



**ADED 43rd Annual Conference  
Lexington, KY  
August 9-13, 2019**

**2019 Conference Overview**

**ADED cordially invites you to participate in the  
43rd Annual Conference & Exhibits  
August 9-13, 2019 in Lexington, KY  
The theme of the conference is Professional Pride.**

**Meeting Mission:**

This multi-day conference is aimed at providing participants with current processes, procedures and research relevant to the field of driver rehabilitation.

**Conference Goal:** ADED's 2019 Conference will explore research and technology related to driver's rehabilitation. Attendees will receive cutting edge information that they can implement into client care. The lectures and workshops provide ample opportunities for participants to learn, engage and interact. The conference will combine camaraderie, experience and education. Professionals of all levels, introductory, intermediate and advanced will enjoy attendance.

**Learning Objectives:**

Upon completion of courses, participants will:

- Recognize the effects of age-related changes, disabilities and visual impairments on driving
- Analyze the psychomotor, cognitive, visual and behavioral aspects that impact driving
- Compare various pieces of adaptive driving equipment for appropriate vehicles.
- Identify ways that driver rehabilitation specialists can positively encourage their clients
- Develop skills to apply the ADED Code of Ethics & ADED Best Practices Guidelines to their practice
- Appreciate the role of the certified driver rehabilitation specialist and learn how and when to collaborate with them in order to develop and adjust realistic goals based on the client's functional abilities.

**Target Audience:**

Driver educators, equipment manufacturers, kinesiotherapists, mobility equipment dealers, occupational therapists, physical therapists, rehabilitation engineers, rehabilitation technologists, speech-language pathologists, therapeutic recreation therapists, vocational rehabilitation professionals, and allied health students.

**Continuing Education:**

**Earn up to 32 hours by taking 2-day ADED course and all conference activities.**

**Earn up to 24 hours by taking ADED pre-conference workshop and all conference activities.**

**ADED Conference attendance offers up to 17 contact hours beginning with Saturday Night Product Demonstrations.**



ADED is an AOTA Approved Provider of continuing education. Provider # 9245. The assignment of AOTA CEUs does not imply endorsement of specific course content, products, or clinical procedures by AOTA. Please see individual course descriptions for contact hours / AOTA CEUs offered and the Learning Level. AOTA Classification Codes: Domain of OT – Areas of Occupation; OT Process – Intervention; Professional Issues – Contemporary Issues & Trends.

**Official RESNA CEU Provider**



ADED is a RESNA Approved Provider.

Anyone requiring RESNA credits must denote that option on their online registration. See each course description to see if RESNA CEUs are provided.

**ADED 2-Day Courses**  
**Friday & Saturday August 9-10, 2019**  
**8:00 AM—5:00 PM**

**Course 1: The Impact of Disability, Vision & Aging on Driving**

Learning Level: Introductory/Intermediate

15 contact hours / 1.5 AOTA CEUs

Instructor: Nathalie Drouin, OTR/L, CDI, CDRS

Abstract: This 2-day course provides a broad overview of the driver rehabilitation process. The course is designed for healthcare providers starting or advancing a driver rehabilitation program as well as those referring individuals to a program. Traffic safety/driver education professionals will benefit from the information that they can apply to their practice. Topics include: acquired, congenital, developmental and progressive disabilities; age-related and visual impairments that affect driving; the driver assessment process; adaptive driving equipment and vehicle modifications and driver licensing issues.

Learning Objectives:

- Discuss the differences between acquired, congenital developmental and progressive types of disabilities;
- Analyze the effects of age-related changes, disabilities and visual impairments on driving;
- Discuss the driver assessment process and implications for driver assessment and training;
- Compare and contrast adaptive driving equipment and/or interventions and vehicle modifications;
- Assess and discuss solutions for driver licensing issues.

**Course 2: Traffic Safety for Driver Rehabilitation**

Learning Level: Introductory/Intermediate

15 contact hours / 1.5 AOTA CEUs

Instructor: Jill Sclase, CTRS, CDRS

Abstract: This 2-day course is designed to deliver traffic safety principles and practices to Driver Rehabilitation Specialists who have a clinical or healthcare background. In this course, information will be provided that is typically inherent in the Traffic Safety/ Driver Education fields. Information to be gained from this program include: defensive driving and collision avoidance techniques, strategies for teaching vehicle maneuverability, design of a driver education course and how to determine number of sessions needed for training. In addition, the program discusses how human factors impact evaluation, training as well as facilitating communication with the client and their support system.

Learning Objectives:

- Discuss basic traffic safety rules, basic defensive driving and collision avoidance strategies.
- Assess how and when to take control of the vehicle, if needed.
- Analyze specific strategies for teaching vehicle maneuverability.
- Design an on-road course to determine driver competency.
- Discuss the criteria needed to assess and the interventions required to determine the number of sessions needed for training, remediation, or driving cessation.
- Analyze the psychomotor, cognitive, visual and behavioral aspects of driving that result in competent driving skills.
- Discuss the causes of driving errors and relate them to the clinical assessment.
- Assess characteristics inherent in select disabled populations that should be considered for teaching and training for driver competency.
- Discuss ways to effectively communicate observed driver actions into verbal and written format.
- Discuss medical prescriptions that may influence and impact driving ability.

