



# Game Changers

MODIFIED TOY CARS BUILD NEW ROADS FOR CHILDREN'S THERAPY.

ADDING BOOGIE BOARDS AND PVC PIPES TO STORE-BOUGHT CARS CREATES MOVING – AND THERAPEUTIC – OPPORTUNITIES FOR CHILDREN WITH DISABILITIES.

**W**ind in her hair, smile on her face, 18-month-old Ella Bayham stands up in her pint-sized, plastic blue four-wheeler with red-flame decals and rocks forward to make the battery-operated vehicle go faster. It would be a cute story for most parents, but for Ella's, it's actually quite extraordinary.

Ella has Down syndrome, a genetic condition that causes low muscle tone and, often, delayed development. While the toddler fought traditional physical therapy to strengthen her legs, she now happily stands in her custom ride so she can pick up a little speed. The four-wheeler, which was modified through a program called "GoBabyGo," moves only when Ella stands up inside the carriage.

"I don't personally know anyone whose child with Down syndrome walked before 2," said Ella's mother, Valerie Bayham, of Brentwood, Tennessee. Yet Ella regularly stands and even walks with assistance, with what her mother calls, "the biggest smile on the planet."

The Bayham family miracle, along with the answered prayers of thousands of other families, started simply enough: with a toy and a question.

In 2006, Cole Galloway was a professor of physical therapy at the University of Delaware trying to find a way to help nonmobile children get moving. He knew crawling triggered a wave of cognitive development in babies. Children who couldn't move themselves around – for example, those with Down syndrome, cerebral palsy, and some with autism – were at an extreme developmental

disadvantage. There weren't even wheelchairs for children younger than 3 years old.

"Movement stimulates activity in the brain, but it has to be movement initiated by the child," says Galloway. Increasing exploration opportunities for children with special needs, however, proved more easily said than done.

He first teamed with an engineering professor, and together they developed a mobility robot that somewhat resembled a giant robot vacuum cleaner. It was successful in stimulating babies' movements, but the bulky franken-contraption's \$10,000 price tag made it a nonstarter for most families.

Then one day, Galloway walked into a toy store to buy a birthday present and passed an aisle brimming with large, battery-powered toddler cars. He was intrigued by their simple design and engineering. The more he examined these easily modifiable vehicles, the more excited he became. Could these "toys" provide the same results as his expensive mobility robot? Galloway called a few fellow therapists, and the organization that would eventually become GoBabyGo held its first design meeting in the middle of the toy store's toddler-car aisle.

The team started GoBabyGo by making simple modifications to the vehicles using materials like PVC pipes, boogie boards, and pool noodles. The more they tinkered the more they were able to turn ordinary toys into therapy tools that cost hundreds, not thousands, of dollars.

Instead of simply modifying these cars on a case-by-case basis, GoBabyGo thought much more broadly about how they could help the most



ELLA BAYHAM STANDS ASTRIDE HER GOBABYGO CAR, WHICH IS CUSTOMIZED TO RUN WHEN SHE STANDS UP, FULFILLING ONE OF HER PHYSICAL THERAPY GOALS.

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FOUNDER OF GOBABYGO

children. Today, the mission of Galloway’s organization is to share the various processes they’ve developed to modify the cars for free to any parent, nonprofit, college, or caregiver interested in creating a single car or launching an official GoBabyGo chapter. To date, there are more than 60 GoBabyGo chapters around the world.

“This is an incredible low-tech way to get kids moving sooner,” says Andrina Sabet, a physical therapist and research manager at Cleveland State University. She considered herself nontechnical, but was able to modify a car following the simple GoBabyGo instructions. Sabet would eventually go on to organize a community event during which volunteers adapted dozens of cars for children.

Galloway explains that getting children mobile as early as possible is essential, not only to their physical development, but also to their socialization.

“I have a lot of kids who aren’t invited to birthday parties — ever,” Galloway says of the kids with whom he works. “Friends are hard to make when you’re not mobile.”

Galloway himself started facilitating play dates that include children without disabilities alongside

GoBabyGo clients. Within minutes, barriers disappear as the tricked-out cars attract attention and admiration from everyone in the room.

Amanda Simon understands. Her heart soars every time she watches James, her 16-month-old with Down syndrome, driving his modified race car surrounded by neighborhood boys on their bikes.

“He’s just one of them,” says Simon, of Westlake, Ohio. “I love to see him mobile and interacting with other children, without limitations.”

Galloway contends that the benefits of GoBabyGo extend to adults as well. The “disability taboo” seems to disappear when he adds a toy car to the mix. People stop to talk to GoBabyGo children and their parents, which not only improves children’s language skills, it also builds understanding among onlookers.

One of Galloway’s favorite stories came from a parent at one GoBabyGo workshop whose preschooler was so engaged in play that she had to call him to come back to her. The woman, he recalled, broke down in tears. “That’s the first time I’ve ever said that,” she confessed to Galloway. ☺

**ON THE MOVE**

On GoBabyGo cars, boogie boards help young patients build neck strength and PVC-pipe handles support standing tall, which can be a daunting task for a toddler with a disability. Easy-to-tap buttons and switches empower children to use large and small muscles as they navigate a new world of play.

