



Michigan Center for Advancing Safe Transportation throughout the Lifespan

PHOTO - UMTRI / SHERNAH ERRINGTON

THE PURPOSE OF THE *Messenger* IS TO INFORM M-CASTL FACULTY, STUDENTS, SPONSORS, AND FRIENDS ABOUT THE CENTER'S ACTIVITIES.

Words from the M-CASTL Director



M-CASTL staff, faculty, and collaborators continue to pursue opportunities to not only find solutions to the transportation issues facing people of all ages, but also to get this information out to a global audience. We are pleased to announce that three top scholars have agreed to give keynote addresses at our upcoming International Conference of Aging, Mobility, and Quality of Life—Dr. James Jackson, Director of the University of Michigan Institute for Social Research; Dr.

Christine Milligan, Professor of Health and Social Geography, Lancaster University, Division of Health Research, UK; and Dr. Martin Wachs, Senior Principal Researcher, RAND Corporation. The conference will be held at the University of Michigan in Ann Arbor on June 24-26, 2012. Visit the website to submit abstracts for presentations and further conference information (<http://agingmobilityconference.com/>).

We are also pleased to announce that M-CASTL faculty will be editing a special issue of the journal *Accident Analysis & Prevention* on "cognitive impairment and driving safety." We are looking for papers on a wide variety issues related to this topic including, but not limited to: crash risk; screening and assessment of driving fitness; families and caregivers; and facilitating the transition to non-driving. The submission website for this journal is located at: <http://ees.elsevier.com/aap>.

More information on these activities can be found on our website (<http://www.m-castl.org/>). If you have feedback about M-CASTL, or you wish to contribute financially to our activities, please contact me at: m-castl@umich.edu.

My best regards,

David W. Eby, PhD

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M-CASTL Feature

With the theme of *safety and mobility throughout the lifespan*, M-CASTL focuses on the transportation challenges of young people and older adults. At first glance, these groups are associated with very different transportation problems. Young driver issues include distracted driving, speeding, and other risky behaviors, while older people are most often linked to driving problems caused by deteriorating health conditions. The problems faced by these two groups are some of transportation's most challenging, so solving them is a difficult but critical undertaking that has been M-CASTL's focus.

This focus has given Center personnel a unique perspective as work has progressed over the past several years. There is a surprising amount of overlap between young and older drivers in a number of important ways. Young people are often restricted in their ability to travel either by policy or their parents, while older adults often self-restrict or stop driving due to functional declines. Regardless of the reason, both groups face a lack of transportation options which can limit one's mobility and access to important activities, goods, or people.

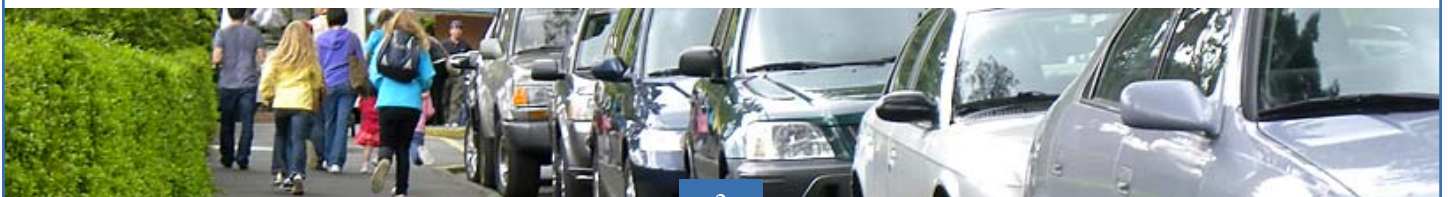
The fact that much of the safety problem lies within the males of these two groups is another common theme that has become apparent. Among young drivers, distraction, risky driving behaviors, and the negative influence of passengers, for example, tend to primarily affect males. Within the older cohorts, males tend to continue to drive longer, even when it is no longer safe for them to do so. In fact, females sometimes stop driving sooner than necessary from a safety standpoint. Another interesting commonality is related to the role of health care providers in traffic safety. It has been commonly suggested that physicians are too busy, and do not feel like it is their role, to speak to patients about traffic safety issues. In separate Center-funded research projects, however, investigators found that optometrists and ophthalmologists are interested in speaking to older patients about driving safety, and that emergency department physicians also feel that it is an important role for them to speak to parents of child patients about traffic safety. This willingness could be a key focus of future interventions aimed at improving traffic safety at both ends of the age spectrum.