**ADED 1-Day Pre-Conference Workshops**  
**Saturday, August 10, 2019**

**8:00 AM-5:00 PM**

**Workshop A: How to Enhance Driving Performance for Teens Defined with Autism and ADHD**

Presenter: Ronn Langford

Learning Level: Intermediate

7 contact hours / .7 AOTA CEUs

**Abstract:** Young people who have been defined within the functional and performance limitations of what is defined and perceived as the ‘Autism Spectrum Disorder’ has increased from an estimated 1 in 10,000 to 15,000 to a (current) estimation of 1 in 59 in the last year or so, and appears to continue to become even worse. The greatest impact upon these young people is in regard to their potential “quality of life”. While the function and performance of these young people is very important to the overall quality of their lives, there are many interrelated and integrated issues that literally wrap around each other, and therefore become a very complex process to determine a solution – including their overall individual physiological systems (i. e., engineering the functional systems of their body), but also their overall psychology, knowledge, belief systems, identity, relationships, decision making, and more. At the appropriate age, the ability and/or inability to drive a car becomes a MAJOR consideration. As an example, it has been estimated that kids with ADHD have more than a 400% higher crash rate than “normal” teens (whatever normal means). The functional and performance abilities and limitations of kids defined as ADHD is all over the map – because of the “variability of the causes and effects”. That is, there is NO simple way to define the cause, and also NO simple solution to some of the functional effects, because of a specific cause that is difficult to identify. Kids who have been defined as being within the Autism Spectrum have a much more complicated set of issues of performance – behavior – decision making – self-perception – and their overall resulting psychology and ‘self-belief system’. As a matter of fact, there is more and more concern with almost ANY functional and/or behavioral challenges and therefore diagnosis being “thrown into the Autism Bucket”. And the result is that the driving of a vehicle places their very lives and the lives of others at a level that is just not acceptable. More young teen drivers are killed and injured in car crashes than the total of other “accidental causes”. And now if we consider the level of function, performance, decision making, behavior, etc., of a young person diagnosed with autism – we must look at this process in a very different manner than we currently consider. That is, it is NOT just a matter of being able to “pass the states criteria to get a driver’s license”!!

The solution is going to be found within the area of a Driving Rehabilitation Specialists. The typical “medical model” is not going to be able to address this situation and very complicated condition as it relates to driving. It will require a functional model – a performance model – in which the systems of the body and the brain are developed to a higher level. And PERHAPS – this young person can become a safe and responsible driver for many years!

**Learning Objectives:**

- Learn very specific strategies to enhance the effectiveness of working with young people who have been defined with ADHD and Autism, and their various types of special needs.
- Understand the psychology as well as the physiology of a young person with special needs regarding the various issues on the autism spectrum.
- Review current identifiers and impacts of autism to increase the overall knowledge and understanding by the DRS.
- Define specific strategies that can (potentially) make a difference in regard to clients with autism abilities to function and drive safely.
- Discuss the details of future technologies in cars and how they may help drivers with autism and ADHD.
- Become familiar with the SAM research project and process involving the development of electronics and systems with complex development considerations.

**Workshop B: Developing & Implementing a Formalized Program of Bioptic Driver Screening, Training, Assessment and Testing**

Presenter: Chuck Huss, C.O.M.S., Driver Rehabilitation Specialist

Learning Level: Introductory/Intermediate/Advanced

7 contact hours / .7 AOTA CEUs / .7 RESNA CEUs

**Abstract:** The greater majority of states now allow or accept the use of prescription bioptic lens systems for visual assistance in the driving task. Recent research illustrates a strong positive relationship between qualified low vision driver applicants who participate and complete formalized bioptic driver training practices and demonstrated driver performance. As a result, there is a growing interest amongst driver rehabilitation professionals nationwide to obtain the necessary type of in-service or other staff training to work with driver candidates with mild to moderate levels of central vision loss who wish to explore the driving privilege. This workshop will provide attendees with information re: basics about bioptics and their application to the driving task; hands-on experiences with mock-up bioptic lens systems; updates re visual acuity standards for driving across the USA; how best to advocate for legislative change to expand vision standards for driving purposes; cost-effective ways to screen, train, assess and test persons with known vision conditions who wish to obtain or retain the driving privilege; and areas of consideration when developing and implementing a formalized program of bioptic driver training. Driver rehabilitation specialists with prior work experience in this specialized area of adaptive driver education training and assessment are also welcome to attend, contribute, endorse or offer alternate instructional methods of working with visually challenged drivers or driver applicants.

