

Rebecca Diane Breaux

Senior Research Instructor

Center for Inclusive Design and Engineering (CIDE)

College of Engineering, Design, and Computing – University of Colorado Denver

PhD Student

Health and Behavioral Sciences Department – University of Colorado Denver

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HISTORY

Ms. Breaux is currently an Assistive Technology Specialist at the Center for Inclusive Design and Engineering (CIDE), University of Colorado Denver. She holds a senior research instructor faculty appointment in the Department of Bioengineering, College of Engineering, Design, and Computing, and the Department of Physical Medicine and Rehabilitation. She serves as a clinical occupational therapist for CIDE in Denver part-time and is enrolled as a PhD student in the Health and Behavioral Science program at CU Denver.

EDUCATION

2019 –Present **University of Colorado Denver**, Health and Behavioral Sciences, PhD student

2001 **University of Oklahoma Health Sciences Center**, Oklahoma City, OK
M.S., Rehabilitation Sciences

1995 **University of Missouri-Columbia**, Columbia, MO
B.S., Occupational Therapy, Minor in Psychology

ACADEMIC APPOINTMENTS

2007-Present **Senior Research Instructor-Faculty**
Center for Inclusive Design and Engineering, Department of Bioengineering,
School of Engineering, Design, and Computing, Department of Physical Medicine
and Rehabilitation, University of Colorado Denver, Denver, CO

1/07 – 6/07 **Independent Contractor/Online Course Instructor**
University of Oklahoma Health Sciences Center, Department of Rehabilitation
Sciences, Tulsa, OK

2000-2006 **Adjunct Clinical Professor- Seating and Mobility Specialist**
University of Oklahoma Health Sciences Center, Department of Rehabilitation
Sciences, Tulsa, OK

PROFESSIONAL POSITIONS

- 2008-2010 **Occupational Therapist**
Stargate Charter School, Thornton, CO
- 1995-2000 **Occupational Therapist - Assistive Technology Clinic Coordinator**
Children's Medical Center, Inpatient and Outpatient Rehabilitation Department,
Tulsa, OK
- 1995-1997 **Home Health Occupational Therapist**
Sooner Start Oklahoma Early Intervention Program, Tulsa, OK

LICENSURE & BOARD CERTIFICATIONS

- 1995- present **Occupational Therapist, Registered (OTR)**, National Certification Board of Occupational Therapy
- 2001- present **Assistive Technology Professional (ATP)**, Rehabilitation and Engineering Society of North America
- 2014 – present **Occupational Therapist, Licensed (OTR/L)**, Colorado Department of Regulations Licensure for Occupational Therapy

HONORS/SPECIAL RECOGNITIONS/AWARDS

- **Nominee for 2001 Outstanding Thesis Award**, University of Oklahoma Health Sciences Center, 2001
- **Graduate with High Honors, Summa Cum Laude**, University of Oklahoma Health Sciences Center, 2001
- **Graduate with High Honors, Summa Cum Laude**, University of Missouri-Columbia, 1995
- **Student Occupational Therapy Association Scholarship**, University of Missouri-Columbia, 1994

MEMBERSHIPS IN PROFESSIONAL ORGANIZATIONS

- 2016-2018 **Rehabilitation Engineering and Assistive Technology Society of North America (RESNA)**
- 2007-2009 **Rehabilitation Engineering and Assistive Technology Society of North America (RESNA)**
- 2000-2005 **Oklahoma Occupational Therapy Association**

