



## Michigan Center for Advancing Safe Transportation throughout the Lifespan

### Words from the M-CASTL Director



M-CASTL was founded to increase understanding of, and address three issues related to maintaining safe mobility throughout the life-span: 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; and the elevated crash risk of young drivers. Solutions to these issues benefit greatly from an international perspective. Toward this end, M-CASTL has been forging strong international ties with collaborators. M-CASTL recently sponsored the *International Symposium on Teen Driver Safety* in Ann Arbor, Michigan

which featured speakers from five countries. Our newly awarded research projects include three international collaborators, including one that is jointly funded by Monash University in Australia. We continue to pursue opportunities to collaborate with a group of top Canadian researchers on a groundbreaking longitudinal study of older drivers in the Candrive project. M-CASTL staff have also been visiting with researchers around the world, including most recently, a visit with Dr. Michel Bédard at Lakehead University. Dr. Bédard directs the Centre for Research on Safe Driving in Thunder Bay, Ontario. M-CASTL will continue working to foster these important relationships.

The M-CASTL research program continues to be active. We have awarded four innovative research projects this year. In addition, several of our previously awarded projects are concluding, and final reports are becoming available. Completed projects also have "web briefings" available that provide a concise video summary accessible to a broad audience.

In October, I had the honor of participating in the *Distracted Driving Summit* organized by the US Department of Transportation. Distracted driving is becoming an increasingly important traffic safety issue, particularly for young drivers. The entire summit can be viewed at: [http://www.rita.dot.gov/distracted\\_driving\\_summit/](http://www.rita.dot.gov/distracted_driving_summit/).

M-CASTL has been busy with many other activities the past few months and I invite you to read about them in this issue of the *Messenger*.

My best regards,

David W. Eby, PhD

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

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## M-CASTL Feature

Understanding and mitigating the unique traffic safety problems of young people is an ongoing challenge. Beginning drivers, especially teens, have a well-documented learning curve when they first begin driving. For those of us who have been driving for a number of years, it is easy to forget how complex the task of driving actually is. There are knobs, switches, lights, and buttons to attend to, all while watching both the road ahead, and for other vehicles. These tasks are made even more difficult, especially for beginning drivers, by other activities that compete for a driver's attention. Smartphones and handheld computing devices have brought conversation, dialing tasks, texting, emailing, web browsing, and even TV and movies into the automobile. Young people are more likely to adopt new technologies, even while learning the complex new task of driving.

To best understand the direction in which research should move in this area, we must start with what we know about the problem, and identify the gaps in knowledge. This process allows for a focused approach that has the greatest chance for success. In August, M-CASTL hosted the International Symposium on Teen Driver Safety to assess the current state of knowledge of teen driving from an international perspective. Such an approach provides an opportunity to learn from differences in policy and culture that can affect behavior. The Symposium featured speakers from several different countries, including Australia, The Netherlands, Israel, Canada, as well as many different regions of the US. An opening address was given by Ann Dellinger (Centers for Disease Control and Prevention), a keynote address by Mary Sheehan (Queensland University of Technology; Brisbane, Australia), and closing remarks were delivered by Rob Foss (University of North Carolina Highway Safety Research Center). PowerPoint slides from the presentations are available at <http://m-castl.org/node/57>, and video from the conference will be uploaded in the very near future. One of the important outcomes of this symposium will be an ongoing collaborative effort by the speakers (and others) to prepare materials that will translate our current knowledge into a user-friendly format. Discussions are continuing about how best to proceed, including publishing a book, creating web-based educational materials, or writing articles for a special issue of a journal. More information will be published in the Messenger and on our website, as decisions are made on this continuing process.