**Learning Objectives:**

- Discuss an overview and update of bioptic driving and visual acuity standards for driving across the USA;
- Develop hands-on experience with mock-up bioptic lens systems and better understanding of their optical advantages and limitations;
- Assess information on how to advocate for legislative change to expand vision standards, including the benefits of formalized bioptic driver training;
- Develop a cost effective ways to screen, train, assess and test persons with mild to moderate levels of central vision loss who wish to explore or retain the driving privilege;
- Review information & discuss areas of consideration when developing and implementing a formalized program of bioptic driver training.

## **Workshop C: Driver Education Training: Eye Mirror Workshop**

Presenters: Sharon Fife, Dave Muma, Denis MacNeil, Nina Jo Saint, Stacey Dove, Bud Chauncy, Adam Williams

Learning Level: Introductory

7 contact hours / .7 AOTA CEUs / .7 RESNA CEUs

**Abstract:** Eye Mirrors Workshop Part I, The Eyes Have It, Part II: In-car component and Part III: Tying it all together. The workshop will provide practical, hand-on, in-vehicle training on the use of the eye mirror. Learn appropriate eye movement and necessary roadway information using an eye mirror. Learn to recognize where the driver is looking and then learning to recognize the information the driver receives through their eyes and whether or not the driver actually received it. Review the information learned in-vehicle, also learn additional information regarding eyes.

### **Learning Objectives:**

- Learn appropriate eye movement and necessary roadway information.
- Learning to recognize where the driver is looking.
- Learning to recognize the information the driver receives through their eyes
- Learning whether or not the driver actually received information through their eyes.
- Review the information learned in-vehicle, also learning additional information regarding eyes.

## **Workshop D: Apply Cognitive Assessments to Improve Driving Rehabilitation Interventions & Outcomes**

Presenters: Susan Touchinsky, OTR/L, SCDCM, CDRS & Erin Knoepfel MS, CCC-SLP

Learning Level: Intermediate

7 contact hours / .7 AOTA CEUs

**Abstract:** Cognition is a critical vital sign when evaluating your overall health. Like physical well-being, it is essential for maintaining an independent lifestyle and is at the center of all experiences. The American Occupational Therapy Association (AOTA) defines the role of the Occupational Therapist as an, "Expert in determining how cognitive deficits can impact everyday activities, social interactions, and routines... Occupational therapists have the skills to assess the cognitive aspects of functional activities and design an intervention plan, from acute care to community reintegration," (AOTA, 2011). Furthermore, occupational therapy practitioners play an important role with addressing the growing needs of the aging adult, specifically driving. "AOTA recognizes that driving in particular is a critical component of community mobility in the context of living within an industrialized nation and asserts that occupational therapy practitioners are poised to address driving at various levels to evaluate and intervene relative to individual performance as well as contribute to the overall health and safety of the public." (AOTA, 2016). Intact cognition is essential for optimal participation in a range of instrumental activities of daily living (IADLs) including driving and community mobility. Driving is one of the most complex and cognitively demanding activities of all. The availability and application of standardized, evidenced based cognitive assessments are essential for the occupational therapy practitioner and driver rehabilitation specialist. The Brief Cognitive Assessment Tool (BCAT) Approach is a unique applied concept for assessing and working with people who have memory and other cognitive impairments. It is designed for any clinical and residential setting in which cognitive functioning and impairment is a central issue. The BCAT Approach integrates broad-based assessments and targeted interventions. Specifically, the BCAT assesses orientation, verbal recall, visual recognition, visual recall, attention, abstraction, language, executive functions, and visuo-spatial processing. Cognitive staging, Memory Factor Score, and Executive Functions Score provide essential clinical information. The BCAT test system is made up of six assessments, three treatment interventions, and family/caregiver resources. The approach includes interventions and self-assessment tools to address a range of cognitive needs with the goal of correctly evaluation, and supporting. During this session we will share data re: the use of standardized assessments of cognition related to driving to demonstrate how the scores can be used to predict changes with driving skills and facilitate appropriate referrals between OT practitioners and driver rehabilitation specialists. By utilizing an evidenced based cognitive assessment, the OT can identify whether a resident demonstrates clinical signs of age related cognitive decline, mild cognitive impairment (MCI), or whether a dementia is present. Course attendees will gain valuable information on assessment resources to help differentiate cognitive deficits, and considerations for application of assessments outcomes to assist with referrals for driving rehabilitation. In addition, participants will learn to apply cognitive assessments to predict safety in IADL performance, specifically driving, and provide clinical services to the client to obtain the most efficacious and positive clinical outcomes.

### **Learning Objectives:**

- Understand the importance of cognition in the evaluation of performance skills needed for the task of driving
- Understand occupational therapy practitioner's role with cognitive assessment and potential for referral relationship with a driver rehabilitation specialist.
- Learn the key components of the Brief Cognitive Assessment Tool (BCAT) Approach in the assessment and intervention of address cognitive and memory impairments impacting driving performance.
- Learn how to utilize results of standardized assessments completed by the referring occupational therapist to provide mentorship, guide appropriate referrals, and to predict safety in driving.
- Understand the outcomes and potential risks when using various cognitive screening and assessment tools to determine safety in driving in the adult.