1999-2005 **American Occupational Therapy Association**

DEPARTMENTAL COMMITTEE RESPONSIBILITIES AND SERVICE

- 2018-2019 **BIOE Course Development: Anatomy, Physiology, and Medical Terminology for Bioengineers**, Worked with colleague to develop course syllabus, lab activities, and course reading materials for proposed course to be offered by the Bioengineering program as an undergraduate and/or special topics option.
- 2015 – 2018 **Stealth Simulator Design Project**, Worked with engineers, product representatives and the company vice president at Stealth Products, LLC, to provide design requirements and feedback on prototype examples for an adjustable seating simulator system.
- 2017 **Stealth iDrive Video Game Concept Feedback**, Provided feedback to engineers at Stealth Products, LLC, regarding the development of a new product designed to help children with disabilities engage, learn, and play with new accessible gaming product; January 19, and August 29, 2017.
- 2015-2016 **Cross-Training and Collaboration with Craig Hospital Clinicians**, Committee Member, Ongoing meetings to collaborate and share knowledge between the AT department at Craig Hospital and Assistive Technology Partners clinicians; June 22, 2015, September 14, 2015, and February 22, 2016.
- 2014-2015 **Development of NuMotion Clinic Program**, Lead Clinician, Establishing a weekly one-day clinic using a new model of service, paperwork, and processes/procedures to increase revenue to the Assistive Technology Clinic program.
- 2009-2010 **Assistive Technology for Infants, Toddler, and Youth with Disabilities, Colorado Department of Education Guidelines**, Committee Member, Assistive Technology Partners, Denver, CO
- 2008-2009 **Education Programs**, Coordinator, Assistive Technology Partners, Denver, CO
- 2008-2009 **Learning Labs Planning Committee**, Committee Member, Assistive Technology Partners, Denver, CO
- 2007-2008 **Collaborative Assistive Technology Conference of the Rockies Planning Committee**, Committee Member, Assistive Technology Partners, Denver, CO
- 2007-2008 **SWAAC Advisory Committee**, Committee Member, Assistive Technology Partners, Denver, CO

2004-2004 **Oklahoma Assistive Technology Equipment Exposition**, Coordinator, Oklahoma Assistive Technology Center, Department of Rehabilitation Sciences, Tulsa, OK

2000-2002 **Oklahoma Assistive Technology Equipment Exposition**, Coordinator, Oklahoma Assistive Technology Center, Department of Rehabilitation Sciences, Tulsa, OK

REVIEW AND REFEREE WORK

Ensuring access to complex rehabilitation. Draft legislation introduced to the Colorado State Legislature in January, 2014. Reviewed proposed legislation and provided feedback to the Colorado Association of Medical Equipment committee members.

The smart wheelchair: Is it an appropriate mobility training tool for children with disabilities? Invited Reviewer. Disability and Rehabilitation Assistive Technology Journal, Scherer (Ed.), March 2011.

TEACHING RECORD

Teaching Assistant, Guest Lecturer, and Guest Lab Instructor, *BIOE 5420: Rehabilitation and Assistive Technology*, University of Colorado Department of Bioengineering, School of Engineering, Computing, and Applied Sciences. Fall semester, 2019, 2018, 2017, 2016, 2015.

Instructor, *Introduction to Assistive Technology, RS5450 Web-Based Course*, University of Oklahoma Health Sciences Center, Department of Rehabilitation Sciences. Spring Semester, 2007.

Co-Instructor, *Topics in Assistive Technology, RS5483 Web-Based Course*, University of Oklahoma Health Sciences Center, Department of Rehabilitation Sciences. Summer Semester, 2004, 2003.

Co-Instructor, *Introduction to Assistive Technology, RS5450 Web-Based Course*, University of Oklahoma Health Sciences Center, Department of Rehabilitation Sciences. Spring Semester, 2003.

Lab Instructor and Guest Lecturer, *Evaluation and Intervention I, OPTH 7223*, University of Oklahoma Health Sciences Center, Department of Rehabilitation Sciences. Spring Semester 2005, 2004, 2003, 2002, 2001, 2000.

Lab Instructor, *Introduction to Assistive Technology, OPTH/PHTH 7522*, University of Oklahoma Health Sciences Center, Department of Rehabilitation Sciences. Spring Semester 2004, 2003, 2002.