*Left to right:* Ann Dellinger, Rob Foss, and Mary Sheehan give talks at the International Symposium on Teen Driver Safety





## Meet Mark M. Banaszak Holl, PhD

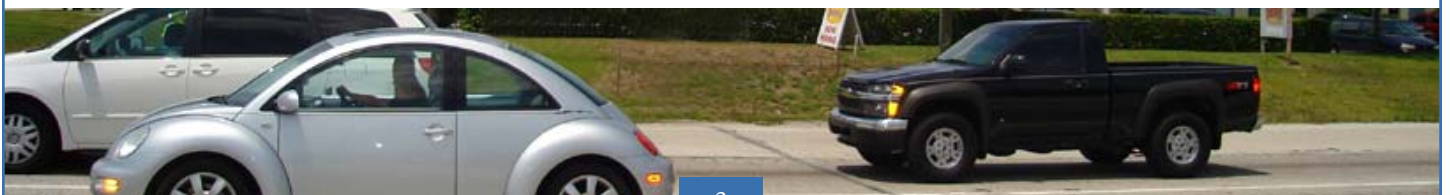
Professor Banaszak Holl earned his BS degree from the University of Chicago in 1986 and his PhD degree from Cornell University in 1991. After a post-doctoral position at IBM's T. J. Watson Laboratory, he held an appointment as an assistant professor at Brown University from 1992-1995, prior to joining the University of Michigan faculty in 1995 as an assistant professor in the Department of Chemistry, College of Literature, Science, and the Arts. In 1999, he was promoted to associate professor in the Department of Chemistry, and in 2004, to professor. He holds a joint appointment as a professor in Macromolecular Science and Engineering, College of Engineering, and is affiliated with the Programs in Applied Physics and Biophysics. Professor Banaszak Holl serves on the Executive Board of the Michigan Nanotechnology Institute for Medicine and Biological Sciences. He also recently agreed to serve on M-CASTL's Executive Committee.



About M-CASTL, Dr. Banaszak Holl says, the Center "exemplifies the dynamic, interdisciplinary interaction between the Department of Transportation, the University of Michigan Transportation Research Institute, and the broader University of Michigan community that best leads to important advances in understanding the challenges faced by our older and younger drivers."

Professor Banaszak Holl is a distinguished scientist whose research focuses on the synthesis, analysis, and biological activity of nanomaterials, and he has developed or adapted several different techniques to analyze these materials. He is also active in the field of main group organometallic chemistry. He is a fellow in the American Association for the Advancement of Science and a member of the American Chemical Society. His research has been extensively published and cited in peer-reviewed publications and he has been principal investigator or co-investigator on numerous research projects.

*At right:* Presenters from the International Symposium on Teen Driver Safety pose with M-CASTL faculty and staff in the U-M Union





## Meet Joyce Daniels, MA

Joyce Daniels is a writer who joined UMTRI May, 2009. She began working at the University of Michigan in 1998 as an editor for the Michigan Sea Grant College Program, formerly in the College of Engineering and now in the School of Natural Resources and Environment. As editor, she produced the program's quarterly newsletter, *upwellings*, focusing on Great Lakes research, outreach and education. She also contributed to a number of award-winning materials including books, posters, and online educational content. During the course of her work, Ms. Daniels has had the opportunity to interview many researchers at U-M and Michigan State University, and to write about their research for a broad audience.



About M-CASTL, Ms. Daniels says, "Over the last six months, I've learned a lot about the M-CASTL program and its mission. The Center's work to advance safe transportation across all age ranges is extremely important, particularly as transportation issues and challenges are changing rapidly. Through research and educational efforts, the M-CASTL staff is helping us to understand and address some of the vital issues that impact transportation safety."

Ms. Daniels holds a bachelor of arts degree in English from Western Michigan University and a master of arts degree in Mass Communication from the University of Wisconsin, with a concentration in science and technical writing.

## Meet Christian L. Hanna, MPH



Christian (Chris) L. Hanna received a bachelor of science (BS) degree from the University of Michigan, School of Natural Resources and Environment, and a master of public health (MPH) degree from the University of Northern Colorado. He is currently working on a PhD through the Karolinska Institutet-Division of International Health in Stockholm, Sweden. His thesis is on Young Unlicensed Drivers and Injuries: Scope, Nature, and Consequences of the Problem in the US.

