kids brain health network | réseau pour la santé du cerveau des enfants

2009-25

NETWORKS OF CENTRES OF EXCELLENCE IMPACT REPORT

OUR VISION

All children living with neurodevelopmental disabilities enjoy a good quality of life and inclusion in all aspects of society and reach their full potential.

OUR MISSION

Through catalyzing collective action across sectors, Kids Brain Health Network ensures optimal care and better outcomes for children with neurodevelopmental disabilities and their families.

EXECUTIVE SUMMARY

The Kids Brain Health Network (KBHN) has played a transformative role in advancing research and innovation in neurodevelopmental disabilities across Canada. Over its 15-year tenure, KBHN has driven groundbreaking discoveries, strengthened partnerships, trained highly qualified personnel (HQP), and contributed to policy and commercial innovations that continue to benefit children, families, caregivers and communities. By focusing on three core challenges in neurodevelopmental disabilities (NDDs): early identification, effective interventions, and family support, KBHN has ensured research findings translate into real-world applications that improve quality of life children and their families.

Turning Research into Innovative Solutions for Kids

$108 million

invested in projects and initiatives with Kids Brain Health Foundation and partners since 2009.

5 continents

are home to active KBHN-funded projects: Africa, Asia, Australia, Europe and North America.

850+ publications

from KBHN and its research programs cited 25,600+ times.

55,000+ stakeholders

engaged in KBHN events, research activities, training, workshops and projects.

2,800+ trainee engagements

have supported students, fellows and professionals from diverse backgrounds who have made significant contributions to the field.

KBHN puts the child and family at the center of everything it does and is focused on finding solutions to the critical challenges identified by families, front-line service providers and communities. The Network's research efforts have led to significant advancements in early identification of NDDs, with a primary focus on NDDs such as, Autism Spectrum Disorder (ASD), Fetal Alcohol Spectrum Disorder (FASD), and Cerebral Palsy (CP).

SIGNIFICANT RESEARCH DISCOVERIES

The ***Canadian Cerebral Palsy Registry*** and ***EDIT-CP Toolkit*** expanded early detection efforts by integrating standardized screening tools into routine neonatal and primary care, ensuring that CP is identified and treated as early as possible. The ***National FASD Database***, with over 1,700 records from 29 clinics, improved diagnostic consistency and informed national guidelines. Similarly, the ***ASD Biorepository*** and genetic studies identified rare genetic variations associated with ASD and related conditions and contributed to the growing body of knowledge that informs early screening practices. The ***Infant and Early Mental Health Hub*** has trained more than 5,100 practitioners in early childhood mental health, while its online platform reached over 16,300 visitors in 10 months that demonstrated strong engagement in early intervention efforts. Additionally, the ***Social ABCs*** program empowered parents to deliver early therapies for children with social communication challenges. The program successfully expanded, with over 50 trained coaches now delivering services in Canada, India, and beyond.

KBHN'S 15 YEARS OF IMPACT

EFFECTIVE INTERVENTIONS

- Dino Island
- CP Fit 'n' Fun Project
- Secret Agent Society
- Math Interactive Learning Experience (MILE)
- F-Words Foundations Course
- Sustaining eHealth Programs for Parents and Teachers of Children with Neurodevelopmental Disorders
- ASSIST (teacher professional development)
- BNBD-NDD (Better Nights, Better Days for children with NDDs)
- KidsAction Coaching (KAC)
- BCI-Move
- Intelligent Device for Sound Sensitivity

EARLY IDENTIFICATION

- Canadian Cerebral Palsy Registry
- EDIT-CP Toolkit
- National FASD Database
- ASD Biorepository
- Infant and Early Mental Health Hub
- Social ABCs

FAMILY SUPPORT

- Family Check-Up
- The COMPASS tool
- Acceptance and Commitment Training (ACT)
- National Consortium on Aggression towards Family/Caregivers in Childhood & Adolescence

RESEARCH & INNOVATION

- **200+** products, guidelines and tools
- **100+** academic and public platforms
- **1,900+** stakeholder engagement

FUNDING & GROWTH

- Secured **$67.5** million in partnership funding
- Leveraged **159%** of Canada's Science, Technology & Innovation (ST&I) investment through the NCE program

TRAINING & REACH

- **14,257** frontline personnel trained
- **5,022** family advocates trained
- **41,000+** stakeholders engaged

Increasing ***access to evidence-based interventions*** has been a major priority for KBHN. An innovative approach was the development of ***Dino Island***, a tablet-based game originally created for children with FASD that has since been adapted to support broader neurodevelopmental needs. By targeting executive functioning skills, this intervention underwent rigorous testing and was scaled for use in classrooms and homes. For children with cerebral palsy, KBHN funded ***CP Fit 'n' Fun Project***, a virtual reality exergame that improved physical health and strengthened social interaction and engagement in children. For broader NDDs, the ***Secret Agent Society*** program provided cognitive-behavioural therapy-based training, enhanced children's emotional regulation and social skills, and supported more than 90 families. Lastly, the ***Math Interactive Learning Experience (MILE)*** successfully transitioned from small-group settings to full classroom implementation and improved learning outcomes for almost 800 students.

Increased access to effective interventions means training of professionals and empowerment of families to adopt the programs and services. The ***F-Words Foundations Course*** provided an innovative online training model for families and professionals that focused on a strengths-based approach to NDD care. With over 4,000 users enrolled, the program trained 1,780 healthcare providers, 504 educators, and 250 individuals with lived experience and achieved high satisfaction ratings. ***Sustaining eHealth Programs for Parents and Teachers of Children with Neurodevelopmental Disorders*** played a key role in increasing accessibility to evidence-based support. The ***ASSIST (teacher professional development)*** and ***BNBD-NDD (Better Nights, Better Days for children with NDDs)*** programs improved teacher knowledge and parental strategies; BNBD-NDD clinical trials showed reduced insomnia symptoms, improved children's sleep, and decreased parent fatigue. Physical Activity Programs for Children with NDDs, including ***KidsAction Coaching (KAC)***, were implemented across five physical activity sites and showed significant improvements in children's motor skills and social interactions. With 126 trained community-based coaches and 160 participating children and families, the program successfully integrated Indigenous cultural inclusivity and launched an online resource hub with 1,700 new users.

Beyond training to improve access, KBHN funded technological advancements to improve outcomes for children with NDDs and their families. The ***BCI-Move*** project demonstrated the feasibility of brain-computer interface technology in enabling children with severe motor impairments to independently control mobility devices, opening new possibilities for assistive technology. A significant technological advancement was made in addressing sensory challenges for autistic children through the development of an ***Intelligent Device for Sound Sensitivity*** that achieved IP protection with patents approved in Canada and the US.

Supporting families has been a critical component of KBHN initiatives, ensuring that parents, caregivers, and educators have the necessary resources to navigate the challenges associated with neurodevelopmental disabilities. The ***Family Check-Up*** program served over 400 families and strengthened family-centered autism services. The COMPASS tool helped families navigate post-diagnosis support by providing actionable recommendations tailored to education, mental health, and life skills. In addressing caregiver mental health, the ***Acceptance and Commitment Training (ACT)*** intervention was delivered to 140 caregivers and 30 facilitators, significantly reduced stress, anxiety, and depression and expanded to Black and Indigenous communities. The ***National Consortium on Aggression towards Family/Caregivers in Childhood & Adolescence (AFCCA)*** addressed aggression toward caregivers, reaching 800 families and conducting 750+ frontline worker training sessions. Their work resulted in 35 research publications, 27 white papers, and 53 knowledge translation products, influencing policy and practice.