Lab Instructor and Guest Lecturer, *Issues and Intervention for People with Neurological Problems*, University of Oklahoma Health Sciences Center, Department of Rehabilitation Sciences. Spring Semester, 2003, 2002.

Lab Instructor and Guest Lecturer, *Clinical Process, OCTH/PHTH 7133*, University of Oklahoma Health Sciences Center, Department of Rehabilitation Sciences. Fall Semester, 2001, 2000.

Lab Instructor, *Assistive Technology Assessment and Intervention, PHTH/OCTH 7960*, University of Oklahoma Health Sciences Center, Department of Rehabilitation Sciences. Fall Semester, 2001.

Instructor, *Evaluation and Intervention II, OCTH 7312*, University of Oklahoma Health Sciences Center, Department of Rehabilitation Sciences. Summer Semester, 2001.

Lab Instructor, *Activity and Exercise, OCTH/PHTH 7443*, University of Oklahoma Health Sciences Center, Department of Rehabilitation Sciences. Fall Semester, 2000.

Lab Instructor, *Evaluation and Intervention II, OCTH 7312*, University of Oklahoma Health Sciences Center, Department of Rehabilitation Sciences. Summer Semester, 2000.

Lab Instructor, *Control of Human Movement, II, OCTH 7242*, University of Oklahoma Health Sciences Center, Department of Rehabilitation Sciences. Spring Semester, 2000.

Lab Instructor, *Introduction to Orthopedic Management, OCTH 7243*, University of Oklahoma Health Sciences Center, Department of Rehabilitation Sciences. Spring Semester, 2000.

INVITED EXTRAMURAL LECTURES, PRESENTATIONS & VISITING PROFESSORSHIPS

National/International

Breaux, B. Managing wheelchair seating & mobility services during COVID-19 pandemic. Five-minute presentation as a guest panelist for International SIG Webinar: AT provision in the time of COVID-19. Hosted by RESNA. April 28, 2020.

Breaux, B. Control of smartphones through the power wheelchair. One-hour lecture presented at the International Seating Symposium. Pittsburgh, Pennsylvania. March 21, 2019.

Breaux, B. Positioning challenges and strategies for posterior pelvic tilt. One-hour lecture presented via live national webinar for the National Registry of Rehabilitation Suppliers (NRRTS). November 6, 2018.

Gardner TN, Kenyon LK, Jones M, **Breaux B**, Tsotsoros JD. Pediatric therapists' views of power mobility use in children: a qualitative study. Poster presented at the 2018 Fall Conference of the Michigan Physical Therapy Association. Traverse City, Michigan. October 5, 2018.

Kenyon, L., Jones, M., Livingstone, R., **Breaux, B.**, & Tsotsoros, J. Attitudes and practices of pediatric therapists on early power mobility. Poster presented at AOTA Annual Conference, Salt Lake City, UT, April 20, 2018.

Kenyon, L., Jones, M., Livingstone, R., **Breaux, B.**, & Tsotsoros, J. Attitudes and Practices of Pediatric Therapists on Early Power Mobility. Poster presented at Research Day at the University of Oklahoma Health Sciences Center. Tulsa, Oklahoma. April, 2018.

Breaux, B. Access to mobile devices through the power wheelchair drive control system. One-hour lecture presented via live national webinar for the National Registry of Rehabilitation Technology Suppliers (NRRTS). June 15, 2016.

Breaux, B. & Love, M. Access to iOS mobile devices through the power wheelchair drive control system. One-hour lecture presented at the RESNA Annual Conference. Denver, CO. 2015.

Waugh, K., **Breaux, B.**, & McLachlan, L. Improving outcomes with custom contoured seating: theory and practice. Assistant Lab Instructor for this pre-conference instructional course, RESNA Annual Conference. Denver, CO, 2015.

Breaux, B. Access to mobile devices through the power wheelchair drive control system. One-hour lecture presented at the International Seating Symposium. Nashville, TN. 2015.

