MICHIGAN CENTER FOR ADVANCING SAFE TRANSPORTATION THROUGHOUT THE LIFESPAN

M-CASTL AND YOU: IMPROVING OLDER ADULT SAFETY AND MOBILITY

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Head, UMTRI-Social and Behavioral Analysis
Director, M-CASTL
What is the M-CASTL?

- Competitive grant from the US DOT.
- One of 14 Tier 1 University Transportation Centers.
- 60 centers sponsored at various levels in US.
- M-CASTL is housed at UMTRI
- 3 year sponsorship from US DOT
  - August 1 to July 31 (in our second year)
- $1 million/year from US DOT; $1 million/year cost share:
  - Cost share comes from U-M, UMTRI, and other various sponsors.
What is the M-CASTL?

• The theme of the Center is: *Safety and Mobility throughout the Lifespan;*
  • Primary focus on older adult safety and mobility;
  • Secondary focus on young drivers.

• We chose this theme because:
  • Relevant to current societal problems;
  • UMTRI does work in these areas;
  • U-M has great expertise in these areas;
  • Aligned with US DOT strategic planning.
What is the M-CASTL?

• Center Staff
  • Director: David W. Eby
  • Assistant Director: Lisa J. Molnar
  • Program Director: Jonathon M. Vivoda
  • Administrative Associate: Amanda Dallaire
  • Editor, business development, etc.

• Executive Committee
• Advisory Board
• Faculty
• Students
In addition to M-CASTL’s commitment to furthering the educational and research missions of U-M and UMTRI, we also strive to be a resource for Michigan and others:

- **M-CASTL and You**
  - Information resource
  - Education resource
  - Research resource
M-CASTL: Information Resource

- Website: http://m-castl.org
- Frequently updated
- Content
  - Topical reports
  - Research reports
  - Conference video clips
  - Web briefings
  - Links to resources
M-CASTL: Information Resource

- Website: http://m-castl.org  Email: m-castl@umich.edu
- Content continued:
  - Copies of M-CASTL Newsletter
  - Announcements
  - Annual research synthesis reports
M-CASTL: Education Resource

- Professional Education Program
  - Education of various transportation safety and mobility practitioners
  - Multiple media outlets
  - Stakeholder Survey
    - Sent to about 300 stakeholders
  - M-CASTL welcomes requests
M-CASTL: Education

- **Global Education Program**
  - Web-based training and education modules
  - (i.e., dementia and driving).
  - Emphasis will be on quality multimedia, timely topics, and sound educational principles.
Research Excellence Program

- M-CASTL supports a vigorous program of basic and applied research to improve safety and mobility for young people and older adults
- Responsive to areas identified by US DOT, U-M, Advisory Board, and community
- Peer-review grant competition
- Three research thrusts:
  - the changing perceptual, cognitive, and psychomotor abilities of older drivers;
  - the transportation needs of young people and older adults when they are unable or choose not to drive themselves;
  - the elevated crash risk of young drivers.
Eligibility Requirements

- Eligibility by academic and research faculty submitting proposals to serve as Principal Investigators at U-M;
- Focus on one or more of the M-CASTL priority research topics;
- 75 percent non-federal cost match/share;
- Use of “quad-team” approach by investigators;
  - Must have a non-University partner.
- Budget not to exceed ceiling direct costs;
- Proposed project period of 1 year.
First Round Selected Projects

- Youth, Age, and Transportation Accessibility: An Intermetropolitan Comparison
  - PI: Jonathan Levine (Urban Planning)
  - Co-investigators: Joe Grenges (Urban Planning), Lidia Kostyniuk (UMTRI), Laurie Wargelin (Abt-SRBI, Inc.)

- A Behavioral Model of Driving Reduction and Cessation
  - PI: Lidia Kostyniuk (UMTRI)
  - Co-investigators: Cathleen Connell (School of Public Health), Patricia Carrow (Michigan Office of Highway Safety Planning)
First Round Selected Projects

- **A New Approach to Assessing Self-Regulation by Older Drivers: Development and Testing of a Questionnaire Instrument**
  - PI: David Eby (UMTRI)
  - Co-investigators: Lisa Molnar (UMTRI), J. Scott Roberts (School of Public Health), Gary Bubar (AAA Michigan)
  - International Experts: Jim Langford (MUARC), Sean Marshall (University of Ottawa)
Second Round Selected Projects

• *Cognitive Training as an Intervention to Improve Driving Ability in the Older Adult*
  - PI: Rachael Seidler (U-M Kinesiology)
  - Co-Investigators: John Jonides (U-M Psychology); Martin Buschkuehl (U-M Psychology); Susanne Jaeggi (U-M Psychology); Jessica Bernard (U-M Psychology); Pamela Hall (Michigan Office of Services to the Aging); Peggy Brey (Michigan Office of Services to the Aging).

