-informed change agents who produce an ever-widening ripple effect by performing the same roles within their own agencies and communities. The AFWI is developing targeted knowledge products to support community-based leaders and has projects in development or ready to launch to meet their needs.



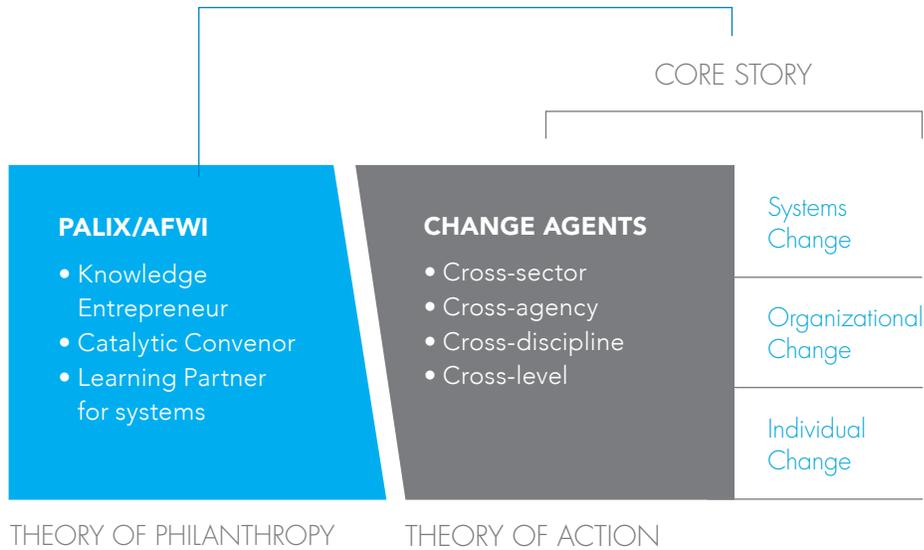
2015

The AFWI supports the creation of *The Mask You Live In*, a documentary film about cultural definitions of masculinity.



2015

The Foundation wins a 2015 Canadian Medical Association Award for Excellence in Health Promotion.



“While most leaders are focused on delivering state-of-the-art services today, a pioneering group should be developing breakthrough solutions for tomorrow... The time has come to launch a new era in early childhood policy and pediatric practice driven by 21st-century science and a research and development platform that tests new ideas, learns from failure, and settles for nothing less than breakthrough outcomes at scale.”
 – From a 2016 paper in *JAMA Pediatrics* (a journal of the American Medical Association) by Jack Shonkoff, Professor of Child Health and Development at the Harvard School of Public Health, Director of the Center on the Developing Child, and member of the Faculty at AFWI Symposia.



2015
 The AFWI partners with Fulbright Canada to welcome American scholars and researchers to Alberta.



2015
 The AFWI supports the launch of the Brain Architecture Game.

NEW PROJECTS, NEW HORIZONS

Current and future projects include the following:

- The AFWI funded the production and distribution of the Brain Architecture Game (January 2016), which is available on the AFWI website. The tabletop game allows participants to build brain structures based on fundamental principles of neuroscience using pipe cleaners, straws, and life experience cards. As groups compete to build the strongest, most viable brain, they also build an understanding of the powerful role of experiences on early brain development. Some brains collapse under the weight of adversity, others reflect weaknesses from a series of adverse situations, and others emerge strong. The game is the result of collaboration among the Harvard Center on the Developing Child, the National Scientific Council on the Developing Child, the University of Southern California Creative Media and Behavioral Health Center, FrameWorks, and the AFWI. Kits have already been accessed across Canada, the U.S., the United Kingdom, Australia, New Zealand, and South Africa.
- The AFWI has developed a Brain Story Certification course, a global online professional development resource based on the Brain Story that uses a standardized common curriculum for everyone who works in the health, human services, education, and justice sectors. The course supports the development of core knowledge competencies for

students and practising professionals in the areas of brain development; adverse childhood experiences (ACEs); the effects of stress on brain development, behaviour, and later addiction and mental health outcomes; and principles of quality addiction treatment and other mental health interventions for parents and children. Brain Story Certification, which is freely available to anyone, allows participants to obtain a certificate of completion that demonstrates they have completed the course and passed the tests for basic comprehension of the material.

- The AFWI website was redesigned and updated in 2016, creating a site that is rich in resources, that is a more mobile-friendly platform, and that accommodates the Brain Science Certification course as a user function.
- The AFWI has developed social media tools in Twitter, Facebook, Instagram, and YouTube to disseminate AFWI resources and engage key stakeholders in its work.