## **Saturday Night Product Presentations\***

**5:30-9:00 pm**

Learning Level: All

**Coordinator: Katy Greene, OTR/L, CDRS**

3 contact hours / .3 AOTA CEUs / .3 RESNA CEUs

**Abstract:** This three (3) hour seminar is designed to provide information on different adaptive driving equipment available for individuals with disabilities, along with information on evaluation equipment. The presenters will be representatives from the manufacturers of these products and features our Gold Level Sponsors\*.

Please note: 3 contact hours offered for those attendees checking in by 5:30 and staying for the duration of the event. Doors remain closed at 5:30 to allow our presenters a distraction free environment and all attendees the opportunity to hear the presentations.

\*Features different vendors from those in Seminar #3.

### **Learning Objectives:**

- Develop skills in operating the products presented.
- Identify clients that need secondary control systems.
- Develop skills to write prescriptions for adaptive equipment for vehicle modifications.
- Discuss loading/unloading scooters and wheelchairs with different types of vehicles.
- Analyze various pieces of adaptive driving equipment for appropriate vehicles.

**Sunday, August 11, 2019**

**8:30 – 9:00 AM Opening Address & Welcome**

**9:00 – 10:00 AM Keynote Address: I Have a Speeding Problem**

Presenter: Paul Erway

Learning Level: All

1 contact hour / .1 AOTA CEU

**Abstract:** Having a spinal cord injury for 39 years has provided insight and understanding to the multifaceted challenges that individuals face when attempting to proceed with life after a tragedy. There is a process to re-navigating a life that will be dramatically different than originally planned. Paul will share his experiences including the highs and lows he has endured in the hope that driver rehabilitation specialists can more fully understand their clients from a personal perspective and develop strategies that can assist in helping to get their clients “rolling” again.

**Learning Objectives:**

- Understand the levels of grief that occur with tragedy
- Understand why setting bigger, harder things to reach for will help clients
- Identify ways that driver rehabilitation specialists can positively encourage their clients

**Sunday 2:00-5:15 PM Conference Seminars run concurrently**

### **1. CDRS Ethics in Real Life**

Presenter: Dianna Robertson, CDRS, OT, Lawyer

Level: Intermediate/Advanced

3 contact hours / .3 AOTA CEUs

**Abstract:** The session will focus on application of the ADED Code of Ethics and ADED Best Practices to the complexities of the real world. This fun and interactive session will engage participants in exploration, role playing, and problem solving of issues that impact the everyday practice issues encountered by driver rehab professionals. The session will bridge theory and practice.

**Learning Objectives:**

- Gain increased knowledge of the ADED Code of Ethics & ADED Best Practices
- Identify real life challenges faced by driver rehab professionals
- Develop skills to apply Code of Ethics & ADED Best Practices to their practice

### **2. Examining the "Strategic" Level of Driving Behavior: Evidence and Implementation**

Presenter: Anne Dickerson, PhD, OTR/L, SCDCM, FAOTA, Elin Schold Davis, OTR/L, CDRS, FAOTA,

Susan Touchinsky, OTR/L, CDRS, SCDCM, Terri Cassidy, OTD, OTR/L, CDRS

Learning Level: Intermediate/Advanced

3 contact hours / .3 AOTA CEUs

**Abstract:** This session will first review Michon’s hierarchy of driving behaviors and why this theoretical framework is essential for supporting evidence-based practice for driver rehabilitation professionals and occupational therapists who address the IADL of driving and community mobility. Using current research and tools for evaluation, the emphasis will be on Michon’s strategic level. Accordingly, we will focus on the evaluation and/or observation of executive functioning during carefully planned clinical tasks and components of the on-road assessment. Research evidence on the use of wayfinding or navigation as a strategic task will underscore the strengths and challenges of developing a comprehensive road assessment. Select interventions will be discussed for use with a variety of diagnoses. Participants will have the opportunity to explore new approaches for the on road assessment through an interactive activity with the goal of building “strategic evaluation components that will produce stronger evidence for decision making and/or client recommendations.

**Learning Objectives:**

- Discuss Michon’s hierarchy of driving behaviors in order to use it as a framework for decision making and determining recommendations.
- Determine appropriate approaches for the use of technology to support evaluation of a client’s impaired strategic level of functioning.
- Learn examination strategies to assess on road assessments to ensure all levels of driving behaviors are evaluated effectively.
- Explain how the Occupational Therapy Performance Analysis of Driving (OT-PAD) can be used to design driving evaluations.
- Discuss the importance of evaluating the medically-at-risk clients at the strategic level.

