**Program Schedule**

**Sunday, October 30, 2022**

(Presentations are 20-minutes long, plus a 10-minute Q & A period)

All times are Eastern Standard

**12:15- 1:00 pm** **Lunch/ Welcome and Introduction**

Paul Edwards, M.D., Chair, Department of Ophthalmology, Henry Ford Health, Detroit, Michigan

**Session One:** **Three to Energize the Congress**

**Moderator: Cynthia Owsley, Ph.D., University of Alabama, Birmingham, Alabama**

**1:00 - 1:30 pm** *TREYESCAN: An Eye Tracking and Hazard Viewing Test for Driving with*

*Visual Field Defects*

**Yasmin Faraji, M.D., Amsterdam University Medical School,**

**Amsterdam, Netherlands**

**1:30 – 2:15 pm** **Keynote Address**:

*An Introduction to Artificial Intelligence and its Impact on Mobility and Healthcare*

**Jacob Bond, Ph.D., General Motors, Warren, Michigan**

**Alok Warey, Ph.D., General Motors, Warren, Michigan**

**2:15 – 2:45 pm** *Volatolomics of Breath as an Emerging Frontier for Wellness Screening in*

*Autonomous Vehicles*

**Phillip Olla, Ph.D., Audacia Bioscience, Windsor, Canada**

**Arezoo Emadi Ph.D., University of Windsor, Canada**

**2:45 - 3:15 pm** **Break**

**Session Two: The Driver**

**Moderator: Timo Tervo, M.D., Ph.D., Helsinki University Eye Hospital, Finnish Crash Data Institute, Helsinki, Finland**

**3:15 – 3:45 pm** *Bioptic Driver Training and Testing: Similarities and Differences Across*

*the United States*

**Charles Huss, M.A., Retired, Dunbar, West Virginia**

**3:45 - 4:15 pm** *Windshields as an Electronic Device for Perception, Comfort, and*

*Communication*

**Sameh Saad, Ph.D., Betterfrost and Asahi Glass, Oakville, Ontario,**

**Canada**

**Terence Yim, Asahi Glass, Oakville, Ontario, Canada**

**4:15 - 4:45 pm** *Global Human Body Modeling: Vision and Opportunities*

**Paul Krajewski, Ph.D., General Motors, Warren, Michigan**

**4:45 – 5:15 pm** *Naturalistic Driving Metrics for Predicting Rheumatoid Arthritis Disease*

*Status*

**Jun Ha Chang, Ph.D., University of Nebraska Medical Center,**

**Nebraska**

**5:15 – 5:45 pm Panel Discussion:**

**Moderators: Cynthia Owsley, Ph.D. and Timo Tervo, M.D., Ph.D.**

**Panelists: Jacob Bond, Ph.D., Jun Ha Chang, Ph.D., Yasmin Faraji, M.D., Charles Huss, M.A., Paul Krajewski, Ph.D., Phillip Olla, Ph.D., Sameh Saad, Ph.D., and Alok Warey, Ph.D.**

**5:45 – 6:00 pm** **Break**

**6:00 – 9:00** **pm** **Bartimaeus Award Reception and Dinner**

**Reservations required: Contact rhorne1@hfhs.org**

**MONDAY, OCTOBER 31, 2022**

(Presentations are 20-minutes long, plus a 10-minute Q & A period)

All times are Eastern Standard

**7:25 – 7:30 am** **Welcome and Introduction**

Paul Edwards, M.D., Chair, Department of Ophthalmology, Henry Ford Health, Detroit, Michigan

**Session Three**: **Night Driving**

**Moderator: Cynthia Owsley, Ph.D., University of Alabama, Birmingham, Alabama**

**7:30 - 8:00 am** *Night-time Driving in Older People: Quantifying the Relation Between*

*Visual Acuity, Contrast Sensitivity, and Hazard Detection Distance in a Driving Simulator*

