

Cerebra Innovation Centre

BRIGHT IDEAS FOR BRILLIANT KIDS

CEREBRA



Working wonders for children
with brain conditions

Cerebra

WORKING WONDERS FOR CHILDREN WITH BRAIN CONDITIONS

We're the charity dedicated to helping families that include children with brain conditions discover a better life together. Families that have a child with a brain condition face challenges every day. To learn, play, make friends and experience the world can feel difficult, even impossible. But we don't believe there's any challenge that can't be overcome. So we listen to families, we learn from them. We carry out research, we design and innovate, we make and share. From new equipment to new learning resources to new ways to play and support each other, everything we find together makes life better; it opens doors to discovering the world. It's an enriching journey for everyone involved. Why not be a part of it? You never know what we'll discover together.

"We understand that families play a vital role in their children's lives. By listening to what families tell us, we can help them see past barriers and discover a better life together."

www.cerebra.org.uk



Our Services

WORKING WITH YOU AND YOUR AMAZING CHILD

In the UK today, there are around half a million children and young people with brain conditions that result in complex medical, educational and social support needs. Our research work across neurodevelopmental conditions gives us a unique perspective allowing us to provide research-driven solutions and advice to those who need it most. Our guides, factsheets, and other resources offer comprehensive and current information on various physical, social, and legal issues that parents and carers of children with brain conditions may face. Services available include a Sleep Advice Service, the Cerebra Innovation Centre, our Book and Toy Library, and LEaP, our innovative problem-solving project that runs alongside our Legal Advice Service.

We support children up to the age of 16 who have a brain condition. We use 'brain condition' to describe any disorder or disability that affects the brain, including those caused by illness, genetics, or traumatic injury. Brain conditions include (but are not limited to) autism, ADHD, Down's syndrome, learning disabilities, cerebral palsy, epilepsy, and developmental delay.

We aim to provide the best research-driven, high-quality health, legal, financial, and social care advice for children with brain conditions and their families. We help them put that knowledge into practice through practical advice and support.



SLEEP ADVICE SERVICE

We understand that if you have one child that doesn't sleep, the whole family suffers. Our range of sleep services will help your child and everyone in your family get a good night's sleep.



LEGAL RIGHTS

Our Legal Rights Service provides families of children with brain conditions with help when facing difficulties accessing support services they are entitled to.



TOY AND BOOK LIBRARY

Our specialist postal library contains a wide range of books for both adults and children and a selection of toys specially chosen for children with brain conditions.



PARENT GUIDES

Our guides and factsheets help families with everyday problems they may be facing. We offer comprehensive, up-to-date advice and research-driven strategies to help you deal with a wide range of issues.



Innovation Centre

BRIGHT IDEAS FOR BRILLIANT KIDS

The Cerebra Innovation Centre (CIC) designs and builds innovative, bespoke products to help disabled children discover and engage with the world around them. We take requests from parents, carers, and professionals and design logical, innovative, and, above all, fun solutions catered to the specific needs of children with brain conditions. Our designs aim to reduce some of the social stigma attached to disabilities by making functional and beautiful products for our amazing young people. From iPad cases to rocking horses via specialist buggies and surfboards, our award-winning team is brimming with ideas and solutions to help. We strongly believe our product should be desirable and exciting, not just functional. They should always promote a child's social inclusion and peer expectation and enable them to participate in everyday activities that are so often closed to them.

WHAT CAN WE HELP YOUR CHILD DISCOVER?

Firefly Go To

FIREFLYFRIENDS.COM

GoTo is a postural support seat developed by Firefly and CIC that lets children participate in those moments that make family life special. Families worldwide use their GoTo Seats in supermarket trolleys, on planes, on swings, and on Granny's dining chair. They make daily tasks easier and mean kids don't need to miss out. It gives a little piece of independence that lets them see the world from a new perspective and feel they're at the heart of the action.

"Absolutley fantastic product! The GoTo seat is so easy to use and has allowed us to bring Jake shopping with us anytime we want! It really has changed the way Jake can interact with people around him. "



Crutches

Lara, had tried for some time to find suitable crutches for Henry, but all the options they tried were too wide or too heavy for him. After approaching the CIC team, we created a set of brand-new, light and strong crutches for Henry. Making these stunning lightweight crutches needed a big collaborative effort by the CIC team, leaning heavily on the experience of our colleagues at the university. As well as using carbon fibre poles for the crutches, we designed stiff and lightweight lattice structure titanium 3D printed feet and a comfortable ergonomic handle also 3D printed, this time using carbon fibre. Henry's new crutches mean he can spend less time in his wheelchair and more time building his stamina by participating in the activities he loves.

