Assistive Technology Awareness Week
October 5-11, 2014

Governor Hickenlooper has proclaimed October 5-11, 2014 as Assistive Technology Awareness Week in Colorado. Assistive Technology (AT) comes in many shapes and forms and can be as simple as hearing aids, a talking alarm clock, manual wheelchairs, or as sophisticated as a voice-activated computer system.

To celebrate the proclamation, Assistive Technology Partners (ATP) is pleased to be working with the Denver Commission for People with Disabilities to host this year’s Disabilities & Assistive Technologies Expo. The Expo will be held at the Colorado Convention Center on Saturday, October 18, 2014 from noon to 4 pm. The expo is free and open to the public.

The Expo will feature vendors showcasing the latest innovations in hardware, software, AT devices and solutions for home, school, work and play. Colorado organizations that provide services to individuals with disabilities or to those who are experiencing problems associated with aging will also be present. For more information about the event, please visit the Upcoming Events Section on our website at www.assistivetechnologypartners.org or contact us at 303.315.1280.

Some of our other AT Awareness Week activities include:

- **AT for Employment Webinar** - October 8
- **14th Annual Coleman Institute Conference on Cognitive Disability and Technology** - October 9
- **American Council of the Blind of Colorado Raisin’ Cane** - October 15

To keep up to date on all of the 2014 AT Awareness Week Events, visit the Upcoming Events page on our website - www.assistivetechnologypartners.org. Or visit the ATP Facebook page - www.facebook.com/AssistiveTechnologyPartners.
The 12th International Conference on Smart Homes, Assistive Technologies, Robotics and Health Telematics was hosted by ATP in Denver, from June 25 to 27, 2014 at the Anschutz Medical Campus.

The event was a huge success! ICOST 2014 included participants and speakers from more than 15 countries worldwide. The conference featured a dynamic program incorporating a range of technical, clinical and industry related speakers, oral and poster presentations along with demonstrations and technical exhibits.

Presentations and discussions included research in the design, development, deployment and evaluation of Smart Environments, Assistive Technologies, Robotics and Health Telematics systems. ICOST brought together stakeholders from clinical, academic and industrial perspectives along with end users and family caregivers to explore how to utilize technologies to foster independent living and offer an enhanced quality of life.

Keynote speakers included:

- **Frances W West, Chief Accessibility Officer, IBM Human Ability & Accessibility Center - A New IT (Inclusive Technology) Revolution.**
  Her presentation focused on how next generation solutions are complementing and supplementing the human senses to better optimize communications and make information more meaningful and consumable to everyone.

- **Chris Nugent, Professor of Biomedical Engineering, School of Computing and Mathematics, University of Ulster - 10 Years of Reminding Technologies: What Have We Learnt?**
  His presentation reflected on the development and evaluation of cognitive prosthetics over the last 10 years, highlighting lessons learned. He discussed future trends, highlighting user profiling in an effort to improve technology adoption.

- **Michael Lightner, Professor and Chair, Department of Electrical, Computer, and Energy Engineering, University of Colorado, Boulder - The Challenge of Assistive Technologies in Developing Countries.**
  His presentation offered insight on the challenges of providing assistive technology (AT) to people with disabilities in developing countries.

Other highlights of the conference include the Welcome Reception and Gala Dinner at the Denver Museum of Nature & Science where Dr. David Braddock presented an inspiring presentation on the work of the Coleman Institute in supporting AT initiatives.

Conference attendees also enjoyed an evening at the award winning Phamaly Theatre presentation of Joseph and the Amazing Technicolor Dreamcoat.
CLINIC SPOTLIGHT
Finding Solutions for On-Campus Worksite Accommodations

Elizabeth Medina is a researcher and post-doctoral fellow in the Department of Cardiology, School of Medicine, University of Colorado Anschutz Medical Campus. She is researching the molecular differences between adults and children with cardiomyopathy to determine why the treatment for adults does not work for children. One of the unique things about Elizabeth is that she has weakness on the left side of her body from a spinal tumor that was removed. Because of that, she has difficulty performing some of her job tasks that require the efficient use of both hands. Thanks to the Americans with Disabilities Act and a very responsive Human Resources department at CU, Elizabeth was referred to ATP for a work site evaluation. An assessment of her physical abilities, her work site, and her job requirements was completed. It was determined that the two tasks that currently pose the most significant challenges for her are filling test tubes and manipulating a media dish while she holds it under a vent hood. She is able to do both, but efficiency and timeliness are both affected by her motor impairment in her left hand. A plan was put in place to design and fabricate a test tube rack that holds the 32 8-millimeter test tubes she has to fill, and a prop to rest the media dish on while manipulating it under the vent hood. The test tube rack would enable her to fill the test tubes with one hand and the media dish prop would assist her left hand while holding and manipulating it. After a good deal of research on materials and designs, both devices were conceptualized. The design for the test tube holder was taken to RMI Plastics of Denver since it ideally needed to be made out of Plexiglas. RMI Plastics’ were not only accommodating in building the test tube holder to specification, but they offered to donate it at no charge. The media dish prop was made from simpler products and is still in trials. Elizabeth reports the test tube holder is working so well and looks so nice that her colleagues all want one! It is hoped the media dish holder fits the bill as well. Initial trials are positive. This story provides a great example of how a simple but effective application of AT can help people with disabilities gain independence on the job while at the same time improving job performance. Both devices were relatively simple to build, but made a big impact because they enabled Elizabeth to perform important job functions on par with her peers. Elizabeth’s story is also a great example of positive collaboration between an employer and a provider to accommodate the needs of an employee with a disability in the work place through the use of low-tech AT.