### **3. Product Demonstrations\* - in the exhibit hall**

Learning Level: Introductory /Intermediate

**Facilitator: Katy Greene, OTR/L, CDRS**  
3 contact hours / .3 AOTA CEUs / .3 RESNA CEUs

**Abstract:** This three (3) hour seminar is designed to provide information on different adaptive driving equipment available for individuals with disabilities, along with information on evaluation equipment. The presenters will be representatives from the manufacturers of these products and will feature our Silver Level Sponsors. \*Program will feature different vendors from the Saturday night program.

**Learning Objectives:**

- Develop skills in operating the products presented.
- Identify clients that need secondary control systems.
- Develop skills to write prescriptions for adaptive equipment for vehicle modifications.
- Discuss loading/unloading scooters and wheelchairs with different types of vehicles.
- Analyze various pieces of adaptive driving equipment for appropriate vehicles.

**Monday August 13, 2018**

**9:00 – 11:00 AM Soap Box Sessions**

2 contact hours / .2 AOTA CEUs / .2 RESNA CEUs

**2:00-5:15 PM Conference Seminars run concurrently**

**4. Best Practice Guidelines - What's in it for me?**

Presenter: Dan Allison & Panel

Learning Level: Intermediate

3 contact hours / .3 AOTA CEUs / .3 RESNA CEUs

**Abstract:** This is a panel presentation designed especially for evaluators that recommend driving equipment and/or vehicle modifications. Panel will have representatives from NMEDA Guidelines committee, Equipment Manufacturer, Mobility Equipment Dealer sales person, Service technician/installer, CDRS, and ADED representative. It is hoped to be a highly interactive presentation with active audience questions, comments, concerns shared. Some topic's that may be addressed:

Do evaluators ask dealers/installers to perform modifications that are not permissible? Do dealers/installers install equipment that is not recommended by the evaluator? Is a vehicle fitting REALLY that important?

The end goal is to provide the best service to the end user in a timely fashion with as few obstacles as possible.

**Learning Objectives:**

- Review where to find ADED and NMEDA guidelines
- List at least 3 modifications for which no exemption is permitted.
- Describe where labels for modified vehicles can be found on the vehicle
- Define: GVWR, GAWR, and TWR
- Name at least 3 pieces of documentation that a MED requires prior to installing any driving equipment.

**5. Mental Fitness and Driving: Balancing the Right to Drive with Public Safety**

Presenter: Dr. Sarah Shelton

Learning Level: All

3 contact hours / .3 AOTA CEUs

**Abstract:** Respecting an individual's Right to Drive must be balanced against Public Health & Safety concerns for all. Mental Fitness is just as important to establish as Physical Fitness for Driving, given the safety concerns that exist for the vehicle operator and the public. While physical conditions that may impact driving are often visible and obvious, mental conditions that may impact driving are often invisible and less apparent. To complicate the picture further, not everyone with the same mental condition is universally qualified or disqualified from driving from a Mental Fitness standpoint. The ways in which various mental health conditions, both transient and chronic, impact driving ability are highly individualized and require formalized assessment by a trained professional familiar with this construct. There are many types of mental health symptoms and sequela that impact Fitness for Driving. Understanding why and how these symptoms manifest within a driving context is critical to this issue. Cultural, developmental, and social issues also interface with the impact of driving on an individual's quality of life and need to be appreciated. By understanding what mental health symptoms and conditions are relevant to Fitness for Driving and why, we can better position and equip professionals to identify drivers who pose a safety risk to themselves and others and can also devise strategies to help those deemed unfit to drive achieve the improvement and stability necessary to regain that privilege.

**Learning Objectives:**

- Identify various types of mental conditions that can impact one's ability to safely drive
- Appreciate how and why certain mental health symptoms or conditions can interfere with driving safety
- Analyze the right to drive argument at the individual level in the context of broader public health and safety concerns
- Recognize relevant laws, policies, and guidelines that relate to mental fitness to drive
- Understand cultural, developmental, and social implications of mental fitness to drive

**6. ADED's On-Road Training Intervention Strategies**

Presenter: Nina Jo Saint & Sharon Fife

Learning Level: Introductory

3 contact hours / .3 AOTA CEUs

**Abstract:** This course focuses on behind-the-wheel training, providing participants with techniques and strategies to target the problem areas linked to the specific situation/disability of their client. This course should also teach effective communication techniques to use with specific special populations, including how to facilitate learning and how to provide appropriate feedback. The course will identify strategies to improve driving difficulties associated with visual perceptual and physical challenges, cognitive challenges resulting from aging or disability, practice effective communication techniques to facilitate driver training with specific special populations, and appreciate the role of the certified driver rehabilitation specialist to develop and adjust realistic goals based on the client's functional abilities.

**Learning Objectives:**

- Identify strategies to improve driving difficulties associated with visual perceptual challenges, physical and cognitive challenges resulting from aging or disability.
- Appreciate the role of the certified driver rehabilitation specialist and learn how and when to collaborate with them in order to develop and adjust realistic goals based on the client's functional abilities.
- Identify and practice effective communication techniques to facilitate driver training with specific special populations.