Breaux, B. A systematic approach to alternative drive control assessments. One hour lecture presented at the International Seating Symposium. Nashville, TN. 2013.

Breaux, B. Assessing alternative drive controls for power wheelchair users. Developed and presented lecture materials for this full-day workshop presented at Assistive Technology Partners. Denver, CO. 2012.

Breaux, B., Parkhouse, T., & Olson, S. UNITTS: Universally designed, no-brainer instructional teaching tools for all students. One-hour lecture presented at the TRLD Conference. San Francisco, CA. 2005.

State/Regional

Breaux, B. Device demonstration: power mobility for young children. SWAAAC Exploration Day: Eye Gaze and Alternative Access. University of Colorado-Denver. September 27, 2019.

Breaux, B. Positioning challenges and strategies for posterior pelvic tilt. One-hour lecture presented at the SWAAAC Summer Symposium. Thornton, CO. June 11, 2019.

Breaux, B. Fundamentals of switch access. One-hour lecture presented at the SWAAAC Summer Symposium. Thornton, CO. June 13, 2017.

Breaux, B. Access to mobile devices through the power wheelchair drive control system. One-hour lecture presented at the SWAAAC Summer Symposium. Denver, CO. June 9, 2016.

Waugh, K. & **Breaux, B.** Wheelchair seating for postural control and function. Assistant lab instructor for third day practicum, part of three-day course led by Kelly Waugh and presented at Assistive Technology Partners. Denver CO. August 13-15, 2015.

Breaux, B. & Sandstrum, J. Access to the curriculum: Mobile devices for students with physical disabilities. Developed materials for this half-day lecture presented at the SWAAAC Symposium. Aurora, CO. June 8, 2015.

Breaux, B. Understanding access options for the Android and Apple tablets. Half-day lecture presented at the SWAAAC Training. Aurora, CO. 2014.

Breaux, B., & Williams, T. General motor access for students with severe physical disabilities. Full-day lecture/workshop presented at the SWAAAC 202 Conference. Aurora, CO. 2011.

Breaux, B. AT assessment in the public schools. One-hour lecture presented at the SWAAAC 101 Conference. Aurora, CO. 2008.

Breaux, B., & Williams, T. General motor access for students with severe physical disabilities. Full day lecture/workshop for SWAAAC Summer Symposium. Thornton, CO. 2010.

Breaux, B. AT assessment and implementation in the public schools. Full-day lecture/workshop presented at the SWAAAC 101 Distance Training. Aurora, CO. 2009.

Breaux, B. Assistive technology assessment in the public schools. One-hour lecture presented at the SWAAAC Summer Symposium. Thornton, CO. 2009.

Breaux, B. Assistive technology for people with amputations. One-hour lecture presented at the UNC Greeley Conference. Greeley, CO. 2009.

Breaux, B. AT assessment and implementation in the public schools. Presentation for SWAAAC 101 Conference. Denver, CO. 2009.

Breaux, B., & Hall, M. AT assessment in the public schools. Presentation for the Collaborative Assistive Technology Conference of the Rockies. Westminster, CO. 2008.

Breaux, B., & Elfner, S. Low tech AT. Full-day lecture/workshop presented at the SWAAAC Make-N-Take Conference. Denver, CO. 2008.

Breaux, B. Assistive technology to enhance literacy and learning. One-hour lecture presented at the SWAAAC Distance Education Training. Aurora, CO. 2007.

Breaux, B. Seating, positioning, and mobility to promote access. One-hour lecture presented at the Colorado Part C Training. Denver, CO. 2007.

Breaux, B., Parkhouse, T., Olson, S., & Stinnett. Assistive technology and the law. Full-day workshop for Oklahoma Public Schools Level I Training Series, presented multiple times each year in various locations throughout Oklahoma. 2005, 2004, 2003, 2002.