COLLABORATION AND PARTNERSHIPS

KBHN initiatives collectively demonstrate the transformative power of research-driven, technology-enhanced, and community-centred solutions. By advancing early identification, expanding access to high-quality interventions, and strengthening family support networks, KBHN-funded projects are shaping a more inclusive and effective system of care for children with NDDs and their families, made possible with ***strong collaborations and partnerships*** across sectors. Under the NCE, KBHN engaged with 25 member institutions representing Canada's leading research-intensive

universities and institutes, 698 project-affiliated researchers and collaborators, more than 3,000 trainees, over 41,000 stakeholders and 634 partner organizations spanning the private, public (including federal and provincial departments and ministries), and not-for-profit sectors. KBHN has a proven track record of assembling world-class research teams that attract investment from private and public sectors to co-develop innovative solutions, strengthening Canada's social and economic future. Over its 15-year history, KBHN has secured more than $67.5 million in partnership funding, leveraging 159% of Canada's Science, Technology & Innovation (ST&I) investment through the NCE program.

TRAINING OF HIGHLY QUALIFIED PERSONNEL

In addition to project-focused knowledge translation activities, KBHN has engaged in extensive efforts to ensure its transformative discoveries benefit as many people as possible. Between 2009 and 2025, more than 850 KBHN-acknowledged publications have been cited in peer-reviewed journals, policy documents, patents, news articles, and social media worldwide. These knowledge mobilization efforts have been coupled with a strong commitment to training highly qualified personnel (HQP). KBHN-funded projects trained 14,257 frontline professionals, 5,022 family advocates, and 1,506 researchers in evidence-based intervention strategies, strengthening service delivery. Collaborations with universities and industry have fostered entrepreneurship and policy training of professionals, ensuring research findings inform scaling and policymaking. These initiatives have directly contributed to Canada's health strategies and other neurodevelopmental policies, reinforcing KBHN's national and global impact.

FIFTEEN YEARS OF ACCOMPLISHMENT

From an early emphasis on bridging basic and clinical sciences, KBHN quickly recognized the critical role of partnerships in driving knowledge translation and mobilization. From the outset, KBHN prioritized the development of innovative tools for earlier and more accurate diagnosis, the implementation of evidence-based behavioural and therapeutic interventions, and the creation of novel strategies to support children with neurodevelopmental disabilities and their families. By equipping frontline workers with knowledge and resources, KBHN worked to build capacity and ensure that scientific advancements translated into real-world benefits.

The investment in KBHN by the Networks of Centres of Excellence (NCE) established a unique-in-Canada interdisciplinary research network that has leveraged partnerships to address critical gaps. These efforts have significantly improved the early identification of neurodevelopmental disabilities, expanded access to effective interventions, and strengthened fragmented support systems for families. Through rigorous research and collaboration, KBHN has developed and tested solutions to systemic challenges, transforming the landscape of neurodevelopmental care across Canada.

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EXCELLENCE OF THE RESEARCH PROGRAM

KBHN was established in 2009 to advance research on early brain development and improve outcomes for children with neurodevelopmental disabilities through its emphasis on earlier diagnosis, evidence-based interventions, and improved support systems. Cycle I (2010-2015) laid the foundation by supporting interdisciplinary investigations aimed at defining the critical gene-environment interactions that underlie neurodevelopmental disabilities such as Cerebral Palsy, Autism Spectrum Disorder and Fetal Alcohol Spectrum Disorder. In Cycle II (2015-2020), KBHN shifted towards a focus on applied research and expanded its scope to address key non-categorical challenges such as fragmented care systems and unmet intervention needs, incorporating stakeholder priorities and launching new research projects with national impact. KBHN also strengthened training efforts by engaging frontline workers, educators, and parents in research teams. Cycle III (2020-2025) committed to its current focus on implementing and accelerating the translation of research findings into practice, guided by expert reviews and strategic planning. This phase prioritized real-world application, translating research into meaningful improvements for children and families. KBHN's three research streams continue to prioritize early identification, evidence-based interventions, and increased support for families. KBHN introduced formal training to strengthen implementation knowledge, skills and capacity across the research programs to support the sustainable uptake of technologies and child-and family-centered programs that will improve quality of life and bring socio-economic benefit to Canada.

KBHN'S ACCOMPLISHMENTS IN THREE FOCUS AREAS

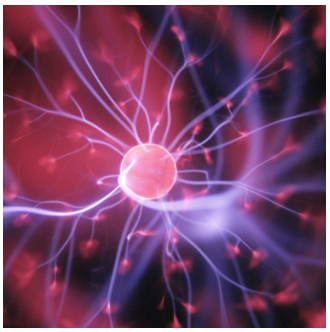
Early Identification	Effective Interventions	Family Support
Significant advancements in Autism Spectrum Disorder, Fetal Alcohol Spectrum Disorder and Cerebral Palsy informed diagnostic practices in neurodevelopmental disabilities	Innovative technologies and approaches to implement and mobilize evidence-based interventions for children and families	Transformative initiatives to ensure children, youth and families have access to necessary resources and supports

Cycle I advanced early diagnosis and treatment for prevalent neurodevelopmental disabilities—autism spectrum disorder (ASD), fetal alcohol spectrum disorder (FASD), and cerebral palsy (CP)—through multidisciplinary research programs. Key accomplishments of each research program include:

Autism Spectrum Disorder (ASD) Research Program

Principal investigators:
Dr. Lonnie Zwaigenbaum
Dr. Stephen Scherer

- Identified rare inherited variations in genes associated with ASD, ADHD and other neurodevelopmental conditions.
- Established a new biorepository that collected DNA samples and other biological specimens to support research on genetic influences in infants at increased risk of ASD. This biorepository, linked with observational data from multiple sites, enhanced research efforts by incorporating additional phenotype data and supporting advanced genetic analysis through microarray technology.
- Hosted annual ASD Research Parent Conference with 350 attendees.



Fetal Alcohol Spectrum Disorder (FASD) Research Program

Principal investigators:
Dr. James Reynolds
Dr. Joanne Weinberg
Dr. Sterling Clarren

- Established the National FASD Database that represented the pan-Canadian FASD diagnostic clinical experience and was utilized for a coordinated approach to identifying functional disabilities and recommendations within the FASD spectrum. With over 1,700 records obtained from 29 participating clinics across Canada, the database informed best practices and policies to address gaps in service delivery and led to the publication of the revised Canadian Guidelines for Diagnosis.
- Led NeuroDevNet-GRAND research collaboration on computer-based interventions for children with neurodevelopmental disorders.
- Conducted a large-scale brain imaging study on FASD, combining MRI scans with behavioral and cognitive data to create one of the most comprehensive databases in the world.
- Mapped brain connectivity and structural differences, helping to better understand the neurological and functional impacts of FASD.
- Developed an internet-based parent training program to support families facing behavioral challenges related to FASD, aiming to improve access to services, enhance communication, and influence policy change.

Cerebral Palsy (CP) Research Program

Principal investigators:
Dr. Michael Shevell
Dr. Jerome Yager

- Launched the Canadian Cerebral Palsy Registry that expanded across multiple regions in Canada to study potential risk factors, genetic and environmental influences, and the prevalence of CP.
- Launched the Cerebral Palsy Canada Network that provided accessible and credible information to families on new research discoveries, educational opportunities and provincial services and programs.
- Published a guide and fact sheet for patients and clinicians on stem cell research in CP.
- Explored early intervention for CP and a prenatal dietary strategy to prevent CP-related brain injuries.