Mr. Hanna's previous work experience includes substance abuse prevention programming in northwest Colorado, coordination of a rural national resource center for child and adolescent injury and violence prevention in Wisconsin and Michigan, and county consultant for child death review teams at the Michigan Public Health Institute. He recently began working for the Michigan Department of Community Health—Division of Chronic Disease and Injury Control, evaluating nutrition and physical education programs in low income schools in Michigan.

About M-CASTL, he says "I have been aided tremendously in my PhD thesis from my relationship with M-CASTL, not only through assistance with funding but also timely mentoring by Dr. Ray Bingham and the staff at UMTRI. I have also had the opportunity to participate in M-CASTL seminars and conferences."

PHOTOS THIS PAGE—TOP: COURTESY OF JOYCE DANIELS. MIDDLE: UMTRI / AMANDA DALAIRE. BOTTOM: UMTRI / JONATHAN VVODA





## M-CASTL Activities

On August 4, Jonathon Vivoda (M-CASTL's program coordinator) presented an overview of M-CASTL at a seminar for UMTRI's students. His talk focused on the multi-disciplinary nature of the Center, as well as the importance of student involvement. Between August 13-14, Amanda Dallaire (M-CASTL's administrative assistant) was in Holland, Michigan to attend the 2009 Society of Research Administrators Michigan Chapter Meeting.

The Research Subcommittee met in late August to discuss proposals received in response to M-CASTL's latest request for proposals. The subcommittee discussed the projects and their peer-review scores, and made recommendations about project awards for the upcoming year. Details about the awarded projects are provided in the Research News section of this issue of the *Messenger*.

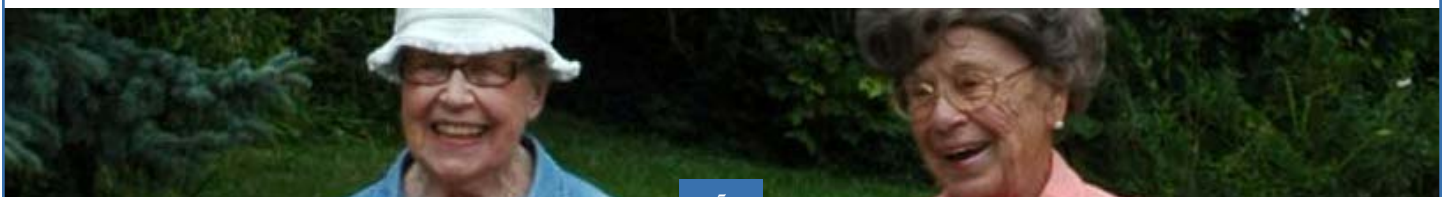
On September 8<sup>th</sup>, John Maddox, the associate administrator of Vehicle Safety Research at the National Highway Traffic Safety Administration (NHTSA) visited UMTRI. Dr. David Eby met with him to discuss M-CASTL's structure, mission, faculty, staff, and activities. On September 16-17, Lisa Molnar (M-CASTL's assistant director) attended the conference "The Eye and The Auto," held in Detroit, MI. The conference focused on the relationship between vision and safe operation of a motor vehicle.

Between September 30 and October 1, David Eby was in Washington, DC to take part in the US Department of Transportation's (US-DOT) Distracted Driving Summit. The goal of the Summit was "to address the dangers of text-messaging and other distractions behind the wheel." The Summit brought together elected officials, transportation experts, academics, safety advocates, and law enforcement representatives to discuss distracted driving from multiple perspectives. Dr. Eby gave a presentation entitled "Technology and Distracted Driving: A Double-Edged Sword." His expanded comments from the summit are available on our website at (<http://m-castl.org/files/DDSummitEbyExpandedComments.pdf>). Video and other information from the Summit is posted on the US-DOT's website ([http://www.rita.dot.gov/distracted\\_driving\\_summit/](http://www.rita.dot.gov/distracted_driving_summit/)).