Breaux, B., Olson, S., Parkhouse, T., & Stinnett. Principles of assistive technology assessment, access, and positioning and mobility assessment. Full-day workshop for Oklahoma Public Schools Level I Training Series, presented multiple times each year in various locations throughout Oklahoma. 2005, 2004, 2003, 2002.

Olson, S., Stinnett, T., **Breaux, B.**, & Parkhouse, T. Introduction to augmentative and alternative communication. Full-day workshop for Oklahoma Public Schools Level I Training Series, presented multiple times each year in various locations throughout Oklahoma. 2005, 2004, 2003, 2002.

Olson, S., **Breaux, B.**, Parkhouse, T., & Stinnett. Assistive technology to enhance literacy and learning. Full-day workshop for Oklahoma Public Schools Level I Training Series, presented multiple times each year in various locations throughout Oklahoma. 2005, 2004, 2003, 2002.

Parkhouse, T., **Breaux, B.**, Olson, S., & Stinnett. Low-tech assistive technology and other categories. Full-day workshop for Oklahoma Public Schools Level I Training Series, presented multiple times each year in various locations throughout Oklahoma. 2005, 2004, 2003, 2002.

Breaux, B., Olson, S., Parkhouse, T., & Stinnett. Assistive technology funding, group presentation, course wrap-up. Full-day workshop for Oklahoma Public Schools Level I Training Series, presented multiple times each year in various locations throughout Oklahoma. 2005, 2004, 2003, 2002.

Breaux, B., & Parkhouse, T. UNITTS: Universally designed, no-brainer instructional teaching tools for all students. One-hour lecture presented at the Oklahoma Technology Coordinators Conference. Oklahoma City, OK. 2005.

Breaux, B. Cultural sensitivity in the workplace. One-hour lecture presented at the Oklahoma Occupational Therapy Association. Tulsa, OK. 2005.

Breaux, B. Safe and healthy learning environments. Two-hour lecture presented at the Oklahoma State Department of Education Para-Professional Training Series, presented multiple times each year in various locations throughout Oklahoma. 2004, 2003.

Local

Breaux, B. Fundamentals of switch access. Two-hour lectured presented to Littleton Public Schools, Department of Occupational Therapy. Littleton, CO. February 13, 2017.

Breaux, B. Assistive technology for motor access. One-hour, 30-minute lecture presented to staff at Children's Hospital Colorado. Denver, CO. 2011.

Breaux, B. Overview of handwriting without tears. One-hour lecture presented to staff at Stargate Charter School. Thornton, CO. 2009.

Breaux, B. Seating and positioning for infants and toddlers. One-hour lecture presented to attendees of the Assistive Technology Partners Learning Lab. Denver, CO. 2009.

Breaux, B. Overview of AT assessment and implementation. One-hour lecture presented to the ATP Personnel Prep Class. Denver, CO. 2009.

Breaux, B. & Goldberg, A. Using scanning software to access computers. One-hour lecture presented to attendees of the Assistive Technology Partners Learning Lab. Denver, CO. 2009.

Breaux, B. & Goldberg, A. Using scanning software to access computers. Two-hour lecture presented to attendees of the Assistive Technology Partners Distance Webinar. Denver, CO. 2009.

Breaux, B. Overview of cognitive technologies. One-hour lecture presented to the ATP Personnel Prep Class. Denver, CO. 2009.

Breaux, B. AT for writing: An overview of low to high tech strategies. One-hour lecture presented to attendees of the Assistive Technology Partners Learning Lab. Denver, CO. 2008.

Breaux, B. Computer access assessment. One-hour lecture presented to the ATP Personnel Prep Class. Denver, CO. 2008.

Breaux, B. Introduction to computer access: Part II. One-hour lecture presented to the ATP Personnel Prep Class, Denver, CO. 2008.

Breaux, B. Introduction to Classroom Suite. One-hour lecture presented to the ATP Personnel Prep Class, Denver, CO. 2008.