Cycle II and III focused on implementation in practice and policy. Selected exemplars of KBHN's most impactful initiatives are summarized below:

Caribbean Quest/Dino Island Serious Game for Children with Neurodevelopmental Disabilities

Principal investigators:
Dr. Sarah J Macoun
Dr. Kimberly A. Kerns

Caribbean Quest, a computer-based neurorehabilitation program, was developed to remediate attention and executive functioning (EF) deficits in children with FASD. Based on pilot efficacy and implementation testing with community engaged-research partners, the intervention evolved into Dino Island, a tablet-based game aimed at improving attention and EF in children across a range of neurodevelopmental disabilities. Dino Island has undergone extensive testing and modification to facilitate broad implementation across diverse settings, such as homes, clinical settings, and classrooms, in both local and remote communities:

- Developed the Caribbean Quest intervention and website that trained non-professionals (e.g., parents, teachers, support workers) and equipped them with evidence-based strategies to deliver the intervention.
- Conducted two studies in schools with Educational Assistants facilitating children with FASD and ASD, and a 5-year study in children born premature with parents as facilitators. These studies led to improvements in cognitive and behavioural skills and provided extensive implementation data to refine the intervention.
- Developed Caribbean Quest into Dino Island to address trial limitations, collaborating with eight Family Engaged Research partners and industry stakeholders to improve accessibility, engagement, and feasibility.
- Showcased Dino Island as the lead project in the first Canadian-led ITEA/NRCAN cluster, where it was awarded the prestigious 'Eureka' label.
- Trialed Dino Island with preschool and school-age children across various neurodisabilities, with downward extension of the intervention to facilitate early intervention. Populations included children with ASD, FASD, ADHD, Learning Disorders, Congenital Cardiac Disease, children from economically disadvantaged backgrounds and at-risk children without formal diagnoses.
- Completed pilot testing (n=60) and a waitlist RCT (n=92) of Dino Island parent/home-delivery in a mixed pediatric sample. Expanded to international populations, including children with Cerebral Malaria (Queen Elizabeth Hospital, Malawi, n=20) and Brain Tumors (Mayo Clinic, USA, n=4). Ongoing trials include Pediatric Brain Tumor (n=30) and economically disadvantaged children (n=400).

CP Fit ‘n’ Fun Project: Health & Social Benefits of Virtual Exercise Games in Adolescents with CP

Principal investigators:
Dr. Darcy Fehlings
Dr. Nicholas Graham

A virtual reality exergame where adolescents with cerebral palsy (CP) pedal a stationary bike to control an avatar in a multiplayer game.

- Enabled social interaction through live chat and Facebook-organized play-dates that reduced isolation and promoted engagement.
- Investigated the impact of exergames on physical fitness and quality of life and advanced virtual reality as a rehabilitation tool for children with disabilities.

Earlier Intervention and Improved Access: Extending the Reach of the Social ABCs through nimble models of care and capacity building

Principal investigators:
Dr. Jessica Brian
Dr. Isabel M Smith
Dr. Lonnie Zwaigenbaum
Dr. Susan E Bryson

Social ABCs addresses the lack of intervention available for young children with autism or related communication challenges by providing early, evidence-based intervention that is delivered by the primary caregiver with support from a trained coach, thereby empowering parents and caregivers with skills and support. Social ABCs is based on years of studies and scientifically proven methods to help toddlers with social-communication challenges. Learn more about the research studies here. Other notable achievements include:

- Successfully adapted and tested the Group Social ABCs model for virtual delivery; Implemented community training and formalized the model.
- Integrated into clinical care across multiple sites with support from provincial funders.
- Established a growing online presence with global reach.
- Over 50 trained coaches working across implementation sites in Canada, India, and other countries.

Implementing an Intelligent Device for Sound Sensitivity in Children and Youth with Autism Spectrum Disorder (ASD)

Principal investigators:
Dr. Elina Birmingham
Dr. Siamak Aranzpour

A programmable app that can connect to a mobile device and uses AI-powered algorithms to detect and manage noises that are debilitating to children with ASD who also exhibit decreased sound tolerance. Users can mask, turn down or remove the environmental sounds they find aversive, allowing them to engage more confidently at home, in school, and social and recreational settings. Accomplishments to date include:

- A standalone prototype created that uses AI to detect and manage specific noises for children with autism; tested the device in real-world settings, showing high precision in detecting and managing aversive sounds.
- Achieved IP protection with patents approved in Canada and the U.S., established connections with audiologists and family partners, and advanced plans for commercialization.

Sustaining eHealth Programs for Parents and Teachers of Children with Neurodevelopmental Disorders

Principal investigators:
Dr. Penny Corkum
Dr. Shelly Weiss

ASSIST (Accessible Strategies Supporting Inclusion for Students by Teacher) provides online professional development for teachers to support students with NDDs; BNBD-NDD (Better Nights Better Days for Children with NDDs) provides behavioural and learning strategies to parents of children with NDDs and insomnia.

- ASSIST: Increased teacher knowledge about NDDs in children, which reduced stress and increased positive beliefs about working with children with NDDs.
- Program commercialized through collaboration with industry partner Velsoft.
- BNBD-NDD clinical trial reported reduced insomnia symptoms and parent fatigue, improved children's sleep, daytime functioning, and quality of life.

Implementation of the Secret Agent Society (SAS) Program for Autistic Children

Principal investigators:
Dr. Vivian Lee
Dr. Jonathan Weiss

The SAS:SG program is a 10-week CBT-based intervention with a spy theme to teach emotional regulation and social strategies to autistic children aged 8-12 within community-based mental health agencies.

- Assessed program acceptability in bilingual Francophone communities.
- Program delivered to 91 families; significant empathy and social skills gains observed;
- Partnerships with 5 community agencies; trained 43 therapists in 5 agencies.

Implementation and Evaluation of the Online F-words Foundations Course

Principal investigators:
Dr. Peter Rosenbaum
Dr. Andrea Cross
Rachel Teplicky

The F-words Foundations Course is a self-paced online course co-developed by families, service providers, and organizational leaders to provide a structured framework for a strengths-based approach focused on core aspects of child development: Family, Fun, Friends, Functioning, Fitness and Future.

- Global uptake of the five-module, self-paced, online F-words Foundations Course, available in English and French.
- Over 4,000 users enrolled; trained 1,780 healthcare providers, 504 educators, and 250 individuals with lived experience.
- High satisfaction rate (8.6/10), with families rating it 8.9/10.

The Math Interactive Learning Experience (MILE) for the classroom: Final Implementation

Principal investigators:
Dr. Jacqueline Pei
Dr. Carmen Rasmussen

MILE is an intervention that supports the development of key cognitive skills critical for children's success in math classes at school by promoting math learning at a pace tailored to the individual student. Additionally, the FAR (Focus, Act and Reflect) Methodology applied by MILE enhances problem-solving skills and self-regulation abilities.

- Adapted delivery format from individual and small group settings to classroom-wide use; implemented in 19 classrooms across four Alberta school divisions, yielding improved math scores and student confidence; and expanded to 6 Manitoba school divisions (700-800 students).
- Developed a website with all MILE materials and learning support.
- Published MILE training videos and resources for educators on the website to support asynchronous training, which resulted in 77 educators trained in Alberta and Manitoba.

Infant and Early Mental Health Hub for Training, Resources, and Tools

Principal investigators:
Dr. James N. Reynolds,
Dr. Chaya Kulkarni
Dr. Purnima Sundar

Addresses the gap in strategies for supporting Infant and Early Mental Health (IEMH) in Canada by creating a Canadian Hub for IEMH resources and training.

- Established the infrastructure for the IEMH Hub; created 8 training modules for the IEMH Certificate Program.
- Trained over 5,100 practitioners in IEMH basics from 2019-22 with ongoing programs and mentoring; Increased practitioner competency and confidence in supporting children (prenatal to 6) and families.
- Over 16,300 visits to the Hub's website in 10 months; Nurturing the Seed app launched with 230+ users.

Physical Activity Programs for Children with NDDs & Their Families: KidsAction Coaching (KAC)

Principal investigators:
Dr. Jean-Paul Collet
Dr. Stephanie Glegg

KAC aims to improve physical, cognitive, social, and mental wellbeing of children with NDD and/or intellectual disabilities through personalized physical activity coaching

- Implemented KidsAction Coaching (KAC) at 5 physical activity sites; showed significant improvement in children's motor skills and social interactions.
- Established 7 partnerships, trained 126 community-based coaches and reached 160 children/families.
- Integrated Indigenous cultural inclusivity into programs.
- Launched KidsAction website, app, and e-learning modules, with 1,700 new users.