"Before working with CIC, I thought we were going backwards rather than forwards. It's important that Henry's crutches can support him for long distances to help improve his stamina. We're so pleased that we got in touch "







Ball Launcher - Enabling Harry to throw a ball for golden retriever Addi was achieved by CIC combining a Nerf ball launcher and our very own 3D printed joystick controlled arm.

Pod Chair

Our Pod chair is designed for children that love to spin, Sometimes all day! Our highly stylized design looks at home in any family living room while providing a comfortable and safe space for a child to spin freely. The team made sure to create a design capable of withstanding heavy use; the chair includes a robust bearing and a rugged birch plywood frame for longevity. We're now working on a hood that pulls up and over the child, creating a secret space to hide in with sensory lighting and music/sound, which can be reactive (encouraging the child to move stiff muscles), relaxing, or stimulating depending on their requirements.

"The pod now makes up an important part of Curtis' day. He can touch the floor and spin himself which gives him some independence and it also grounds him so the benefits have been huge."





Scoot

FIREFLYFRIENDS.COM

Developed by Firefly using one of our most popular concepts, Scoot provides an experience of independence for many kids with mobility problems. Scoot is designed to help children with additional needs play, explore and participate in a way that best suits their physical and cognitive abilities. Kids benefit from the experience Scoot can provide them – whether that's being at floor level, being able to self-propel a little, or even being able to move around independently or being pushed around their surroundings.

"I loved how tall Carsyn got while on the Scoot. Regularly on his tummy he would not lift that high. This is going to have a huge benefit on his core muscles."



Rocking Horse: "Charlie loves it, and now his brother can have his one back. It is brilliantly made and attractive to have in the house! Thank you."



Scoot Horse: "The lads spent most of half term on them and always ask to play on them when they return from school. They're brilliant and definitely their favourite toy! Thank you"

Tandem Surfboard

Created in partnership with Surfability UK and Roger Cooper, our surfboard was designed for children with limited mobility and brain conditions. It allows adrenaline junkies who use wheelchairs to get out of their chairs and onto the water. The tandem design includes a supportive seat for the child and plenty of space on the back for an experienced surfer to steer it in the right direction. They have been a great success providing endless hours of fun to thrill-seeking children who could not otherwise experience the benefits and thrill of catching waves.

“ He’s like the king of the sea. He can sit back, relax and ride the wave. It’s amazing and opens up so many options, not just for Kai but for other children with disabilities. ”





Bespoke Riding Helmet

Imogen couldn't participate in her weekly horse riding sessions as the riding centre didn't have a helmet that would fit her unique head shape. Much of Imogen's time is spent in a wheelchair, so riding is a source of absolute joy for her – but finding a fitted helmet had proven impossible. So we worked on designing and making this bespoke riding helmet, enabling Imogen to participate in riding lessons with her friends. By using 3D scanning to accurately model Imogen's head shape, we could ensure it fit, was comfortable to wear, and was safe. Thanks to the generosity of the British Standards Institution (BSI), it's also certified, passing the VGI Equestrian helmet tests.

"While riding you meet new friends and you move from pony to pony and that's exciting"



Medical Stands - We have created a fun and colourful alternative to the stainless steel apparatus currently offered to children needing any portable medical equipment such as food pumps or intravenous drips



..... So far, we've prototyped a giraffe, rocket, and a tree, but the possibilities are endless! Maybe we should make a dinosaur next?

Oxy-Gem

For children who constantly need to have their oxygen cylinder, ventilator, or food pump to hand, just going out for a simple walk with Mum and Dad can be a real struggle. We created Oxy-Gem to ensure these children don't have to face barriers when wanting to spend precious time outdoors or have fun running around the house! Now they are free to explore without constant adult help while being the envy of all the other children in school. The Oxy-Gems have recently been given a face-lift by collaborating with local illustrator Brogan Evans to create fun and colourful scenes of our mascot Sparky's adventures through space and time.

"It's just amazing; if it weren't for this, he wouldn't be able to walk around on his own. He's starting nursery after Christmas, and then he'll be able to play with other kids outside. We can't thank you enough"





Rocking Chair

Proving a big hit with many families this concept offers support in a fun, beautiful, and robust rocking chair to keep kids moving. Children love the calming rocking motion, which helps build their core strength while they enjoy a fun and engaging indoor activity. We've recently re-designed the chair to increase stability and used stronger materials to ensure the chairs are more robust than ever. By adding new features such as a height adjustable seat and a three-position recline system to the backrest, the CIC team has made the chairs suitable for a broader age and size range ensuring children can keep rocking for longer.