In addition to the common challenges faced by both groups, there is also overlap in some of the potential solutions. Driver assistance systems for lane departure and forward crash warnings, vehicle connectivity, electronic monitoring, and night vision enhancement are all technologies that could help both older and young drivers become (and remain) safer drivers. Young and older drivers may actually be the groups where advances in technology have the biggest impact. Modifications to roadway design and signage is another common solution that could benefit both groups. Complex driving situations, like an uncontrolled left turn at an intersection, could be made less difficult to navigate by implementing a system designed with older and younger drivers in mind.

Whether through M-CASTL's research projects, conferences, or other activities, it has been interesting to observe these unexpected parallels emerge over time. These similarities and potential for common solutions suggest that advances in one domain, whether with young or older drivers, may have implications for the other. This overlap highlights the continued importance of interdisciplinary research and creativity in adapting solutions from one area to the specific challenges of another, as we move forward in both of these fields.



PHOTOS THIS PAGE - TOP: UMTRI / GREGORY KOSTYUK; BOTTOM: UMTRI / AMANDA DALLAIRE



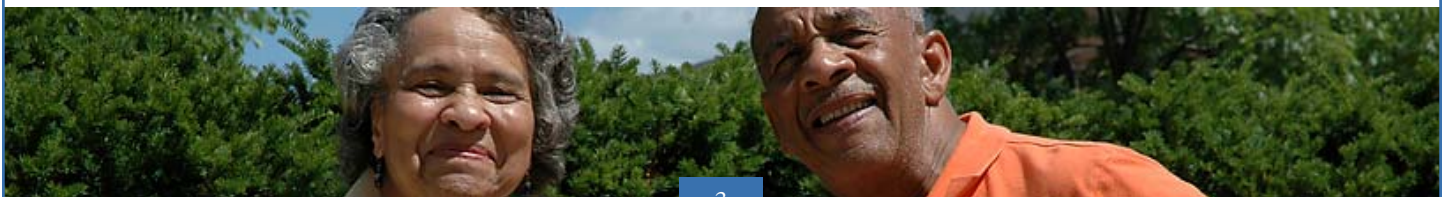
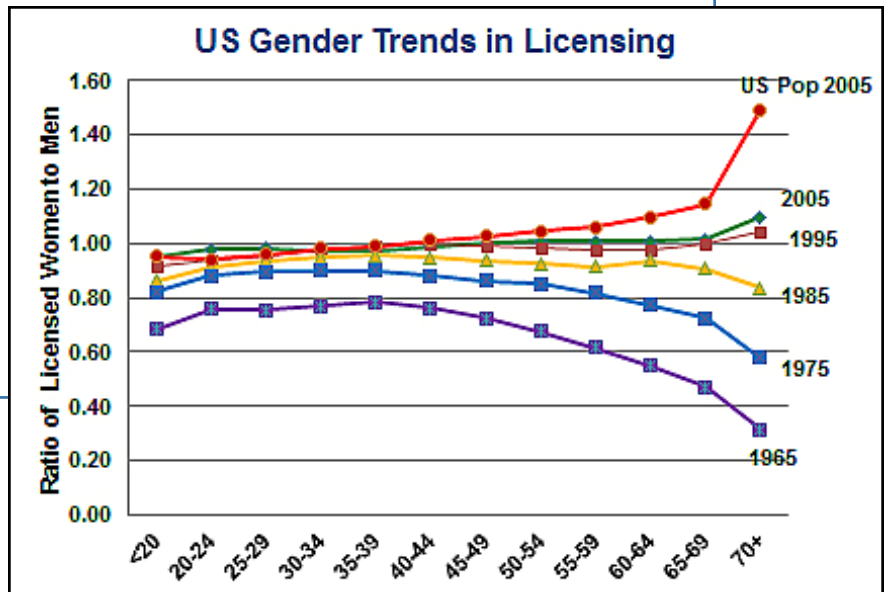