Client-Oriented Mapping Point of Care Access to Supports and Services (COMPASS)

Principal investigators:
Dr. Jocelynn Cook
Dr. Jacqueline Pei
Dr. Kaitlyn McLachlan

COMPASS is a communication tool designed to enhance post-assessment support for clients and families after an FASD diagnostic assessment, allowing for tailored recommendations and increasing access to appropriate services in areas such as education, mental health, life skills and justice. Emerging from the unique National FASD Database, COMPASS provides accessible, actionable, and evidence-based information and resources to:

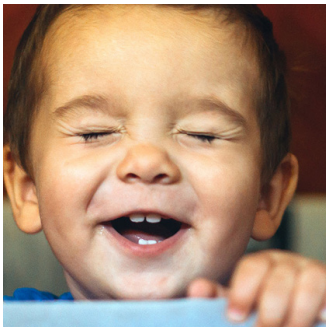
- Enhance clinical efficacy
- Improve communication with families
- Increase support planning and access
- Improve overall access to services

Implementation of a Collaborative Acceptance and Commitment Training (ACT) Intervention for Family Caregivers

Principal investigators:
Dr. Johanna Lake
Dr. Yona Lunsky
Dr. Kenneth Fung

Responds to the mental health needs of parents and caregivers of individuals with neurodevelopmental disabilities. Co-designed and co-delivered by caregivers and clinicians, the program addresses high stress, anxiety, and depression in family caregivers by building community capacity to support mental health, especially during and post-pandemic.

- Evaluated the impact of a caregiver-clinician-partnered ACT intervention on mental health; reduced depression, anxiety, and stress of the participants that completed the workshop.
- Coached three Autistic facilitators as they prepare to co-facilitate a pilot ACT workshop
- Expanded the program to Black and Indigenous communities with support from the Kids Brain Health Foundation and Petro-Canada CareMakers Foundation™, in 2024.
- Trained 140 caregivers and 30 facilitators
- 7 out of 8 teams continue offering workshops post-grant.
- Published open access article on facilitator experiences implementing ACT and presented at the 2024 International Association for the Scientific Study of Intellectual and Developmental Disabilities conference and the 2024 PiPER Research Day on Family Caregiver and Clinician ACT Facilitators



Early Detection and Intervention Toolkit for Children with Cerebral Palsy (EDIT-CP)

Principal investigators:
Dr. Darcy Fehlings
Dr. Annette Majnemer
Dr. Tatiana Ogourtsova

Early detection tools for CP established in neonatal follow-up programs and primary care settings across Canada to ensure early diagnosis (<12 months) and timely intervention.

- Increased Hammersmith Infant Neurological Examination (HINE) in neonatal clinics, with widespread adoption across Canada.
- Integrated CP assessment protocols into the Rourke Baby Record, a guide many physicians use at routine infant checkups. Disseminated the EDIT-CP toolkit to primary care physicians.
- Developed and refined Baby Constraint Induced Movement Therapy (Baby-CIMT) programs; established a Community of Practice for Baby-CIMT implementation.
- Developed a comprehensive website with resources for clinicians and families.

The Family Check-Up: Implementing a New Family-Centred Ecological Model within Autism Services

Principal investigators:
Dr. Terry Bennett
Dr. Irene Drmic

The program aims to address gaps in family-centred care in autism services by working with parents/caregivers to improve child mental health. It identifies family strengths and challenges, sets goals for change, enhances positive parenting, and proves access to necessary supports, and promotes early and effective family well-being.

- Established an independent Family Check-Up (FCU) team within the Autism Program at McMaster University.
- Trained autism therapists and supervisors for FCU implementation, with over 400+ families served.

National Consortium on AFCCA (Aggression Towards Family/Caregivers in Childhood & Adolescence)

Principal investigator:
Dr. Maude Champagne

Develop culturally relevant best practices and resources to close the gap between research conclusions and real-life outcomes, including family stability and family preservation; implement and expand a centralized hub for knowledge and resource sharing.

- 800+ children and families impacted
- Stakeholder engagement and training events reached 750+ frontline workers, 23 family caregiver events, 31 researchers at 6 events, and 20 policy/decision makers at 6 events.
- 13 research publications and reports, 27 position/white papers, 3 policy briefs/papers, 13 practice guidelines, 53 knowledge transfer products, and 11 media attention stories

BCI-Move: Empowering Severely Disabled Children to Achieve Power Mobility through Brain-Computer Interfaces (BCIs)

Principal investigator:
Dr. Adam Kirton

BCI-Move uses brain-computer interface technology to enable children with severe motor disabilities to independently control mobility devices such as powered wheelchairs using switchboards and joysticks.

- The feasibility of BCI as an assistive technology for power mobility was demonstrated in a group of 9 children who completed personalized power mobility training
- Enhanced understanding of BCI technology for future studies and clinical applications.

DEVELOPMENT OF HIGHLY QUALIFIED PERSONNEL

IMPACT OF THE KBHN TRAINING PROGRAM

A cornerstone of KBHN's mission is training, which strengthens Canada's research ecosystem by building capacity through inclusive and equitable education. In January 2021, KBHN welcomed Dr. Hajer Chalghoumi to lead the Network's Training Program. Dr. Chalghoumi is an accessibility expert and a member of the international accessibility

professional association. KBHN's training programs equip graduate and postgraduate research trainees, practitioners, healthcare providers, and family and community members with essential skills to translate research into impactful interventions and policies. KBHN's training curriculum was guided by a Core Competency Framework, developed by trainees themselves, encompassing key areas such as implementation, entrepreneurship and collaboration, and policy development.

Implementation Training: Trainees gained access to specialized training through KBHN's partnership with The Center for Implementation, providing them with the necessary skills to bring research into practice effectively. KBHN supported 44 trainees to complete the Level 1 Implementation Support Specialist Certification, providing foundational knowledge on applying implementation science to design, apply, spread and scale change.

Entrepreneurship and Collaboration: KBHN collaborated with Simon Fraser University (SFU) and Mitacs to provide entrepreneurial training through programs such as the Invention to Innovation (i2I) Skills Training initiative. This program supported notable alumni. In 2012, Mitacs intern Suzanne Robinson led the evaluation of Secret Agent Society, a program to support the social-communication skills development of children aged 8-12 with autism. Dr. Behnaz Bahmei, a KBHN Outstanding Awardee (2021-2022), who contributed to the Sound Sensitivity project by developing an AI-powered app for autistic youth with decreased sound tolerance. Another alumnus, Phil Brunet, a Clinical Neuropsychology graduate student at the University of Victoria, participated in the foundational i2I program and served as the technical lead for the KBHN-funded Dino Island project, a tablet-based intervention designed to enhance cognitive functions in children.

Policy Training: KBHN collaborated with the Autism Alliance of Canada to support the federal government's National Autism Strategy. Since the partnership, six graduate interns and two postdoctoral fellows received practical experience in policy development, stakeholder engagement, and policy writing each year. KBHN trainees have been instrumental in leading consultations and producing policy briefs that influence national autism policies.

Career Outcomes of KBHN Trainees: A total of 1149 individual HQP participated in KBHN's research and training programs between 2010 and 2024. Career tracking data was available for 698 former trainees, highlighting their contributions across academia, industry, healthcare, and policy.

- 61 former KBHN trainees hold faculty positions at universities and research institutes in Canada (46) and internationally (15), with 9 serving as Principal Investigators (PIs) or Co-Investigators (Co-Is) on current KBHN-funded projects.
- 114 former trainees have transitioned into roles in industry.
- 150 former trainees work as healthcare and hospital professionals.