• *Young unlicensed drivers: Four Studies to Understand the Association of Lifestyle and Area Associated Risk*
  - PI: C. Raymond Bingham (UMTRI)
  - Co-Investigators: Ana V. Diez-Roux (U-M School of Public Health); Christian L. Hanna (Michigan Public Health Institute).
M-CASTL: Annual Conference

- Most important way to interact, help guide M-CASTL activity/priorities, stay informed about important developments is through the annual conference.
- Conference Website: http://m-castl.org/node/49
- Research & Education Conference
  - April 7, 2009 at the Michigan Union Ballroom
- Serves to set our priority areas for the coming year.
- Conference is followed by Executive Committee/Advisory Board Meeting
Annual Conference: Featured Speakers

• **Dr. James Jackson.** Director, U-M Institute for Social Research: *The value and need for multidisciplinary research and education.*

• **Dr. Richard Marottoli.** Medical Director, The Dorothy Adler Geriatric Assessment Center, Yale School of Medicine: *Medical conditions, medications, and driving.*

• **Dr. Joseph Coughlin.** Director, Massachusetts Institute of Technology AgeLab and New England University Transportation Center: *New transportation demands of an aging America.*
Conference Sessions

- Licensing Issues:
  - Dr. Jean T. Shope, UMTRI, U-M School of Public Health (Graduated Licensing)
  - Ms. Lisa J. Molnar, UMTRI, M-CASTL (Outcomes of the North American License Policy Workshop)
  - Dr. Marianna Spanaki, Henry Ford Health System (Physician reporting and immunity)
  - Ms. Anne Corgan, Michigan Department of State, Legal and Regulatory Services Administration (Licensing of young and older drivers)
Conference Sessions

• Vehicle-Based Technology
  • *Dr. C. Raymond Bingham*, UMTRI, M-CASTL (Technology for monitoring young drivers)
  • *Dr. John M. Sullivan*, UMTRI (Night vision enhancement for young and older drivers)
  • *Dr. Frank Schieber*, Heimstra Human Factors Laboratories, University of South Dakota (Eye scanning behavior of young and older drivers)
  • *Dr. Tao Zhang*, Telcordia (Industry perspective on vehicle-based technology)
Conference Sessions

• Education/Training
  • Ms. Paula Kartje, U-M Medical School, DriveAbility Program (Assessing driving)
  • Dr. Rachael Seidler, U-M Psychology, U-M Kinesiology (Cognitive retraining for improving driving)
  • Dr. Rob Foss, University of North Carolina, Highway Safety Research Center (Driver education)
  • Dr. Richard Backs, Central Michigan University, DEER Center (Education and training of older drivers)
Conferences Sessions

- Distracted Driving
  - Dr. Paul A. Green, UMTRI, M-CASTL (New research on distracted driving)
  - Dr. David LeBlanc, UMTRI (Research on distraction management systems)
  - Dr. Louis Tijerina, Ford Motor Company (Research on Ford’s SYNC™ and driving distractions)
Conference Sessions

• Roadway Design
  • Dr. Sherrilene Classen, University of Florida (Instrumented vehicle testing of intersection improvement for older adults)
  • Mr. Dave Morena, Federal Highway Administration (Roadway design and aging drivers)
  • Dr. Dominique Lord, Zachry Department of Civil Engineering, Texas A&M University (Improving roundabouts for older drivers)
Conference Sessions

• Transitioning
  • Dr. Lidia P. Kostyniuk, UMTRI (Family and self-regulation issues in transitioning)
  • Ms. Karen Kafantaris, AARP (AARP and the transitioning process)
  • Ms. Tina Abate-Marzolf, Michigan Area Agency on Aging (Resources for transitioning)
THANK YOU

http://M-CASTL.org

Photography by Gregory Kestyniuk

University of Michigan