Meet Lidia P. Kostyniuk, PhD, PE

Dr. Lidia P. Kostyniuk is a research scientist at the University of Michigan Transportation Research Institute (UMTRI) and an Adjunct Professor of Urban and Regional Planning at the Taubman College of Architecture and Urban Planning. She holds an MS in aerospace engineering and a PhD in civil engineering from the State University of New York at Buffalo, and is a licensed professional engineer (PE) in Michigan. Her professional career spans more than 30 years and includes teaching, research, and consulting in the area of transportation safety and travel behavior. Although Dr. Kostyniuk's research has covered a broad spectrum of topics in transportation, she has always had an interest in the effects of age on travel behavior. In some of her early work she investigated the effects of increased licensing of women on the travel behavior of households, and was impressed by the mobility implications as cohorts aged (see figure below). While at UMTRI, Dr. Kostyniuk's work on older mobility has included investigation of crash trends and patterns of aging drivers, and several projects examining the process of driving reduction and cessation. Since the beginning of M-CASTL's research program, Dr. Kostyniuk has participated in three Center-sponsored projects. These included *Youth, Age, and Transportation Accessibility: An Intermetropolitan Comparison*, *Driving Reduction and Cessation: Transitioning to Not Driving*, and *Driving Cessation & Caregiving Continuum: Adult Child/Parent Dynamic* (see <http://m-castl.org/node/2> to learn more about these projects). About M-CASTL, Dr. Kostyniuk says that "M-CASTL projects opened doors to other parts of the campus, and have resulted in really enjoyable and productive collaborations." The most recent Center-funded project on which she worked explored the role of adult daughters in their elderly father's transition from driving to not driving (Professor Cathleen Connell, School of Public Health, was the principal investigator).



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Meet Lisa J. Molnar, MHSA



Lisa J. Molnar is the Assistant Director of M-CASTL and a Lead Research Associate at UMTRI. She joined UMTRI in 1986 and has conducted research in a number of areas related to traffic safety and driver behavior over the years. Specific projects have focused on older driver safety and mobility; adolescent driving behavior; development and evaluation of traffic safety laws, policies, and programs; prevention of alcohol-impaired driving; and use and misuse of safety belts and child safety seats. Ms. Molnar co-authored the *Driving Decisions Workbook*, a self-screening instrument for older drivers, and helped develop and test a self-screening website organized around the effects of various health concerns on critical driving skills. She is the primary author of *Promising Approaches for Enhancing Elderly Mobility*, a guide that identifies promising programs and practices in the areas of driver screening and assessment, education and training, vehicle modifications and advanced technology, roadway design, and alternative transportation. She is also the primary author of *Promising Approaches for Promoting Lifelong Community Mobility*, an update of the earlier guide. Her current areas of research interest include self-regulation of driving by older adults, as well as driving and dementia, and she has served as co-investigator on several projects addressing these issues.

Ms. Molnar has authored more than 100 scientific articles, technical reports, and book chapters. She holds a BA in Sociology from Michigan State University and a Master of Health Services Administration (MHSA) in Public Health Policy and Administration from U-M. She is a past convener of the Transportation and Aging interest group of the Gerontological Society of America. At M-CASTL, Ms. Molnar is responsible for assisting the Director in Center oversight; coordinating with state, federal, and international Center partners to identify new program needs and opportunities for collaboration; coordinating the research selection process and chairing the Research Subcommittee; assisting in monitoring of ongoing research projects; facilitating the translation of research into technology transfer activities; and co-organizing the annual conference and other special events. Of her work with M-CASTL, she says, "One of the most satisfying parts of my involvement in the Center has been the opportunity it's afforded me to cultivate interdisciplinary and international partnerships in research and education related to transportation safety and mobility." In addition to her work at U-M, Ms. Molnar enjoys reading, playing bridge and Mahjong, walking, hiking, traveling with friends and family, and attending U-M football and basketball games.





Meet Daniel A. Kellman



Daniel Kellman was born in Pennsylvania, but has lived in Ann Arbor, MI for most of his life. He graduated from Pioneer High School in 2009 and then began his collegiate career at the College of Wooster in Ohio. This fall, he will begin his junior year, but will spend the semester studying abroad at the University of Tel Aviv in Israel. His major is sociology with a minor in psychology, and his academic interests are generally in the behavioral sciences. As part of his college program, Mr. Kellman will complete an independent study, for which he is interested in examining issues related to risk perception. Specifically, he is interested in how differences in people's environment affect their perception of injury risk. This interest brought him to UMTRI as a volunteer M-CASTL student. His goal was to learn about, and participate in, research on understanding the use of vehicular safety mechanisms like seat belts and helmets, a potential topic for his independent study.