These data demonstrate that KBHN trainees contribute to Canada's economic growth and prosperity by advancing research, driving innovation, and improving healthcare and policy outcomes.

Trainees Making a Difference: KBHN trainees have made significant contributions to advancing research, intervention, and policy in neurodevelopmental disabilities. Notable alumni include:

Dr. Jennifer Zwicker, Chief Scientist of KBHN, began as a postdoctoral fellow with NeuroDevNet (now known as KBHN) and is the Director of Health and Social Policy at the School of Public Policy at the University of Calgary. She also holds the position of Canada Research Chair (Tier II) in Disability Policy for Children and Youth.

Dr. Maude Champagne, who is leading the development of Canada's first-ever Nonviolent Resistance (NVR) therapy program, along with the National Consortium on Aggression Toward Family/Caregivers in Childhood and Adolescence (AFCCA), an AFCCA Family Supports Program, and the creation of the country's first clinical practice manual for addressing AFCCA.

Dr. Linda Nguyen, an Assistant Professor at the University of Calgary and a researcher at the Alberta Children's Hospital Research Institute, specializes in youth, sibling, and community-engaged research.

Dr. Jonathan Lai serves as the Executive Director of the Autism Alliance of Canada and is an Adjunct Faculty member at the University of Toronto's Institute of Health Policy, Management, and Evaluation, contributing to autism-related policy and advocacy efforts.

Career Outcomes of KBHN Trainees

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ACADEMIA & RESEARCH

former KBHN trainees hold faculty positions at universities and research institutes

114

INDUSTRY

former KBHN trainees have transitioned into roles in industry

150

HEALTHCARE & HOSPITALS

former KBHN trainees work as healthcare and hospital professionals

POLICY ADVISORY AND RESEARCH TRAINING (PART) COMMITTEE AND RESEARCH OVERSIGHT COMMITTEE

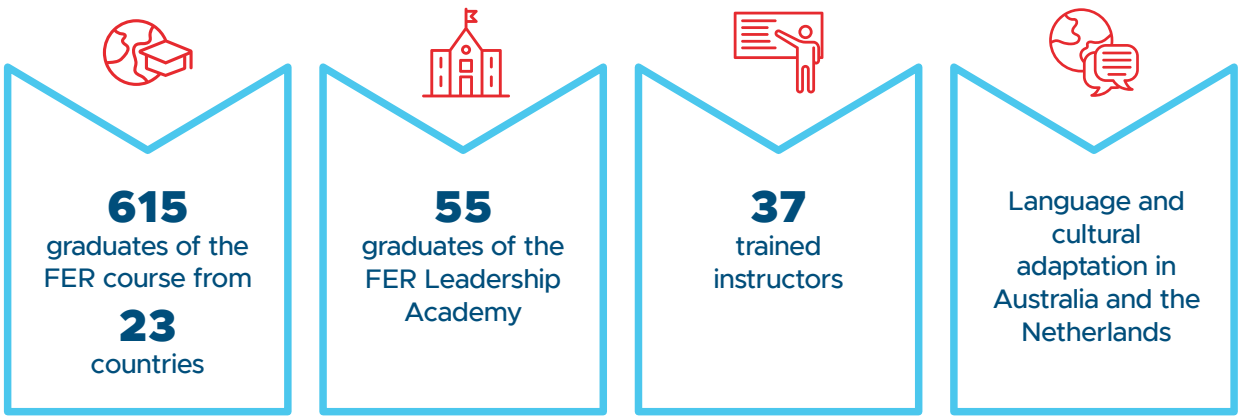
The Policy Advisory and Research Training (PART) Committee advised on trainee needs, sharing professional insights, and collaborating to develop relevant programs and events that enhance professional growth. From 2021-2022, PART took significant steps to ensure equitable and inclusive access to Network-related funding and training opportunities. The committee also organized a professional development webinar series aimed at broadening trainees' knowledge and skills. Additionally, PART members played an integral role in planning the KBHN Annual Conferences and organizing training events and professional development opportunities. Moreover, the Research Training Committee (RTC) managed the overall training program to support trainees at all levels, providing opportunities for enriched skills development for investigators while fostering future leaders. Members, selected for expertise in research, policy, and community engagement, developed training events, internships, and trainee awards.

KBHN HQP ACCESS AWARDS

The KBHN Access Award has provided critical support to emerging researchers, enabling them to share their work on national and global stages. Between 2021 and 2025, award recipients delivered 30 presentations across 14 cities in 5 countries, representing different universities and institutions. Awardees presented at conferences in major Canadian cities, including Ottawa, Montreal, Quebec City, Winnipeg, Calgary, and St. John's. Internationally, they showcased their research in Bruges (Belgium), Reims (France), Chicago, Denver, St. Louis, San Francisco (USA), Arlington (USA), and Cairns (Australia). Many trainees presented at leading conferences, such as the European Academy of Childhood Disability (EACD) and the American Academy for Cerebral Palsy and Developmental Medicine (AACPDM). These opportunities allowed awardees to engage with world-renowned experts, contribute to policy discussions, and advance the field of neurodevelopmental research. Through oral presentations, mini-symposia, and policy discussions, awardees disseminated their findings to diverse audiences, ensuring that cutting-edge research informs real-world practices. By providing financial support, the KBHN Access Award is empowering the next generation of child health and neurodevelopmental disability researchers, cultivating collaborations, and driving meaningful change for children and families worldwide.

FAMILY ENGAGEMENT IN RESEARCH PROGRAM

The Family Engagement in Research (FER) Course was developed in 2018 by a group of researchers and family members at CanChild Centre for Childhood-onset Disability Research at McMaster University. What started as a single 10-week course and a pilot research study has evolved into a world-class patient-oriented research capacity and community-building initiative. In 2018, the program's goal was to train 40 people — 20 researchers and 20 family members. As of January 2025, 23 cohorts of the FER Course have been completed, with 615 graduates from 23 countries. The FER Course has also been linguistically and culturally adapted through partnerships in the Netherlands and Australia and has been licensed and delivered in both countries. All FER Course cohorts are taught by former graduates, and as of 2025 there are 37 trained instructors.



Offering foundational to advanced-level courses—including two micro-credentialed courses (FER Course and Family Engagement Leadership Academy) —the FER Program provides a comprehensive program for building capacity in family engagement, along with an expanding international community network and various engagement support services. The program has grown organically, responding to needs identified by FER Course graduates. For example, the Family Engagement Leadership Academy was developed based on the identified need for further training in how to champion family engagement at a community and organizational level. To date, there have been five cohorts of participants in the Leadership Academy for a total of 55 graduates. Research studies have been integrated throughout to inform both program development and evaluation. To date, FER remains the only program of its kind that trains researchers, persons with lived and living experience, and healthcare providers together in the field of child health and neurodevelopmental disabilities, fostering genuine co-learning, collaboration, and connections. As a key example of KBHN's commitment to meaningful family engagement, the FER Program ensures that research and innovation align with the needs of those most affected by NDDs.

EARLY CAREER INVESTIGATOR & MENTORSHIP AWARD

The Early Career Investigator & Mentorship Award was launched in 2021 to build capacity in neurodevelopmental disability research and support the development of early career researchers by helping them strengthen their research programs. This award aimed to foster recruitment of excellent researchers at the onset of their careers and enhance connections to community partners, ultimately contributing to the growth of research in the field.

Since its introduction, a total of 5 trainees have received the Early Career Investigator & Mentorship Award across two cohorts, reinforcing KBHN's commitment to supporting early career researchers and fostering innovation in neurodevelopmental disability research. Through these partnerships, the award continues to strengthen connections between researchers and community partners, building a more collaborative and impactful research environment. In 2021, the first cohort of the award recognized 3 trainees who made significant contributions to neurodevelopmental disability research, each collaborating with community partners to advance the field. The awardees were:

Carly McMorris (University of Calgary) partnered with Alberta Children's Hospital Research Institute (ACHRI) to conduct research on Enhancing Supports for Autistic Post-Secondary Students at The University of Calgary.