**Tuesday, August 14, 2018**

**8:00a– 9:00a**

**General Session:**

**UF & UAB's Phase I Demonstration Study: Older Driver Experiences with Autonomous Vehicle Technology**

Presenters: Dr. Sherrilene Classen, Justin Mason, PhD, James Wersal, OTD, Virginia Sisiopiku, PhD

Learning Level: Intermediate

1 contact hour / .1 AOTA CEUs

**Abstract:** Introduction. Older drivers are the fastest growing segment of the driving population in the US. Driving is the preferred method of transportation among older adults and yields numerous health, community, and societal benefits. However, older drivers are over-represented in multiple-car collisions and are more susceptible to being seriously injured in the event of a crash. Crash mitigation strategies emerge as a critical factor in preventing crashes and making the roads safer for all users. Autonomous vehicles (AV) may provide health and safety benefits for older drivers if they accept to utilize AV as a primary mode of transportation. Method. This study is using an experimental, repeated measures crossover design with pre-visit and post-visit surveys to quantify the perceptions of 100 older drivers, matched for age and gender, who have been exposed to driving a simulator in autonomous mode (Level 5, SAE Guide) and riding in an AV (Level 5, SAE Guide). Perceptions will entail perceived safety, ease of use, usefulness, trust, experience with driving technology, barriers to adopting technology, anxiety, patience, and external factors (i.e., media, authority, and social influences). Result. Preliminary data will be presented and discussed at the conference as data collection begins November 2018 and ends September 2019. Older driver's pre- and post-visit surveys 1 and 2 will be compared to yield information on their perception to AV. We hypothesize that (1) older drivers' perceptions will change after being exposed to driving the simulator and/or the AV; (2) the greatest level of change will occur between pre-survey and post-survey results; and (3) the older drivers' perceptions will be influenced more by the on-road experience in the AV compared to the driving simulator. Conclusion. Information from this study will inform clinicians and healthcare providers of older adults' perceptions and attitudes toward AV use. The knowledge gained through this research will help to identify opportunities and methods to overcome barriers to improve older drivers' interaction with AVs, facilitate their ease-of-use practices, and potentially empower older drivers to adopt these technologies. Clinicians and healthcare providers require up-to-date knowledge regarding crash mitigation strategies and alternative forms of transportation to promote mobility and enhance quality of life for their clients. Greater mobility can increase access to such things as healthcare, physical activity, necessities of daily life, and community involvement. Lastly, understanding clients concerns and apprehensions can build rapport and strengthen the clinician-patient relationship.

**Learning Objectives:**

- Discuss older drivers' perceptions (i.e., ease of use, usefulness, safety, trust, experience, anxiety, patience, and external factors) of AV.
- Identify and develop methods to overcome barriers for older adults' acceptance of autonomous vehicle technology.
- Synthesize the provided information and hypothesize potential variables that may mediate or moderate drivers' perceptions across the lifespan.
- Discuss potential barriers for various levels of automation.
- Discuss their personal perceptions to utilizing AV and how this relates to their clients' perceptions.

## **9:15AM-12:30PM Conference Seminars run concurrently**

### **7. Trouble in the Trenches: How to dig out by using a Clinical Decision-Making Tool**

**9:15AM-12:30PM**

Presenter: Tamalea Stone

Learning Level: All

3 contact hours / .3 AOTA CEUs

**Abstract:** Adaptive equipment must be considered for some of our clients to be able to access and/or operate a vehicle. Clinicians have gathered their experience through continuing education, mentoring, and often self-learning. Following a comprehensive assessment, the clinician must attempt to determine the best option for equipment based on the client's needs and functional abilities. The chosen option is not always optimal when challenged with barriers such as funding, compatibility with current vehicle or mobility aid and/or availability of products. Determining what is best for the client is only one piece of the puzzle. New technologies and products, a growing evidence base, and changing funding structures all add to the complexity of today's practice environment. It is suggested that the OT/CDRS will benefit from a structured method to assist them to analyze complex and challenging situations that arise in practice. Often, situations are challenging because they involve an ethical dilemma. Sometimes there is an option that is a clearly good one, but there are, unfortunately, many situations when the right thing feels wrong because a positive outcome for everyone involved is not possible. Many factors impact on the final decision: client needs, professional ethics, professional standards, legislation, guidelines, policies and clinician competence. If a conscious decision-making process has been followed, the clinician can feel confident that a reasonable outcome can be achieved, and principles of ethical practices are being upheld. A clinical decision-making framework will be introduced. Case studies will be used to demonstrate how the framework can assist in considering the applicable principles of practice, including QAP and ADED ethics and best practices and determine some reasonable options. Brainstorming/open discussion session will be led to further identify possible avenues to make these decisions more standard within our field.