 @AFWI_News  AlbertaFamilyWellnessInitiative

 AbWellnessInitiative  AFWINEWS



2015

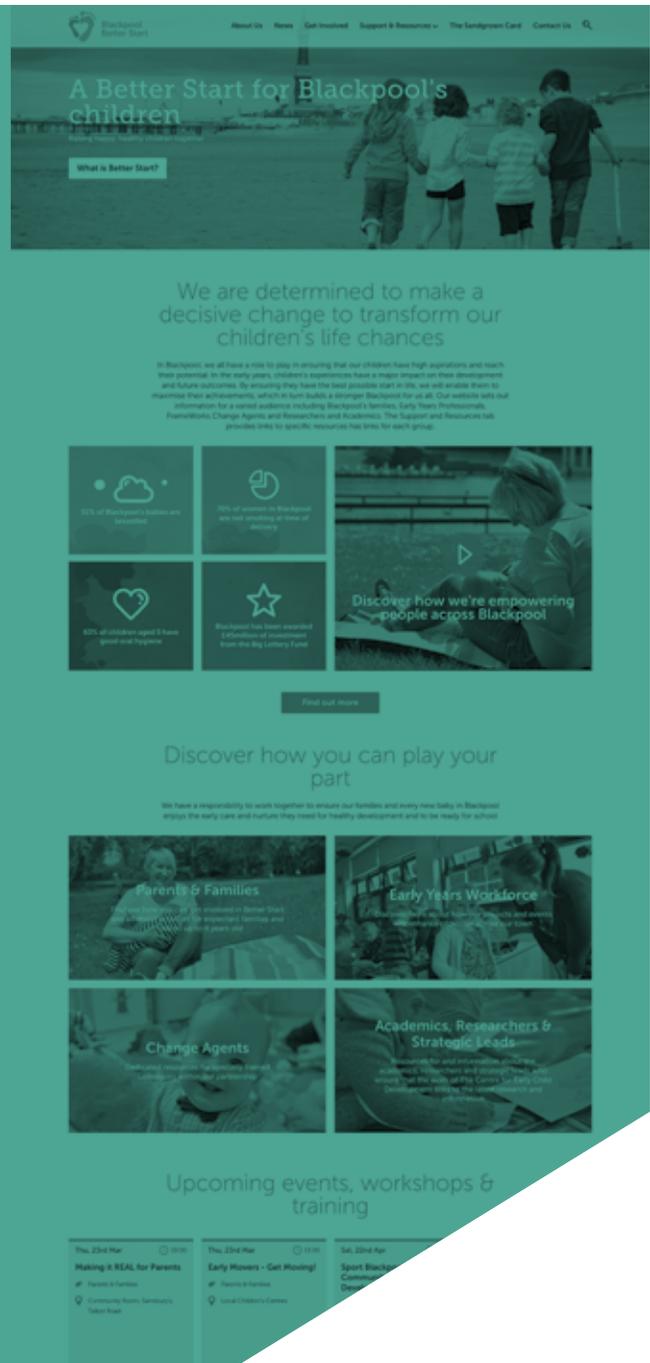
Alberta Human Services releases the Foundations of Caregiver Support visioning document.



2016

The AFWI supports a special reprint of Apple magazine's "Our Brain" issue.

- The AFWI is supporting collaboration between the FrameWorks Institute and the University of Alberta to offer FrameWorks' strategic framing curricula through the university. A course on strategic framing was launched in January 2016.
- FrameWorks also offers Strategic Frame Analysis™ Study Circles, which engage policy decision-makers, analysts, and experts in communications sessions and applications based on the FrameWorks approach to communications for social change. Participants develop fluency in a common language to move beyond their traditional silos and collaborate on sustainable solutions. Over 75 leaders in Alberta have participated in these Study Circles.
- The Harvard Center published a summary report that tells the story behind the development of the Brain Story and highlights the work of the AFWI in Alberta. The Center is interested in featuring the Alberta story on its website as a case example for other jurisdictions to learn from.
- Fulbright Canada and the Palix Foundation have partnered to support distinguished research chairs that focus on child and family wellness. Together with Alberta's three research-intensive universities, they will allow extraordinary American scholars and top-tier applied researchers to spend one semester as visiting research scholars, working in a targeted area of academic inquiry.
- The Child and Adolescent Addiction and Mental Health Program (CAAMHP), a program of Alberta Health Services, is incorporating the ACE Questionnaire into their work. The CAAMHP believes this will have a significant impact on how they provide care to children and families. They will use the ACE Questionnaire to support clinical practice and to systematically assess for childhood trauma.



2016
IACAPAP 2016
 The AFWI speaks at the International Association for Child and Adolescent Psychiatry and Allied Professions World Congress (IACAPAP).

2016
PfC Philanthropic Foundations Canada
 The AFWI participates in discussions on innovation and systems thinking at the 2016 Philanthropic Foundations Canada Conference.

MOVING FORWARD WITH EMBEDDING THE BRAIN STORY AT ALL LEVELS TO ACHIEVE EVEN GREATER IMPACT ON OUTCOMES



2016
The AFWI delivers a keynote speech at the 2016 National Mentoring Symposium.



2016
The AFWI speaks at the 2016 Fall Conference of the College of Alberta School Superintendents (CASS).

As the AFWI continues on through 2017, it will focus even more strategically on embedding the Brain Story knowledge at all levels to catalyze impact—individual, organization, and system levels—and to better measure and understand the impact of this embedded knowledge on outcomes for children and families. With the online Brain Story Certification course freely accessible and available to all, a main area of focus will be to promote the course, and to support and facilitate more sophisticated and applied education and professional development opportunities based on the course in collaboration with practice communities. Testing, piloting, and scaling Brain Story-based policy and practice innovations, including those that use the ACE Questionnaire to improve practice, will also be a main priority. Developing new networking, communication and knowledge-mobilization resources and approaches will continue, as will reaching beyond Alberta to other jurisdictions in Canada and internationally to share the AFWI story and philanthropic processes to catalyze positive change.