Ning Cheng (University of Calgary) partnered with Alberta Children's Hospital Research Institute (ACHRI) on the project titled Selectively Targeting ERK Signaling to Treat Fragile X Syndrome and Autism.

Sarah Munce (Toronto Rehabilitation Institute) partnered with UHN-KITE Research Institute to develop the Compassionate Virtual Peer Navigation Program for Youth with Childhood-Onset Disabilities.

The following year, in 2022, the award continued with 2 more awardees who made significant advancements in their respective areas of research. The second cohort of awardees included:

Elizabeth Condliffe (University of Calgary) partnered with Alberta Children's Hospital Research Institute (ACHRI) to conduct research on Robotic Training to Facilitate Physical Activity in Children Who Cannot Walk.

Tatiana Ogourtsova (McGill University) partnered with Centre for Interdisciplinary Research in Rehabilitation of Greater Montreal (CRIR) to conduct the REsilience Telehealth-COaching (RE-t-CO): Mental Health Support for Children with Disabilities.

OUTSTANDING KBHN AWARDS

The KBHN Outstanding Awards recognize excellence within the KBHN network. Launched in 2022, the awards initially honored three categories: Outstanding KBHN Trainee Member, Promising Researcher, and Mentor/Supervisor. These awards highlight contributions in advancing KBHN's mission, fostering innovation, and mentoring emerging talent.

In 2022-2023, the Outstanding KBHN Leadership Award in Family Engagement in Research was introduced to recognize individuals with lived experience and caregivers in neurodevelopmental disability research since this is at the core of what KBHN does. **Dr. Genevieve Currie** received the inaugural award, emphasizing the importance of family-centered research. In 2025, KBHN added the Inclusive Researcher/Innovator Award to celebrate integrating inclusivity into research and fostering innovation in neurodevelopmental disability studies.

Over time, the awards have expanded to recognize contributions at all levels, from trainees to mentors and family advocates. They serve as a vital mechanism for supporting innovation, professional development, and KBHN's mission to improve the lives of children with neurodevelopmental disabilities. Since their inception, 16 awards have been distributed, reinforcing KBHN's commitment to honoring impactful contributions in children's brain health research.

NETWORKING AND PARTNERSHIPS

Since 2009, KBHN has cultivated partnerships with families and communities, organizations, governments, and industry leaders to innovate and translate research into solutions for children with neurodevelopmental disabilities (NDDs). The partnerships have scaled and spread KBHN's impact through advancing the Network's key focus areas on early diagnosis, improved treatments and enhanced support for families.

Early Foundations and Growth

From its inception as NeuroDevNet, KBHN recognized the power of partnerships in bridging research and real-world applications. In 2011, groundbreaking collaborations with companies such as TELUS, Bionetics Inc., and Neurochip Corporation, along with a Mitacs internship program, laid the foundation for industry-academic cooperation. By 2013, the Network had expanded to 129 active partnerships, supporting early diagnostic biomarkers for autism, cerebral palsy, and fetal alcohol spectrum disorder, while also pioneering the use of computer games for intervention.

Scaling Impact Through Collaboration

As the Network grew, strategic alliances deepened its national and international influence. By 2015, the formation of the Community for Brain Development brought together over 20 organizations to advocate for children with NDDs. Partnerships with Brain Canada enabled multi-million-dollar training initiatives, while the launch of the Cerebral Palsy Canada Network provided families with critical research-informed resources.

Between 2016 and 2020, KBHN's collaborations spanned government ministries, research institutes, and community organizations, driving policy changes and improving access to services. The Network's joint initiatives with provincial ministries enhanced screening, diagnosis, and intervention strategies. During the COVID-19 pandemic, KBHN adapted by launching an internship program co-funded with Mitacs to address emerging community challenges.

Innovation and Future Directions

In recent years, KBHN has continued to forge impactful partnerships that accelerate research translation and service implementation. The Indo-Canada Autism Network allowed for international knowledge exchange, while collaborations with the Canadian Children's Literacy Foundation and AIDE expanded educational and resource access. In 2022-2023, partnerships with The Centre for Implementation provided critical support for training the next generation of implementation leaders. Moreover, KBHN partnered with SFU VentureLabs to help its researchers bring their products and solutions to market by advising them on business plans, market analysis and industry mentorships. The same year, five new projects got underway through the Strategic Investment Fund. This pipeline of innovations, established by KBHN in partnership with Brain Canada, aims to improve the quality of life for children with NDDs and their families in the near term. This funding initiative specifically targeted projects with an established evidence base that were designed to spark positive changes in practice or policy, develop new applications for existing technologies or expand solutions in KBHN's focus areas.

Through strategic and sustained partnerships, KBHN has transformed the landscape of neurodevelopmental research and care. By fostering interdisciplinary collaboration, advocating for policy improvements, and ensuring evidence-based solutions reach families, KBHN continues to drive meaningful change, ensuring that all children with NDDs receive the support they need to thrive.

KNOWLEDGE TECHNOLOGY EXCHANGE AND EXPLOITATION (KTEE)

IMPACT OF KBHN'S KTEE ACTIVITIES

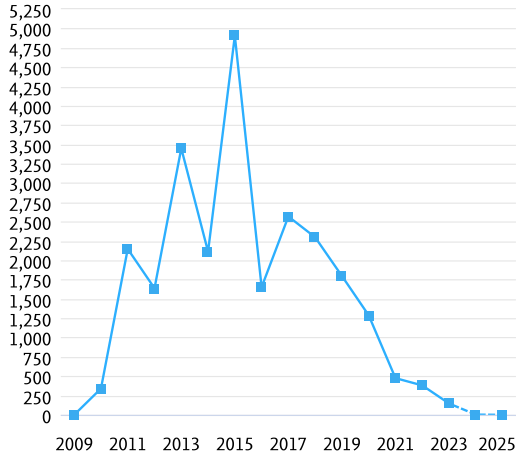
KBHN continues to drive impactful Knowledge and Technology Exchange and Exploitation (KTEE) initiatives, significantly enhancing research translation and stakeholder engagement.

In 2022-2023 alone, KBHN supported 12 research and implementation projects, leading to 42 new academic publications, 33 academic training events, and 4 new clinical-practice guidelines. The year also saw the development of 11 new policy documents and 4 commercial products, along with 36 new training resources aimed at parents and frontline professionals. KBHN training programs directly impacted 904 researchers, 375 family advocates, and 3,239 frontline workers.

Over the past few years, KBHN has engaged tens of thousands of stakeholders. In 2021-2022, more than 16,500 stakeholders participated in Network-sponsored events, while 5,790 frontline workers benefited from training. In the prior year, KBHN trained 3,197 service-delivery personnel and engaged 15,007 stakeholders through funded projects. Research output has been prolific, with 43 publications in 2020-2021 alone, alongside 60 academic training events and 11 new intellectual property filings.