While at UMTRI this summer, Mr. Kellman worked on a project that examined factors that influence seat belt use of situational, or part-time, seat belt users.

His role on the study was to code the sequence of events (from naturalistic video data recorded in instrumented vehicles), including seat belt use, as college-aged male drivers entered their vehicles and began to drive the car. All told, he coded approximately 2,100 vehicular trips, data which will be analyzed by other project team members in the coming months. Mr. Kellman said that he hopes to continue to hear about this project, and possibly work with the data, and is appreciative of guidance, support, and trust he received this summer from Lisa Molnar, David Eby, and Bob Goodsell. About his experience he says, "I feel very lucky as an undergraduate student to be given the opportunity to do this type of research so early in my academic career. Being at UMTRI this summer not only taught me how to conduct research, but from all of the meetings and constant communication with others, it taught me how to be a member of a healthy functioning work environment. I am very much looking forward to the prospect of returning to UMTRI later on in my career, hopefully to continue researching and learning even more."

Right: M-CASTL's Executive Committee, Advisory Board, faculty, and staff met after the annual conference.





M-CASTL Activities

On May 3, M-CASTL hosted our annual Transportation Research and Education Conference. Center personnel enjoyed a dinner with the out-of-town conference speakers the night before the conference, and Lisa Molnar took several on a tour of the U-M campus. To read more about the conference, please see the "Technology Transfer News" section of this issue of the *Messenger*, or our website at <http://m-castl.org/node/102>.

On May 18 and again on July 20, David Eby and Lisa Molnar were in Lansing, MI to attend meetings of the Senior Mobility Workgroup of which they are members. Dr. Eby also served on a grant review panel for the National Institute on Aging during May.

Lisa Molnar has participated in a couple of webinars during the past quarter. On May 6th, she participated in the TRB webinar entitled "Communicating the Value of Research: A Focus on Successful State DOT Practices and Case Studies," and on June 28th, she participated in one jointly hosted by the American Society on Aging and Cognistat, entitled "Cognitive Assessment in an Aging Population."

On June 21, Renée St. Louis, M-CASTL's Communications Coordinator, participated in a webinar designed for transportation researchers interested in the aging population and those with special needs. The webinar was presented by the U.S. Department of Transportation, and Ms. St. Louis spoke about the aging-related research with which M-CASTL has been involved.

On July 11, Dr. Eby met with researchers from the University of Oulu (Finland) to discuss a possible joint research project. Between July 25-27, Dr. Eby and Ms. Molnar were in Washington, DC for several meetings. On the 26th, they attended the midyear meeting of the Transportation Research Board Occupant Protection Committee. On July 27th, they met with Peter Kissinger and Jurek Grabowski, both of AAA Foundation for Traffic Safety, to discuss research gaps and needs in older driver safety and mobility. Also on the 27th, Dr. Eby and Ms. Molnar participated in an aging and mobility roundtable hosted by the AAA Foundation.

M-CASTL would also like to announce an upcoming special issue of the journal *Accident Analysis & Prevention*. The issue will cover "cognitive impairment and driving safety," and David Eby and Lisa Molnar will serve as guest editors. Original contributions related to crash risk, screening and assessment of driving fitness, families and caregivers, and facilitating the transition to non-driving, are particularly invited. For more information and Important deadlines, see <http://m-castl.org/files/AAP-CogImpairSpecialIssue.pdf>.

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Education News

On June 16, David Eby was in St. Louis, MO to teach a class on dementia and driving, as part of a driver rehabilitation refresher course at the Veteran's Hospital. He co-taught the class with Dr. Nina Silverstein, a professor from the University of Massachusetts Boston.

As part of M-CASTL's professional education program, David Eby, Renée St. Louis, and Amanda Dallaire traveled to Portland, Oregon for the Council of University Transportation Centers (CUTC) annual Summer Meeting. The meeting was held June 13-15 at Portland State University, with the Oregon Transportation Research and Education Consortium (OTREC) serving as UTC host.

