Living with cerebral palsy (CP) can be a messy business. The disorder, caused by abnormal brain development affecting movement, muscle tone, and/or posture, can mean needing help with the basic tasks of life. Eating, drinking, cleaning, and even using writing instruments can result in a mess. Mastering fine motor skills is an easily observable challenge for some people who struggle with CP. Something less obvious to the casual observer, however, is the mess caused by some of the adaptive equipment that enables people with CP to gain mobility.

Imagine if you had to wear the same shoes every day, through every season, year after year. Imagine if you could never wipe your feet before walking into your home when you wore your only pair of shoes. To compound matters, imagine if you could only take your shoes off when you went to bed. Your floors—and your shoes—would be filthy, wouldn't they? Think how much dirt, dust, mud, snow, sleet, rain—and whatever else you walked through during the day—would be caked on your flooring.

People in wheelchairs don't have an easy, effective way to clean their wheels throughout the day. But because of Andrew Paad, ACC manufacturing technology instructor, and his family, that may soon change.

The origin story of a wheelchair accessory that may become a standard piece of equipment for people with mobility challenges really starts with Dorothy Paad, Andrew’s sister, who lives with CP. She uses a wheelchair to get around and needs round-the-clock care in order to attend Northern Michigan University and live as independently as possible. Dorothy and Andrew’s father, Eric Paad, couldn’t help but notice the dirty trails Dorothy’s wheelchair made through the family’s home while Dorothy lived there. (She now lives in her own apartment as a student at NMU.) He figured there had to be a way to clean the wheelchair's tires so his home didn’t look like a wagon train had rolled through. And unlike most people who think, “Somebody ought to do something about that,” Eric and his son actually went into action to solve the problem.

The Paads aren’t your ordinary family. Eric grew up on a dairy farm in Northeast Michigan and spent 22 years in the Air Force. He holds a degree in professional aeronautics and served many years as a construction manager after leaving the Air Force. When he discovered how difficult it was to find good caregivers for his daughter when she moved out to go to college, he started the nonprofit organization Caregivers Incentive Program, which seeks to end the shortage of qualified in-home caregivers by educating the public about the crisis, providing financial incentives for people to go into or stay in the caregiving field by offering scholarships and stipends, and providing training for new caregivers.

"My parents both were farmers. They always said that if it’s broke, fix it; don’t think somebody else will do it, don’t just walk by it, fix it," Eric said. “All I’m attempting to do is fix it. With the nonprofit, I’m trying to make the world a better place for people who need care.”

Andrew is an Army veteran who also has a degree in professional aeronautics. He is the lead instructor in the manufacturing technology department of ACC and adviser to the Manufacturing Technology Group at the college. An ACC graduate himself,
Andrew is an innovative instructor who leads his students to new heights, such as guiding the new Manufacturing Technology Group to become a SkillsUSA Chapter of Excellence.

As Dorothy tells it, the story of how the tire cleaner went from an idea to a physical reality is really a story about family ingenuity. When Eric came up with the initial design for a wheelchair tire cleaner, he came to visit his son, who had recently been hired to teach manufacturing technology at ACC.

“Well, Dad had the idea at first--a couple ideas. He told them to Andrew. Then, it was deciding what to try to make. Dad came up with the original idea and showed it to Andrew. Andrew liked it, but had quite a few suggestions on how to improve it,” Dorothy explained.

Eric took those suggestions back to Marquette and worked with the folks at Invent@NMU, an “idea incubator” at Northern Michigan University in Marquette, to guide him through the entrepreneurial process of developing a plan to make his idea a reality. They provided market analysis, constructed and tested early prototypes, helped with product design, CAD, sourcing materials, and put him in touch with a patent agent. When it came time to finalize the design and refine the prototype to manufacture his wheelchair tire cleaner, though, Eric turned to his son, Andrew, and the students at Alpena Community College.

Andrew credits his students at ACC for continuously improving the design of the tire cleaner during their design process once they got the original designs from talented students at NMU.

“We helped with the initial design,” Andrew said of his students, “but had to change it all after we got the drawings, due to it not being able to be manufactured.” It turned out that the original design from NMU relied on 3D printing and was fairly complicated to put together once printed.

So back to the drawing board the team at ACC went. They modified the design to make it manufacturable and created the first prototype. Lots of trial-and-error by ACC manufacturing tech students resulted in a prototype that they continue to refine and improve. Andrew says students have a wheelchair in the ACC manufacturing lab they use to test the prototype designs on, which helps them discover the real-life circumstances that can interfere with the efficiency and effectiveness of their design.

“We have completely designed two versions now and are currently developing the newest model,” Andrew said. They won’t stop until the design is perfect.

Dorothy is thrilled that her father’s idea for an invention turned into a family project and that her brother and his program at ACC was involved in such a meaningful way.

“I am happy that Andrew is a part of it, because I love my brother. We are so different, but I love him so much. He’s the best big brother ever!”

With a patent pending, the tire cleaner is on its way to helping those who use wheelchairs have the simple dignity of being able to do the equivalent of wiping their feet when they enter their home. Once ready to be manufactured, the tire cleaner will benefit more than users’ carpets.

Any money made from sales will go to the Caregivers Incentive Project.

“When this invention of mine makes a dollar, I want that dollar to go benefit this nonprofit that I started. So, all the proceeds will go to this bigger picture of making the world a better place.”