Citation Count

Entity: Kids Brain Health Network (KBHN) Publications · Within: All subject areas (ASJC) · Year range: 2009 to 2025 · Data source: Scopus, up to 26 Feb 2025

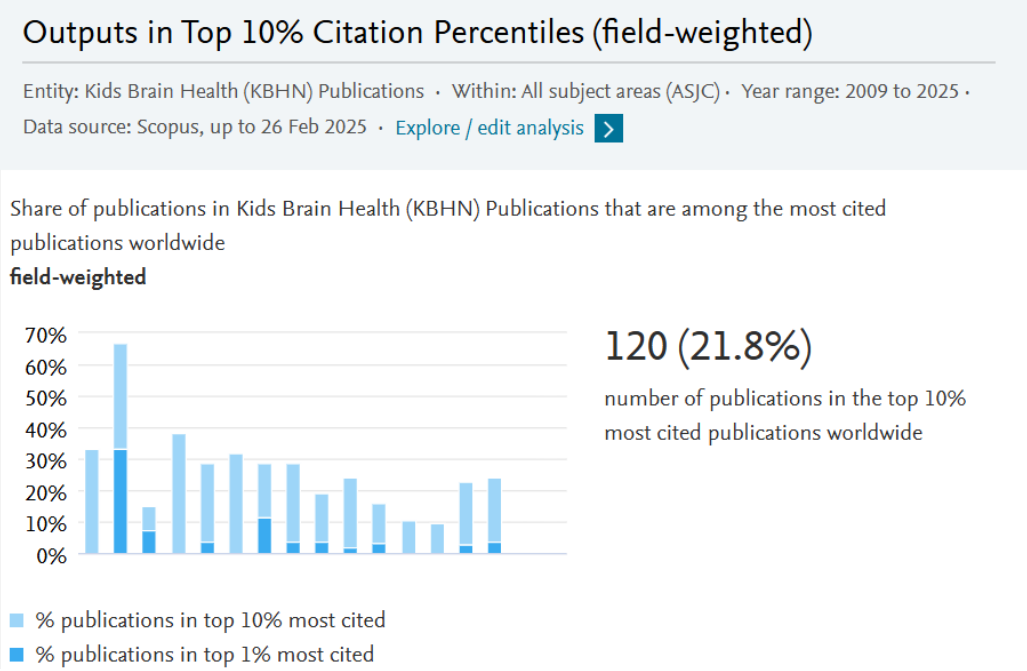


25,201

number of citations received by publications in Kids Brain Health Network (KBHN) Publications

Between 2010 and 2024, KBHN-sponsored research produced over 850 acknowledged publications, with 551 indexed in Scopus. These publications have been cited 25,659 times, achieving a Field-Weighted Citation Impact of 1.91, meaning KBHN research is cited 91% more than the global average. 72.5% of KBHN publications appeared in the top 25% most impactful journals worldwide (CiteScore), and KBHN publications have been cited in 160 patents worldwide. These statistics demonstrate KBHN's significant contribution to the global scientific and knowledge economy.

Citation Impact Analysis of Acknowledged KBHN Publications



An analysis of the citation impact of acknowledged KBHN publications with unique identifiers from 2009 to 2025, using field-weighted citation percentiles. The data, sourced from Scopus as of February 26, 2025, highlights the proportion of acknowledged KBHN publications ranked among the top 10% most cited worldwide. The bar chart illustrates annual trends in citation performance, while the accompanying statistic indicates that 120 publications (21.8%) have achieved this high-impact citation status. This metric reflects the influence and reach of KBHN's research contributions in the global academic landscape.

Beyond numbers, KBHN has championed the development of key programs, including the Social ABCs intervention, Dino Island commercialization strategy, and the Fetal Alcohol Resource Program. With a commitment to Indigenous and rural communities, initiatives such as Nurturing the Seed and the Infant and Early Mental Health Hub are expanding access to crucial resources. The Better Nights, Better Days program exemplifies KBHN's dedication to scaling evidence-based solutions, ensuring families across Canada receive effective interventions. By integrating research into policy and practice, KBHN is transforming the landscape for children with neurodevelopmental disabilities and their families.

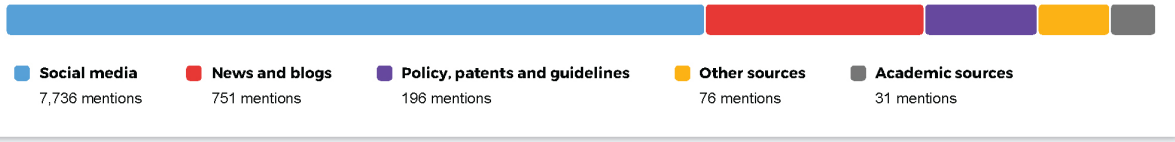
Attention Metrics of Acknowledged KBHN Publications

Total mentions
8,790

Outputs with attention
459

Total outputs tracked
485

Attention breakdown



Social media
7,736 mentions

News and blogs
751 mentions

Policy, patents and guidelines
196 mentions

Other sources
76 mentions

Academic sources
31 mentions

Top outputs

417 Health Concerns and Health Service Utilization in a Population Cohort of...
Article in **Journal of Autism and Developmental Disorders**, September 2017

376 Whole-genome sequencing of quartet families with autism spectrum disorder
Article in **Nature Medicine**, January 2015

342 Metformin ameliorates core deficits in a mouse model of fragile X syndrome
Article in **Nature Medicine**, May 2017

337 The human splicing code reveals new insights into the genetic determinants of...
Article in **Science**, December 2014

Most mentioned by

DrJonathanWeiss
60 total mentions from this **X User**

ASDMentalHealth
57 total mentions from this **X User**

KidsBrainHealth
47 total mentions from this **X User**

A breakdown of total mentions across various media types, based on publications with digital object identifiers, highlighting top-cited research outputs and most influential users in driving attention.

HEALTH ECONOMICS AND POLICY IMPACT CORE

The Health Economics and Policy Impact Core (HEPI-Core) provides expertise for the economic evaluation of the implementation strategies of KBHN research projects and supports policy development for the Network as a whole. Over the duration of its existence, the HEPI-Core has had three primary objectives:

Objective 1: Economic evaluation of KBHN research

KBHN projects often develop novel delivery systems for interventions (e.g., eHealth, therapeutic games) to improve outcomes in children with NDDs and tackle gaps in existing care. Assessing the costs and benefits of these interventions through economic evaluation provides an additional economic justification for widespread implementation, bolstering the argument for scale and spread across stakeholder groups. The team advised on the best approaches for economic evaluations with all KBHN teams and worked with several key projects best positioned for an economic evaluation. Findings were published on the evaluation of FASD Screening Tools indicating the cost-effectiveness of screening. With the Better Nights Better Days team, a protocol for the evaluation was published and a manuscript is under review describing the cost effectiveness of the intervention.

Objective 2: Development of a KBHN policy playbook for KBHN projects.

The HEPI-Core has collaborated with several KBHN teams (such as the F-words research team, Nurturing the Seed team and partners at the Infant and Early Mental Health Promotion) to develop policy briefs based on their research findings. This collaborative process capitalized on the strengths of both parties: the research team's subject matter expertise, and the policy team's policy writing and strategic thinking expertise. These collaborations have led us to develop a policy brief template and distribution plan that can be used as a foundation for developing policy documents across research projects within KBHN. This will allow us to communicate how KBHN research can improve policy and practice to a broad audience, effectively increasing the impact of project research and findings.

Objective 3: Contributing to policy impact.

The HEPI-Core, in collaboration with KBHN, have produced various policy documents (briefs, submissions and reports), which have served to enhance the national presence of KBHN and contribute to important policy development and revisions around files like the National Autism Strategy, Canada Disability Benefit, Early Child Care, Youth mental health and Right Sizing Children's Health Care. Importantly, these documents position KBHN as one of the leading organizations bringing forward the lens of children with neurodevelopmental disability in legislation and policy. Specific examples of policy documents we have produced include: a policy brief to the Minister of Mental Health and Addictions on COVID-19 impacts on the mental health of children with disabilities and their families with recommendations for priority areas of action, a policy brief submitted to the Standing Committee on Health, Welfare and Social Affairs (HESA) for their study on Children's Health, and two briefs to the Standing Committee on Human Resources, Skills and Social Development and the Status of Persons with Disabilities committee (HUMA) on early learning and childcare in Canada (Bill C-35) and the Canada Disability Benefit (Bill C-22).