**Ulrich Schiefer, M.D., University of Applied Science Aalen/Tuebingen**

**University, Aalen, Germany**

**8:00 - 8:45 am** **Keynote Address:**

*Night Vision Driving Research*

**Joanne Wood, Ph.D. Queensland University of Technology,**

**Brisbane, Australia**

**8:45 - 9:15 am** *Correlations Between Intra-Ocular Stray-light perception and Contrast*

*Sensitivity, Halo Size, and Hazard Recognition Distance with and without Glare - Results from a Nighttime Driving Simulator Study*

**Judith Ungewiss, Ph.D., Aalen University of Applied Sciences, Aalen, Germany**

**9:15 - 9:45 am** **Break**

**Session Four: Matters Automotive**

**Moderator: Joseph Rizzo, M.D., Harvard Medical School, Boston, Massachusetts**

**9:45 - 10:15 am** *Imaging Through Scattering Media for Automotive Applications*

**Manoj Sharma, Ph.D., General Motors, Warren, Michigan**

**10:15 - 11:00 am** **Keynote Address**:

*What You Don’t See Makes the Difference in an Auto!*

**Tim Cavanaugh, M.B.A., Cavanaugh Consulting, South Lyon, Michigan**

**11:00 - 11:30 am** *The Eye and The Brain vs. The Automated Auto*

**Richard Young, Driving Safety Consulting, Troy, Michigan**

**11:30 - 12:15 pm** **Panel Discussion**

**Moderators: Joseph Rizzo, M.D., and Matthew Rizzo, M.D.**

**Panelists: Tim Cavanaugh, M.B.A., Ulrich Schiefer, Ph.D., Manoj Sharma, Ph.D., Judith Ungewiss, Ph.D., Joanne Wood, Ph.D., and Richard Young**

**12:15 - 1:00 pm** **Lunch**

**Session Five: Naturalistic Driving**

**Moderator: Joanne Wood, Ph.D., Queensland University of Technology, Brisbane, Australia**

**1:00 – 1:30 pm** *How Bus Drivers Keep Distance from Obstacles when Braking: A One-*

*year Naturalistic Driving Study*

**Gang Luo, Ph.D., Harvard Medical School, Boston, Massachusetts**

**1:30 – 2:15 pm** **Keynote Address:**

*Naturalistic Driving and Attribution of Crash Causation*

**Matt Rizzo, M.D., University of Nebraska, Omaha, Nebraska**

**2:15 – 2:45 pm** *Older Adults’ Person Abilities about Vehicle Dashboard Designs and*

*Their Association with Vision*

**Cynthia Owsley, Ph.D., University of Alabama, Birmingham,**

**Alabama**

**2:45 – 3:15 pm** **Break**

**Session Six: Autonomous Driving**

**Moderator: David Goldman, M.D., M.B.A., Department of Ophthalmology, Henry Ford Health, Detroit, Michigan**

**3:15 – 3:45 pm** *Comparing Motion Sickness in a High-fidelity Driving Simulator During*

*Manual and Automated Driving in Older Adults*

**Behrang Keshavarz, Ph.D., KITE Research Institute, University Health Network, Toronto, Canada**

**3:45 – 4:15 pm** *Selling Technology: Influencing Perceptions of Autonomous Vehicles*

**Cornelius Darcy, Ph.D., Flint, Michigan**

**4:15 - 4:45 pm** *Passenger Emotional State Assessment using Physiological Sensors in*

*Autonomous Vehicles*

**Mia Levy, M.S., HRL Laboratories, Agoura Hills, California**

**4:45 – 5:15 pm** *Resolution to American Medical Academy on Driver’s License*

*Restrictions for Visually Impaired Citizens*

**Patrick Droste, M.D., Grand Rapids, Michigan**

**5:15- 5:45 pm Panel Discussion**

**Moderators: Joanne Wood, Ph.D., David Goldman, M.D., M.B.A**

**Panelists: Cornelius Darcy, Ph.D., Arezoo Emadi Ph.D., Behrang Keshavarz, Ph.D., Gang Luo, Ph.D., Phillip Olla, Ph.D., Cynthia Owlsey, Ph.D., and Matt Rizzo, M.D.**