Making Computer-based Tools more Accessible

ATP is hard at work supporting the accessibility needs of K-12 students as they begin taking the coming wave of computer based assessments. Our team has worked closely with the Smarter Balanced Assessment Consortium which is producing an electronic test covering the newly developed common core standards for Math and English/Language Arts. This test is currently adopted by over 20 states. The consortium requested our help to identify and prioritize the numerous AT’s and features that students with disabilities use to support their academic success. Smarter Balanced hopes to use this information along with our expert input to make their assessment as compatible as possible with these technologies. On the high stakes testing front, ATP was contracted by Pearson Vue’s GED Testing Services group (GEDTS) to produce alternative image descriptions for the upcoming computer based GED test. The GED provides students an opportunity to earn a high school equivalency in order to pursue future vocational or job training goals. Our work covered the complex diagrams, math equations, maps, charts, photos and rich illustrations found on the test. The quality and accuracy of these descriptions are critical to individuals who are blind or have a significant vision impairment. GEDTS also requested thorough testing of their exam with screen reading technology to ensure a positive experience. These efforts along with work completed for companies and organizations such as Time Warner Cable, Connect for Health Colorado, and Colorado Medicaid are provided by ATP’s Professional Services team. The team was assembled to provide expert consulting and services to the business community to improve technology access for people with disabilities. Our work in this area allows us to support thousands of individuals as they attempt to access the digital world around them.
Future Medical Professionals Enjoyed Internships at ATP

Once again, over the summer, ATP worked closely with the University of Colorado Denver - Anschutz Medical Campus - Office of Diversity and Inclusion and their Undergraduate Pre-Health Program (UPP) to provide summer internships for undergraduate students interested in pursuing health careers. The overall goal of the program is to increase the number of historically underrepresented individuals within healthcare professions in order to reduce health disparities among underserved communities in Colorado. Through summer internships, ATP offers a unique opportunity for these students to learn about AT and its potential for individuals with disabilities. Often, AT is a field that is largely neglected in medical training. Consequently, providing an enriching internship early in a student’s education career offers long term benefits to both the student and their future medical patients with disabilities.

From May to July, 2014, ATP worked closely with two undergraduate pre-health students, Brianna and Billy. These students had opportunities to observe in the clinic, help with research, and assist in the day to day operations of the program. In addition, the UPP fellows attended training at the University. Each of these students wrote a short paragraph below summarizing their experience at ATP this summer.

Assistive Technology Partners was one of the most meaningful experiences that I have had on my journey to becoming a future healthcare provider. Being able to work directly with patients who have cognitive and physical disabilities was very enlightening. I learned the correct mannerisms to successfully work with patients and their loved ones and caretakers. Most notably, I learned that although our patients have disabilities, by no means are they suffering or experiencing a lower quality of life. In fact, the patients that I had the privilege of working with appreciate and love life as much as anyone. I enjoyed working with the clinicians at ATP and watching their impressive clinical knowledge and innovative thinking in action while working with patients. What is unique about ATP is that the clinicians spend the time needed to ensure that the patients are properly fitted to their mobility devices. ATP clinicians are able to develop meaningful relationships with their patients. I enjoyed my time at ATP and loved working with younger patients. ATP serves to confirm my desire to be a future clinician and I plan to pursue pediatrics in the future.

My internship this past summer at Assistive Technology Partners has truly been a transformative experience. I began the summer with the intent of seeking to understand more about the types of services that ATP provides and left with a newfound respect for both the individuals at ATP that dedicate themselves to helping those with disabilities and for the patients themselves. The services that ATP provides are essential in promoting equality and empowerment for individuals with disabilities within our community. Furthermore, the genuine care and concern that ATP’s clinicians embody are exemplary models for healthcare providers in any field of speciality. I will be sure to aspire to these qualities myself as I continue on my journey to become a pediatrician. Thank you everyone at ATP, for allowing me to take part in this amazing experience.

Our team at ATP is so grateful for the opportunity to work with these impressive students this summer and for their positive attitudes and passion for helping people. They remind us why we do what we do.

Contribute to Assistive Technology Partners

There is much more work to be done, and you can help. ATP relies heavily on donations, grants and other sources for funding. Your contribution allows ATP to provide a full-range of AT services to help persons with cognitive, sensory and/or physical disabilities reach their highest potential at home, work, school and play.

Donations can be made by phone at 303.315.1281 or mailed to Cathy Bodine at CU Denver/ATP, 601 East 18th Avenue, Suite 130, Denver, CO 80203. If you or someone you know can benefit from AT please contact us at 303.315.1280 or cathy.bodine@ucdenver.edu.