KBHN CONFERENCES

The Annual Conferences KBHN hosted served to foster collaboration and knowledge exchange in advancing neurodevelopmental disability research. The event grew into a significant forum for families, trainees, researchers, organizational partners and policymakers to discuss innovations in the field. Supporting trainees in neurodevelopmental research was core to the conferences. Since 2010, KBHN has consistently provided opportunities to expand professional networks and develop essential skills.

In response to a 2015 needs assessment, KBHN introduced faculty-led workshops on science communication, digital video production, and academic writing. In 2022, pre-congress workshops covered topics such as big data research, with sponsorships extending to trainees from low- and middle-income countries.

KBHN Annual Conferences

2010

INAUGURAL CONFERENCE

- Launched as the NeuroDevNet Brain Development Conference
- Focused on supporting trainees in neurodevelopmental research

2015

WORKSHOPS INTRODUCED

- Faculty-led workshops launched after a needs assessment
- Topics: Science communication, digital video production, academic writing

2016

FAMILY & ADVOCACY INVOLVEMENT

- Prioritized family engagement & partnerships in neurodevelopmental research.
- Advocacy groups & lived experience voices played a stronger role

2019

CO-HOSTED WITH CHILDREN'S HEALTHCARE CANADA

- Strengthened partnerships to support children & families
- Expanded reach & collaborative efforts

2020

VIRTUAL SHIFT (COVID-19 RESPONSE)

- First virtual conference with **300** participants
- Maintained engagement despite the pandemic

2021

VIRTUAL CONFERENCE ON "REALIZING CHANGE"

- **226** attendees & **53** speakers
- Highlighted research innovation & collaboration

2022

CO-HOSTED WITH DOHaD CANADA AND INTERNATIONAL

- Pre-congress workshops on big data research
- Sponsored trainees from low- and middle-income countries
- Co-led sessions aligned with the Big Data and Global Inclusion theme

2023

FINAL NCE CONFERENCE IN OTTAWA

- **87** organizations represented by **258** attendees
- Diverse international attendees (South Africa, Qatar, Chile)
- **22%** attendees with lived experience
- High engagement in sessions on early interventions & policy advocacy

The strategic decision of KBHN to pivot to a virtual conferences in response to the COVID-19 pandemic in 2020 maintained engagement within the Network, with nearly 300 participants attending the event. The 2021 conference, themed "Realizing Change through Partnerships and Research Innovation," highlighted the importance of collaboration, with 226 participants and 53 speakers showcasing impactful research.

From its early days as the NeuroDevNet Brain Development Conference, KBHN's annual conference has grown in scope and influence, consistently fostering groundbreaking discussions, equipping future researchers, and strengthening collaborative efforts to drive meaningful change.

Partnerships have also been central. Since embedding commitment to partnerships in its structure, KBHN has prioritized engagement with families and advocacy groups. The 2016 and 2017 conferences emphasized family involvement, while the 2019 event, co-hosted with Children's Healthcare Canada, reinforced shared missions in supporting families and children with neurodevelopmental challenges. Moreover, the 2022 KBHN Congress in partnership with DOHaD (developmental origins of health and disease) Canada and DOHaD International ensured that all concurrent sessions were co-led by family partners with lived experience, sponsoring their attendance and participation to the event.

The final conference under the NCE in October of 2023 held in Ottawa, Ontario made a significant impact, bringing together 87 organizations and a diverse group of attendees from across Canada and abroad, including participants from South Africa, Qatar, and Chile. With strong representation from Ontario (112 attendees), British Columbia (32 attendees), and Quebec (20 attendees), the conference facilitated meaningful discussions on childhood disability, knowledge mobilization, and collaborative research. Every concurrent session included a co-presenter with lived experience, and 22% of attendees identified as having lived experience, ensuring authentic and insightful dialogue. Feedback from participants was overwhelmingly positive, with high ratings for speakers, program content, and networking opportunities. Sessions on critical topics—such as early interventions, clinician-caregiver collaboration, and policy advocacy—resonated with attendees, reinforcing the event's role in driving innovation, fostering collaboration, and shaping future practices in the field of neurodevelopmental disability.

KBHN ACHIEVEMENTS AGAINST THE OBJECTIVES SET OUT IN THE NETWORK AND FUNDING AGREEMENTS

KPI/Metric	Cycle I (2010-2015)	Target Cycle II	Cycle II (2015-2020)	Target Cycle III	Cycle III (2020-2024)	Cycle III* Achievement Percentage Achievement Percentage
NCE funded projects	24	25	25	19	33	174%
Provincial/federal-supported projects	--	--	7	2	7	350%
NCE funded investigators	61	51	101	28	40	129%
NCE project-affiliated researchers & collaborators	65	--	264	107	369	386%
Family advocates integrated in projects	--	--	--	50	181	362%
Frontline workers integrated in projects	--	--	--	--	677	New
Indigenous researchers integrated in projects	--	--	--	44%	48%	109%
Acknowledged publications	306	--	366	44	201	477%
DEVELOPMENT OF HQP						
Network funded project HQP	--	--	255	40	204	510%
Project affiliated HQP	--	--	464	95	433	364%
Early career investigator & mentorship awards	--	--	--	4	5	125%
Fellowships & internships	--	--	--	9	27	300%
Academic training events	--	--	61	25	182	728%
Research trainees in Family Engagement in Research course and Leadership Academy	--	--	39	120	146	195%
Family/stakeholders trained in Family Engagement in Research Course and Leadership Academy	--	--	37	120	234	177%
TCI implementation training participants	--	--	--	--	15	New
Frontline service delivery personnel trained in intervention	--	--	526	1,200	13,731	429%
Researchers trained in intervention	--	--	--	--	1,506	New
Family advocates trained in intervention	--	--	--	--	5,022	New

KNOWLEDGE AND TECHNOLOGY EXCHANGE AND EXPLOITATION						
Health Economics and Policy Impact Core	--	--	--	1	1	100%
Commercial products in development	--	--	11	3	15	500%
Acknowledged publications	199	--	416	44	243	391%
Practice guidelines	--	--	25	6	24	400%
Academic platforms	--	--	15	4	10	250%
Public platforms	--	--	7	6	76	1266%
Policy documents	--	--	3	4	27	675%
Intervention training resources & tools	--	--	13	17	99	394%
Licenses, copyrights or trademarks granted	--	--	9	18	22	122%
Stakeholder engagement events	243	--	198	83	1,501	1808%
Stakeholders engaged	5,044	--	2,483	6,645	41,201	788%
Implementation science workshops & consultations	--	--	34	91	81	89%
TCI implementation training participants	--	--	--	--	38	New
NETWORKING AND PARTNERSHIPS						
Network member institutions	26	--	25	25	22	88%
Network partnerships	--	--	--	--	402	New
Contributing partner organizations	118	44	189	41	242	590%
Partner contributions (cash & in-kind)	$28.50M	$16.70M	$19.94M	$11.98M	$19.06M	159%

***The achieved percentage and total figures for Cycle III have been included since some KPIs were only established in Cycle III**

KBHN consistently demonstrates exceptional commitment by not only staying on track to meet the projected targets ahead of schedule but also by surpassing some key performance indicators well before the conclusion of each funding cycle.

This report highlights the legacy and impact of Kids Brain Health Network (KBHN) under the support of the Networks of Centres of Excellence of Canada. As KBHN enters its next chapter, the focus is on scaling, spreading, and implementing innovations that improve the lives of children with neurodevelopmental disabilities and their families. This work is now supported by the Strategic Science Fund (SSF), a program of Innovation, Science and Economic Development Canada. Through a transparent and competitive process, the SSF funds not-for-profit science organizations to support innovations directly benefiting Canadians.

kids brain health network

réseau pour la santé du cerveau des enfants

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