**Learning Objectives:**

- Review adaptive equipment rationale, best practices and decision tree/flow charts
- Discuss research findings and case studies
- Discuss intersection btw QAP and ADED Best Practices relating Code of Ethics and professional competencies
- Develop policy for the facility, practice setting
- Analyze how to develop decision tree/model



## **8. Securement & Mobility Device Training** Presenter: Darren Reaume **9:15AM-12:30PM**

Learning Level: Introductory/Intermediate 3 contact hours / .3 AOTA CEUs / .3 RESNA CEUs

**Abstract:** The landscape of mobility device transportation is changing dramatically with the development of recent standards aimed at finally making wheelchairs and securement equipment more compatible. We will explore these regulation changes, while also providing an overview of the range of securement equipment currently available. Finally, we will provide the attendees the tools to both select the safest combination of securement equipment and mobility device for their clients, and to develop an effective plan of attack to secure the most difficult mobility devices that don't yet comply with the new standards.

### **Learning Objectives:**

- Analyze and explain the relevance of the new wheelchair securement best practice standard, ANSI/RESNA WC18, and related ANSI/RESNA WC19.
- Compare and differentiate between the various types of securement equipment, occupant restraints, and docking systems.
- Assess difficult to secure mobility device mobility devices and formulate a protocol for evaluating their ability to be safely secured during transport.
- Develop a plan for procuring a vehicle and mobility device for their clients that will work seamlessly together to maximize safety during transport.

## **9. The 21-item Fitness-to-Drive Screening Measure: Implications for Identifying At-Risk Older Drivers** **9:15AM-10:45AM**

Presenters: Dr. Sherrilene Classen & Shabnam Medhizadah, MSc

Learning Level: Introductory 1.5 contact hours / .15 AOTA CEUs

**Abstract:** Introduction. By 2020, it is estimated that approximately 46 million license holders in the U.S. and Canada will be over the age of 65. As the number of older drivers continues to rise, there is a mounting need to support clinicians with identifying drivers' fitness to drive. Specifically, clinicians may benefit from an efficient and valid screening measure, such as the 54-item Fitness-to-Drive Screening Measure (FTDS), for detecting at-risk older drivers and preventing crash-related deaths or injuries. However, uptake of the existing web-based FTDS by clinicians may be limited due to the measure's length and 20-minute administration time. Therefore, we aimed to develop and validate a short form FTDS (FTDS-SF) that may aid clinicians in screening older drivers, detecting their crash-risk and making initial fitness to drive decisions. Method. This study used 200 proxy rater responses and 200 older driver on-road assessments. To construct the FTDS-SF this study used a mixed methods approach. For the quantitative analysis we used a frequency and Rasch analysis. First, a frequency analysis was used to remove items with no variability in responses from proxy raters (e.g., formal/informal caregivers, friends, spouses). For the remaining items, a Rasch analysis was run to determine the item's difficulty level followed by the researchers grouping the items based on difficulty. For the qualitative analysis we examined the content validity index of the items in each group using three expert reviewers who rated and selected items with the highest clinical relevance for determining an older driver's fitness to drive. Lastly, using a receiver operator characteristics curve we determined the concurrent validity of the FTDS-SF to on-road pass/fail outcomes. Result. The frequency analysis necessitated the removal of 13 items from the 54 item FTDS. The Rasch analysis for the remaining 41 items resulted in 10 groups of items. Next, the content validity index scores calculated from expert ratings of the items in each group resulted in the selection of the final 21 items. The receiver operator characteristic curve results indicated the 21-item FTDS-SF predicted on-road outcomes with acceptable accuracy (AUC = .72, sensitivity= .71, specificity= .65). Nonetheless, 68 drivers were misclassified by the FTDS-SF with 59 drivers predicted to fail the on-road assessment when they actually passed. Conclusion. A mixed methods design informed the construction of the FTDS-SF with acceptable psychometric properties and good potential to reduce the administration time. The FTDS-SF in conjunction with clinical reasoning skills and knowledge of client's medical history, may better assist clinicians in screening older drivers, detecting their crash-risk and making initial fitness to drive decisions. However, caution needs to be executed when using the FTDS-SF in clinical decision-making as the measure is overly specific misclassifying 59 of 68 drivers as failing, when they passed the on-road assessment. However, the prediction results indicate that this short-form can better predict on-road outcomes compared to the original version of the FTDS.

### **Learning Objectives:**

- Accurately restate and identify the utility of the Fitness-to-Drive Screening Measure based on the measure's purpose, use, psychometrics, development and validation of the 21-item FTDS-SF.
- Conceptualize the psychometric properties of the FTDS-SF based on the presentation of the measure's validity, reliability, sensitivity and specificity.
- Appraise the application of the FTDS and FTDS-SF as evidence based screening tool for identifying at-risk older drivers in clinical settings, preventing crash-related deaths or injuries and for making targeted recommendations for continued driving, driver rehabilitation or driving cessation.