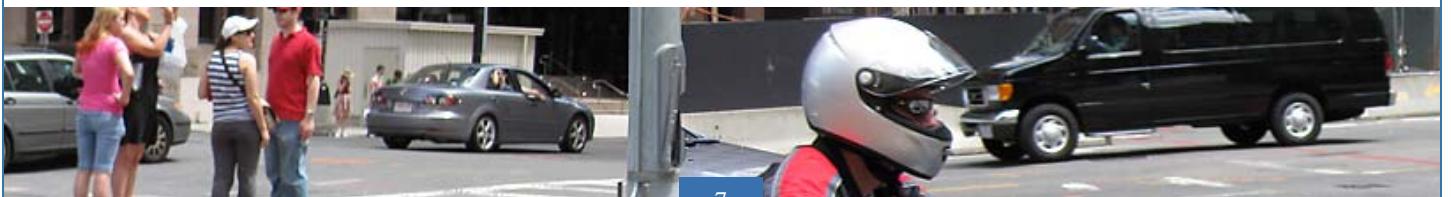
During the upcoming fall semester, Jonathon Vivoda, M-CASTL's Program Coordinator, will leave the Center to serve as a graduate student instructor (GSI) for a course entitled "Research Methods in Psychology." This will allow him to gain valuable teaching experience as he continues in his PhD program. He has enjoyed his time working with M-CASTL and hopes to continue working with Center faculty and staff in the future.



Left: Renée St. Louis and David Eby wait for a streetcar in Portland, OR, at the CUTC Summer Meeting.

Research News

M-CASTL currently has seven ongoing research projects, from the Center's third and fourth year funding cycles. These projects cover a wide variety of topics including the perspective of vision care providers, vehicle workload, caregiving, transitioning to non-driving, drowsy driving, and maintaining alertness while driving. Four of these projects are on time-extensions and are expected to begin wrapping up by the end of the summer, with the others scheduled to end in the fall. Be sure to check our website (<http://m-castl.org/node/2>) to learn about the results of this important research. We will post reports there as soon as each project is completed.





Technology Transfer News

M-CASTL's annual Transportation Research and Education Conference was held on May 3 on the U-M campus. Dr. David Sleet, of the Centers for Disease Control and Prevention, gave the morning keynote address on translating research findings into best practices. Dr. Toni Antonucci, of the U-M Institute for Social Research, gave the afternoon keynote address on bridging the gap between research and practice, using the *Society 2030* consortium as an example. Videos and slides from both of these presentations, as well as all of the others, are available on the conference page of our website at <http://m-castl.org/node/102>.

M-CASTL personnel continue to post Center updates to our facebook page. Photos from the conference, as well as the CUTC summer meeting in Portland, OR are available there. The Center facebook page is a good place to get to know our faculty and staff a little better, and keep updated on new M-CASTL activities. Go to <http://www.facebook.com/mcastl> to check out our page, and remember to "like" it to make sure you get updates in your newsfeed.

M-CASTL personnel continue to work with Elsevier Publishing to plan the Aging, Mobility, and Quality of Life (AMQoL) conference. This international conference is scheduled to be held June 24-26, 2012, on the U-M Ann Arbor campus. For more information about the conference, or to submit an abstract for a presentation or poster, please see <http://www.agingmobilityconference.com/>.



Above: Dr. David Sleet gives the morning keynote address at M-CASTL's Transportation Research and Education Conference.



Left: Dr. Toni Antonucci delivers the afternoon keynote address at M-CASTL's Transportation Research and Education Conference.

PHOTOS THIS PAGE- TOP: UMTRI / JONAHON VIVODA. MIDDLE: UMTRI / JONAHON VIVODA. BOTTOM: UMTRI / RENEE ST. LOUIS.





Upcoming Events

Emerging Issues in Safe and Sustainable Mobility for Older Persons

August 30-September 1, 2011; Washington, DC

<http://crag.uab.edu/safemobility/conference.asp>

The Eye and the Auto International Conference

September 12-14, 2011; Detroit, MI

<http://www.eyeson.org/index.php/research/eye-and-auto>

Improving Roadway Safety Programs Through University-Agency Partnerships

November 2-3, 2011; Washington, DC

<http://www.trb.org/conferences/Safety2011.aspx>

64th Annual Scientific Meeting of the Gerontological Society of America (GSA)

November 18-22, 2011; Boston, MA

<http://www.geron.org/annual-meeting>

91st Annual Meeting of the Transportation Research Board (TRB)

January 22-26, 2012; Washington, DC

<http://www.trb.org/AnnualMeeting2012/Public/AnnualMeeting2012.aspx>



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