Futures for Frontliners: Tuition-Free Education for Essential Workers

During the statewide shutdown in response to the COVID-19 pandemic, we all discovered some unexpected heroes. From the utility workers who kept the lights on and water flowing to the grocery store employees stocking the shelves and manning checkout stations, people with jobs not typically associated with heroics stepped forward to help keep Michiganders going with the basics of living.
To reward workers who worked in “essential industries” during the COVID-19 state shutdown (April 1—June 30), the State of Michigan is providing tuition-free scholarships to eligible workers to complete a high school diploma or to attend a local community college to earn a skill certificate or associate degree. Futures for Frontliners is a state scholarship program for Michiganders without college degrees who worked in essential industries during the state COVID-19 shutdown in spring 2020.

The essential industries identified as having been critical to keeping Michigan going through the shutdown are:

- Chemical supply chains and safety
- Communications and information technology (IT), including news media
- Critical manufacturing
- Defense industrial base
- Energy
- Financial services
- Food and agriculture
- Hazardous materials
- Health care and public health
- Law enforcement, public safety, and first responders
- Other community-based government operations and essential functions
- Public works
- Transportation and logistics
- Water and wastewater
- Additional critical infrastructure workers

You must be a Michigan resident to be eligible to receive Futures for Frontliners scholarship funding and have worked in an essential industry at least part-time for 11 of the 13 weeks between April 1 – June 30, 2020. Eligible students must also:

- Have been required by their job to work outside the home at least some of the time between April 1 – June 30, 2020.
- Not have previously earned an associate or bachelor’s degree.
- Not be in default on a Federal student loan
- Complete a Futures for Frontliners scholarship application by 11:59 pm on December 31, 2020.

Once awarded Futures for Frontliners funding, a student must continue to be a resident of Michigan, stay enrolled at least half-time in their program of study, maintain a 2.0 grade point average, and complete the Free Application for Federal Student Aid (FAFSA). A student’s scholarship lasts until he or she has earned an associate degree or until four years have passed from the first tuition payment.

For more information about Futures for Frontliners, check out the program website or contact Alpena Community College Director of Admissions Mike Kollien at 989-358-7339.

Lumberjack for Life: Jeffrey Brasie

A small town education really can take you anywhere you want to go—just ask Jeffrey Brasie, who graduated from Alpena Community College in 1967 before setting sail for seas outside Northeast Michigan.

Though not a native of Alpena, Jeff grew up in the family home on Crapo Street and considers himself a product of Northeast Michigan. He admits that he may not have “fully applied” himself as a high school student before starting classes in the mid-sixties at Alpena Community College. There, Jeff flourished under the tutelage of favorite instructors Myron David Orr, from whom Jeff took business law and Michigan history, and biology teacher Wally Strom.

At ACC, Jeff joined the campus student newspaper and became president of the Circle K club, the college affiliate of the Kiwanis club. He was an active and enthusiastic student who gained the skills he needed for the next step: a bachelor’s
degree and master’s degree from Central Michigan University.

Following school, Jeff joined the Navy and served from 1971 to 1975 in the public affairs office of the Secretary of the Navy.

“I provided briefing on media coverage of the Navy and Marine Corps to the secretary and senior staff, researched and assembled draft press releases/statements/speeches, and carried the bags on global trips. The office handled such topics as the first women admitted into the Naval Academy, Navy aviation, race riots onboard aircraft carriers, preparing for congressional hearings, and changing archaic regulations. The secretaries I served went on to become U.S. senators from Rhode Island and Virginia,” Brasie explained.

After active duty, Jeff joined the Naval Reserve before moving into the private sector and leading several health care organizations. Working in organizations such as McLaren Health System, Humana, Sisters of Mercy, and Bon Secours, Jeff is an expert in nonprofit executive management and is especially passionate about providing services and advocating for people with disabilities and geriatric clients. Jeff is a founding member of VisionServe Alliance, a consortium of leaders of 501(c)(3) nonprofits throughout the United States that provide unique and specialized services to people who are blind or have severe vision loss.

Now a resident of the Detroit area, Jeff said he models himself after his parents and looks for opportunities to serve his community. He is a founding member of the Grosse Pointes-Harper Woods NAACP chapter and volunteers with both the Detroit Institute of Ophthalmology and the Detroit Historical Society.

Jeff’s connection to ACC goes beyond being a proud graduate. After he retired from General Telephone and Electronics (now Frontier Corporation), Jeff’s father, Harold David Brasie, worked at ACC for a time guiding nontraditional students in continuing education courses. Jeff and his wife Penny honor his family legacy to ACC by sponsoring two ACC scholarships for deserving students.

For information on how you can create a lasting legacy by giving the gift of education to a deserving student, contact Alpena Community College Foundation Executive Director Brenda Herman at 989-358-7297.

Develop Your Workforce with ACC

What if you owned a small business and realized that to compete, you need to start drawing customers in via social media? Would you know where to start? Beyond creating a Facebook page, how would you figure out who your audience was and how to grab them? You might not know where to start, but the people who can help are right here in our community.

Alpena Community College has quietly become an invaluable resource to businesses big and small across Northern Michigan. ACC’s Workforce Development & Training programs have been serving as cost-effective providers of the trainings and enrichment workers across the region need to stay relevant. ACC’s Workforce Development department helps improve the performance of companies and organizations through training and workshops which can be designed and personalized to meet employees’ specific training and development needs. These valuable services are convenient, customized, cost-effective, and can be offered on-location or at ACC.

Training topics include:

- Accounting
- Business Management
- CAD (Computer Assisted Drafting)
- Computer Training
- Customer Service
- First Aid & CPR
- Leadership Development
Workforce Development at ACC is versatile and so eager to tailor classes to meet your company’s needs that it has released a survey to determine what programs would be most beneficial to the community. Please take a moment to fill out the attached survey to help Workforce Development help you.

If you’re interested in training opportunities for your employees, please contact: Dawn Stone, Dean of Workforce Development, at 989.358.7293 or email stonedawn@alpenacc.edu