## **10. Research Roundtable: Development and Dissemination of Projects in Driver Rehab 9:15AM-10:45AM**

Presenters: Beth Rolland

Learning Level: Intermediate

1.5 contact hours / .15 AOTA CEUs

**Abstract:** This session will provide participants with opportunities to dialogue about the 2019 Poster Presentation, current projects or program development, as well as opportunities for future research. The session will begin with reflections from the poster session presenters and lead into a facilitated discussion to help participants better understand topics or the process of doing driver rehabilitation research. Discussion will include, but is not limited to: a) potential topics for research; b) program descriptions which might make noteworthy presentations; and c) strategies for dissemination such as: presentations, poster sessions or articles.

### **Learning Objectives:**

- Discuss future research ideas motivated by research presented at the Conference Poster Presentation and/or personal interests.
- Collaboration among attendees by identifying and matching interests.
- Discuss resources to develop their own posters in the future and present their research at future conferences.

## **11. Current Evidence on Impaired Driving via Cannabis, Alcohol and Insufficient Sleep 11:00AM-12:30PM**

Presenters: Melissa Knott MSc(OT), OT Reg (Ont), CCLCP, Robert Colonna, BHSc, Liliana Alvarez, PhD, MSc, BSc(OT)

Learning Level: Introductory

1.5 contact hours / .15 AOTA CEUs

**Abstract:** In North America, motor vehicle collisions remain a leading preventable cause of injury or death. Moreover, impaired driving is a factor in more than half of road traffic fatalities every year. Drivers with impaired skills arising from use of cannabis, alcohol, or insufficient sleep are at an increased risk of crash involvement and have similar rates of injury severity and fatalities. According to the National Highway Traffic Safety Administration (NHTSA), in 2016, 28% of road traffic fatalities in the United States alone were attributed to alcohol-impaired driving, while drugs other than alcohol were cited in about 16% of crashes. Furthermore, the rate of fatal accidents attributed to use of alcohol or drugs has been increasing in recent years, particularly in young male drivers (NHTSA, 2016). With cannabis now legalized for recreational use across Canada and in several states across the United States, there is potential for an increase in cannabis use and impaired driving. This is problematic as driving under the influence of cannabis is shown to double the risk of motor vehicle collisions (Asbridge et al., 2012). On the other hand, a recent expert panel consensus statement (Czeisler et al., 2016) concluded that most drivers with less than 5 hours of sleep in the past 24 hours would likely be impaired, while those obtaining less than 2 hours of sleep would not be fit to drive. The effects of such types of insufficient sleep were further compared to negligent driving behavior under the influence of alcohol or drugs. Thus, understanding the specific impact of these factors on driving performance is critical, in order to develop intervention and educational strategies for injury prevention. This seminar will provide participants with a current evidence-based overview of the specific impact of cannabis, alcohol, and insufficient sleep on driving performance and fitness to drive. The authors will draw on their most current research on: (1) Cannabis & Alcohol: based on a recent evidence-based review, we will summarize the specific impact of these substances on fitness to drive and driving performance. (2) Perceptions and attitudes pertaining to cannabis use: we will present preliminary findings of a study investigating the knowledge, perceptions and attitudes of young Ontarian drivers (ages 18 to 24 years) towards cannabis driving under the influence of cannabis. (3) Insufficient Sleep: we will present the results of a systematic literature synthesizing the determinants of fitness to drive and driving performance in shift workers experiencing insufficient sleep. Taken together, this seminar will provide driver rehabilitation specialists, driving school instructors and other community mobility stakeholders with current evidence in understanding the scope and impact of driving impairment, and will equip participants with practical knowledge to integrate into their practice.

### **Learning Objectives:**

- Characterize the specific impact of alcohol and cannabis use on fitness to drive and driving performance
- Describe the factors that can influence driving under the influence of cannabis
- Identify the determinants of fitness to drive and driving performance in shift workers experiencing insufficient sleep
- Conceptualize overarching risk factors pertaining to those at risk for impaired driving behaviors

## **12. Why Not CDRS in AgrAbility**

**11:00AM-12:30PM**

Presenters: Maryfrances Gross CDI, COTA, CDRS

Learning Level: Intermediate

1.5 contact hours / .15 AOTA CEUs / .15 RESNA CEUs

**Abstract:** Kentucky AgrAbility is a team approach helping farmers. In Kentucky, a CDRS is a vital team member assisting farmers after an illness or an injury to continue farming activities. This seminar will explore the many ways as a CDRS you can evaluate a farmer's needs. You will become familiar with farm equipment and safety. This seminar will identify the recommendations and modifications a farmer may require to continue their work on the farm.

### **Learning Objectives:**

- Identify safety aspects of working with farm machinery.
- Understand assessments for consumer to determine safety working with farm machinery
- Understand how to develop and evaluate consumer on a driver/ride course.
- Identify types of adaptive equipment for farming.
- Understand types of adaptive equipment, disability limitations and terminology