The final piece to the AFWI's strategy is outcomes. How do we measure outcomes? How do we align programs and delivery to improve outcomes for families in Alberta? What supports are needed in our communities to continue on this positive trajectory?

Through our activities, we have created a high level of distributed leadership and collaboration that will bring Albertans closer to the answers. Working with our ever-expanding network of partners and stakeholders, the AFWI will continue to reduce the gap between what we know from science and what we do in policy and practice by:

- **Convening, informing, educating, and creating engagement** among stakeholders from academia, health, human services, education, and justice so that relevant knowledge can become embedded in all levels of policy, funding, programming, professional education, and practice.
- **Supporting** the understanding and application of this knowledge to catalyze system-level change in policy and practice rooted in cross-sector collaboration for the benefit of children and families.

AT THE ROOT OF ALL
PROGRESS IN THIS
AMBITIOUS ENDEAVOUR
IS ONE STORY—THE
BRAIN STORY.



2016

The AFWI and teachers from Lincoln High School participate in a roundtable discussion on ACEs and the *Paper Tigers* documentary.



2016

The AFWI presents at the 2016 CMHO (Children's Mental Health Ontario) Conference Focus on Quality: The Path to Better Outcomes for Children, Youth and Families.



2016

JAMA Pediatrics publishes an article on understanding ACEs, Toxic Stress, and Trauma-Informed Care.



2016

Continued AFWI funding for CSAT training and certification.

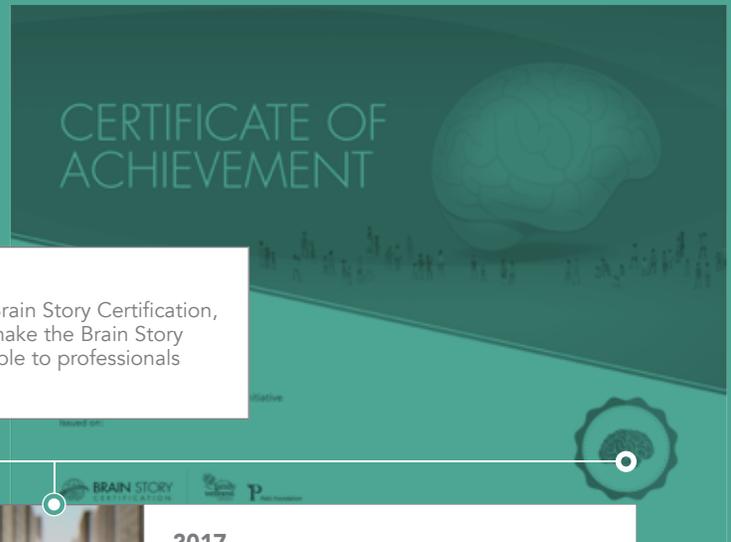
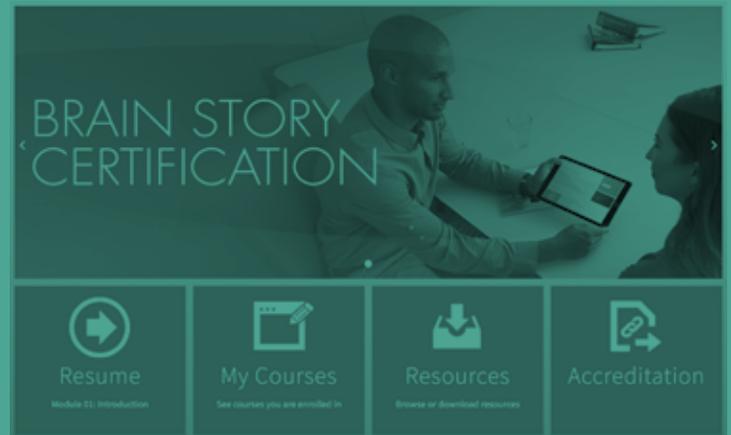


2016

Sheldon Kennedy Child Advocacy Center partners with the University of Calgary's Mathison Centre to study the impact of child abuse on the developing brain.



BRAIN STORY CERTIFICATION




2016
The AFWI launches Brain Story Certification, an online course to make the Brain Story science widely available to professionals and the public.



2016
The AFWI launches a newly redesigned website.



2017
Brains: Journey to Resilience is launched. The video was created by the AFWI in consultation with the FrameWorks Institute and the Harvard Center on the Developing Child.



Better health and well-being for Alberta families is within reach. By empowering change agents to understand and act upon the Brain Story, the AFWI is sharing tools to improve lifelong outcomes for physical and mental health, including addiction.



AlbertaFamilyWellness.org