"The rocking chairs are great. The twins actually use them at meal times and will stay sitting down as I feed them. As they rock it calms them & provides the sensory input they need"





Doodle - "Clayton absolutely loves his writing slope and sits at his desk every morning to "write his new book"! It has been so useful!"



Sledge - "After a deep fall of snow overnight, we have eventually managed to get her outdoors on the sledge, and she loved every second of it, even asking if we could take her out on it every day."



Team Poppy

We made Poppy's dream come true by designing and making all the equipment she needed to take her and dad Rob to the finish line of the Cardiff Triathlon in style. Despite being born with quadriplegic cerebral palsy and chronic lung disease, Poppy is a determined character, a real thrill seeker, and an adrenaline junkie! A huge thank you to everyone that helped us make these cool and unique products a reality and made Poppy's dreams come true. Since completing the Cardiff Triathlon, Team Poppy has participated in multiple other events and has even completed a marathon.

"Poppy doesn't think 'I can't' but rather 'with a little help, I can.' I've got my work cut out though, as Poppy doesn't want just to take part – she wants to win!"



Sensory Drum

The CIC sensory drum may look like a traditional Cajon drum for group music therapy use, but we've built in a few extra features. Created from locally sourced hardwood, the removable back panel has tactile textures carved into the surface so you can use it to make noise or provide sensory input through touch and smell. On the sides, we've included a selection of shakers made from various natural timbers and textures, each creating a unique sound. Inside is customisable space for housing all manner of small musical equipment. We've included a small xylophone, drum sticks, and brushes to get you started.

"Luca loves it, we've put lights inside too so it's a very sensory experience for him. Thank you so much. He will thoroughly enjoy playing with it."