Breaux, B. Introduction to assistive technology. One-hour lecture presented to COTA students at Tulsa Community College. Tulsa, OK. 2004, 2002.

Breaux, B. (2004). Using assistive technology to access computers. Two-hour hands-on learning lab presented to COTA students at Tulsa Community College. Tulsa, OK. 2004, 2002.

GRANT SUPPORT

Breaux, B, McLachlan, L, & Waugh, K. (2012-13). Colorado benefits coverage standards for wheelchair bases, power mobility devices, wheelchair seating, and wheelchair options and accessories, *Colorado Healthcare and Policy and Financing Department*, Co-Author (\$50,000)

McLachlan, L & **Breaux, B** (2011). The SmartWheel: Enhancing clinical care for children and adults using manual wheelchairs, *Caring for Colorado Foundation*, Co-Author (\$20,000).

GRANT PROPOSALS

Bodine, C, Sandstrum, J, **Breaux, B**, Reistetter, T. Investigating the effectiveness and user satisfaction of new and innovative, cloud-connected home automation products by individuals with high-level spinal cord injury (SCI): A proof of concept sequential mixed-methods design. Grant proposal submitted to the *Neilsen Foundation*. 2014.

Breaux, B. & Bodine, C. Assistive technology training for allied health professionals. Grant proposal submitted to the Milbank Foundation. 2012.

BIBLIOGRAPHY

Publications (Peer Reviewed)

Kenyon, LK, Jones, M, **Breaux, B**, Tsotsoros, J, Gardner, T, & Livingstone, R. American and Canadian therapists' perspectives of age and cognitive skills for paediatric power mobility: a

qualitative study. *Disability and Rehabilitation: Assistive Technology*, July 2019, DOI: 10.1080/17483107.2019.1606858.

Kenyon, LK, Jones, M, Livingstone, R, **Breaux, B**, Tsotsoros, J, Williams, K. Power mobility for children: A survey study of American and Canadian therapists' perspectives and practices. *Developmental Medicine and Child Neurology*, 2018, **60**: 1018 – 1025.

Publications (Non-Peer Reviewed)

Breaux, B. (2019, November 21). Council must unite around oil and gas [Editorial]. *Broomfield Enterprise*, A26/A29. Retrieved from <https://broomfieldenterprise-co.newsmemory.com/>.

Breaux, B. Positioning strategies for a child with low muscle tone. *Directions, The Official Publication of the National Registry of Rehabilitation Technology Suppliers*, **2017.6**, 38- 41.

Breaux, B. Using a power wheelchair to control mobile technology. *Directions, The Official Publication of the National Registry of Rehabilitation Technology Suppliers*, **2016.3**, 40-45.

Breaux, B., McLachlan, L., & Waugh, K. (2013). Colorado wheelchair benefit coverage standard: Manual wheelchair bases, power mobility devices, wheelchair seating and wheelchair options and accessories, [Policy Documents]. Retrieved from Colorado Department of Health Care Policy and Financing: <https://www.colorado.gov/pacific/hcpf/benefits-collaborative-approved-benefits-standards>

Burne, B, **Breaux, B.** Power wheelchairs and young children. *Exceptional Parent Magazine*. **May, 2013**, 32-34.

SERVICE/LEADERSHIP

2020 **Clinician's Task Force**, Committee member

2018-2018 **No Barriers "What's Your Everest?" Hiking event**, volunteered to assist a participant with disabilities hike a trail in Estes Park, Colorado, August 8, 2018.

2016-2016 **My Team Triumph**, Volunteer/Race Participant, Served as a team of three racers to take a participant with disabilities through the Boulder Sunset Triathlon in August, 2016, and through the Denver Hot Chocolate 15K, October 2016.

2014 **Colorado Department of Health Care Policy and Financing Benefits Collaborative Standards**, Participant, (Attended meetings to discuss proposed drafts for Manual Wheelchairs and Power Wheelchairs) Denver, CO.