**5:45 – 6:00 pm** **Break**

**6:00 - 8:00 pm** **Poster Session and Cocktail Reception**

**Tuesday, November 1, 2022**

(Presentations are 20-minutes long, plus a 10-minute Q & A period)

All times are Eastern Standard

**Session 7: Driving with Reduced Vision**

**Moderator: Cynthia Owsley, Ph.D., University of Alabama, Birmingham, Alabama**

# **7:30 – 8:00 am** *Vision Screening for Motor Vehicle Collision Involvement among Older Drivers*

**Gerald McGwin, Ph.D., University of Alabama, Birmingham, Alabama**

**8:00 – 8:45 am** **Keynote Address**:

*Medical Condition as a Risk Factor in Fatal Motor Vehicle Crashes*

**Timo Tervo, M.D., Ph.D., Helsinki University Eye Hospital, Finnish**

**Crash Data Institute,** **Helsinki, Finland**

**8:45 - 9:15 am** *Uncovering the Hidden Population in Low Vision: A 10-Year Look at a*

*Student-Parent Program on Driving with Low Vision and Its Multiple Benefits*

**Cynthia Bachofer, Ph.D., TSBVI, Austin, Texas**

**9:15 – 9:45 am** **Break**

**Session Eight: More on the Drivers**

**Moderator: Gerald McGwin, Ph.D., University of Alabama, Birmingham, Alabama**

**9:45 – 10:15 am** *Driver Engagement Support for Commercial Trucking*

**Derrick Redding, M.S., Betterfrost Technologies, Oakville,**

**Ontario, Canada**

**10:15 – 10:45 am** *Preferences of Individuals with Different Levels of Visual Impairment for*

*Autonomous Vehicles*

**Robert Beran, M.S., Wichita State University, Wichita, Kansas**

**10:45 - 11:15 am** *Pilot Study of a Tactile Hazard Warning Device for Drivers with Impaired*

*Vision*

**Alex Bowers, Ph.D., Harvard Medical School, Boston, Massachusetts**

**11:15 – 12:00 pm**  **Panel Discussion**

**Moderators: Daniel Rathbun, Ph.D. and Joanne Wood, Ph.D.**

**Panelists: Cynthia Bachofer, Ph.D., Robert Beran, M.S., Alex**

**Bowers, Ph.D., Gerald McGwin, Ph.D., M.A., Derrick Redding, M.S.,**

**and Timo Tervo, M.D., Ph.D.**

**12:00 – 1:00 pm**  **Lunch**

**Session Nine: Matters to Consider on the Way Home!**

**Moderator: Daniel Rathbun, Ph.D., Henry Ford Health, Detroit, Michigan**

**1:00 – 1:30 pm** *Experiences of Drivers with Vision Impairment When Using Tesla Cars: A*

*One-year Follow-up Study*

**Jing Xu, Ph.D., Envision Research Institute, Wichita, Kansas**

**1:30 – 2:15 pm** **Keynote Address:**

*Beyond “HIPAA in the Car”: The Real Impact of the Law on Automotive*

*Biometric Data*

**Jennifer Dukarski, J.D., Butzel Long, Ann Arbor, Michigan**

**2:15 - 2:45 pm** *Impact of Glare and Other Interference Factors on Visual Exploration and*

*Nighttime Driving in a Simulator*

**Michael Woerner, Ph.D., Aalen University of Applied Sciences, Aalen, Germany**

**2:45 - 3:30 pm** **Final Panel Discussion**

**Moderator: Daniel Rathbun, Ph.D.**

**Panelists: Jennifer Dukarski, J.D., Michael Woerner, Ph.D., and Jing Xu, Ph.D.**

**3:30 pm** ***Congress Adjournment and Bon Voyage!***