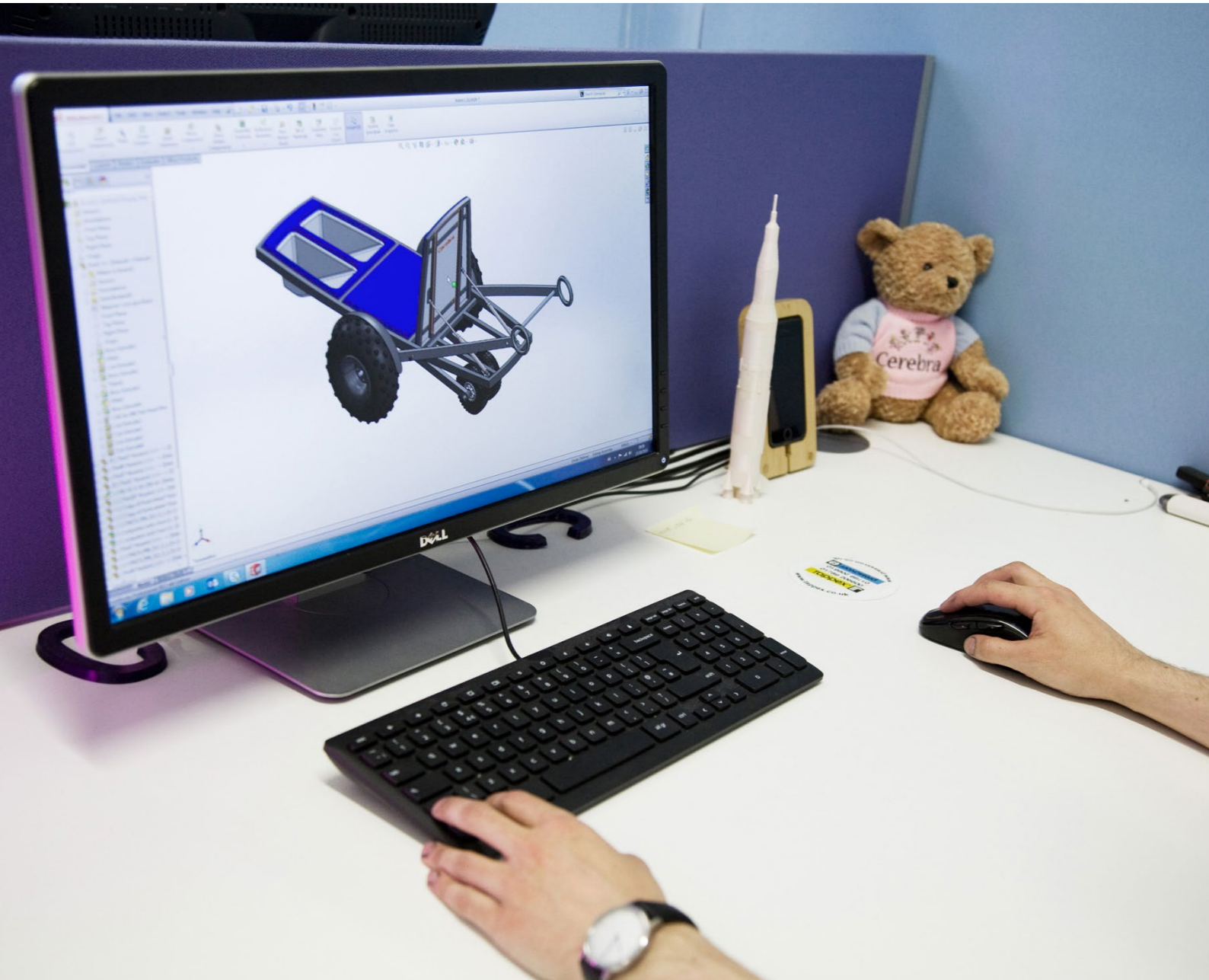


Sensory Aquarium

Looking at the light, colour, and movement of fish swimming around an aquarium provides a therapeutic and calming sensory experience for children with brain conditions. CIC has developed this stunning aquarium enclosure that would look great in any home to help keep the sensitive fish, tank, and equipment protected. We've created a kerf bent double skin plywood casing with tough polycarbonate windows to protect from mischievous fingers and glass banging. Our child-proof tough-to-open lid provides easy access for maintenance while also preventing overfeeding and mum's car keys from being plunged into the water!

"When Sidney gets anxious, he takes my hand and leads me to the tank where we can look at them together; Sidney loves his tank; it keeps him safe, the fish secure, and prevents any items from being dropped in the tank!"





Can we help you?

THE ONLY LIMITS ARE YOUR IDEAS AND OUR IMAGINATIONS.

So that's us; all of the designs we've featured are designed in response to direct requests from parents and carers who struggle to find the piece of equipment they need. If you have a problem you need addressing, or an idea for something that you think could help your child, please get in touch.

BESPOKE DESIGN SERVICE

All our designs start as a bespoke one-off solution to direct requests from parents and carers struggling to find the right piece of equipment that will make their child's life easier, more inclusive, and more fun. The products are created free of charge by the CIC team for these families.

WHAT ABOUT SOMETHING WE'VE MADE BEFORE?

While some are one-offs, others are manufactured in small batches by CIC or made available for sale commercially through partner organisations. If a one-off design proves popular, we are always happy to make it again to enable and enrich the lives of yet more children.

IT MAY ALREADY BE OUT THERE

If we know of a product that already exists that may be able to help, we will point you in the right direction, and if we can't help ourselves, we will do our very best to find a product or someone that can.

Our ethos is simple – if you can dream big, we can do big. Never accept it's not possible!

Get Involved

WHY NOT BE A PART OF WHAT WE DO?

We are committed to helping these amazing children and their families, but we can only do this with your help. There are many ways you can help give a child with a brain condition and their family the chance to discover a better life together. Through your generosity, we can continue to fund vital research and provide the services that enrich the lives of many who need them. Getting involved with Cerebra is immensely rewarding for our families and supporters.



Our 'Count Me In' lottery has been running for 15 years, and you'll make a big difference for as little as £1.20 per week! And at the same time, you'll be in with the chance to win £1,500 every week! Our Lottery players are crucial to ensuring we can continue delivering the services that many children and their families rely on.

Please help support our vital work that enriches the lives of thousands of children and their families daily.



RAFFLE

Our raffle is a great fundraiser. Tickets cost just £1 each and give you a chance to win up to £5,000. Buy as many tickets as you like, or sell them to friends and family to raise awareness of our vital work.



A GIFT IN YOUR WILL

Every year we are honoured to receive large and small gifts in the form of legacy donations. These give us the security to plan our services and invest in the future. Find out how to make your legacy last.



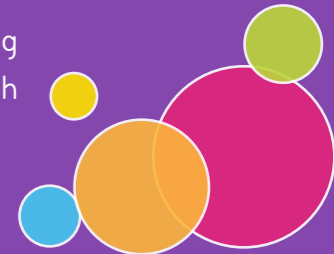
TRUSTS & FOUNDATIONS

You can work wonders for children with brain conditions and their families by helping to provide vital support services for them and funding research that will improve their life opportunities.



CORPORATE GIVING

We are committed to offering our corporate partners something special; a rewarding and sustainable friendship that gives you as much as you put in.





01792 483688



cic@cerebra.org.uk



cerebra.org.uk



Cerebra Innovation Centre
Alex Design Exchange
Alexandra Road
Swansea
SA1 5DU