On October 12, David Eby, Lisa Molnar, and Jonathon Vivoda met with Dr. Mark Banaszak Holl, the associate vice president for research—physical and natural sciences. The trio described M-CASTL's mission, structure, and goals and answered question posed by Dr. Banaszak Holl. M-CASTL is very pleased to welcome Dr. Banaszak Holl as a new member of the Center's Executive Committee.

David Eby also traveled to Thunder Bay, Ontario, Canada to meet with Dr. Michel Bédard of Lakehead University on October 26. Dr. Bédard is the Canada Research Chair in Aging and Health, and Director of the Center for Research on Safe Driving (CRSD). Drs. Eby and Bédard discussed potential collaborative opportunities between CRSD and M-CASTL. While in Thunder Bay, Dr. Eby also presented at Café Scientifique, and at a research colloquium.

Also on October 26, several officials from the US-DOT visited UMTRI. Lisa Molnar gave a presentation about M-CASTL to Ken Leonard (Federal Motor Carrier Safety Administration, FMCSA), John Maddox (NHTSA), Terry Shelton (FMCSA), and Mike Trentacoste (Federal Highway Administration), and answered questions about the Center's research, education, and technology transfer activities, as well as future plans.





## Technology Transfer News

As mentioned in other sections of this issue of the *Messenger*, M-CASTL has released several new reports and multimedia over the last quarter. You can always find new reports, multimedia, brochures, and newsletters by clicking on the "Technology Transfer" section of our website (<http://m-castl.org/node/4>), so check there often for new information. The recently added information includes 5-minute research summary videos by project directors and staff from two completed research projects, as well as the report from the "Driving Reduction and Cessation" project. The report for the "Self-Regulation by Older Drivers" project will be uploaded shortly.

The M-CASTL 2009 Annual Report was completed in September and can be downloaded at <http://m-castl.org/files/2009AnnualReport.pdf>. Dr. David Eby's expanded comments from the US-DOT's distracted driving summit are also in the technology transfer area of our website, as is a new report entitled "Fitness to Drive in Early Stage Dementia: An Instrumented Vehicle Study."

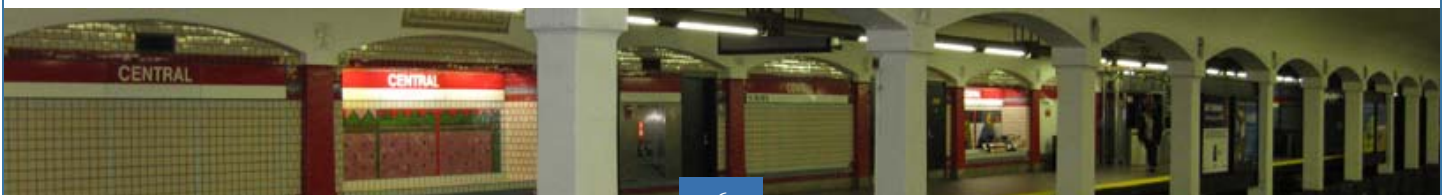
As mentioned in the feature story for this issue of the *Messenger*, videos were also recorded during the International Symposium on Teen Driver Safety. These videos will be added to our website in the next few weeks. For PowerPoint slides or other information about the Symposium, go to <http://m-castl.org/node/57>.

## Education News

Every year all University Transportation Centers (UTCs) participate in the Outstanding Student of the Year Award program. M-CASTL has recently announced the availability of the award to all Center students. Several members of M-CASTL's Executive Committee have agreed to serve on the Education Subcommittee. This Subcommittee will evaluate the students based on the following: 1. Research and Technical Merit, 2. Academic Performance, and 3. Professionalism and Leadership. Each student will submit documentation related to these areas, and give a short presentation to the Subcommittee. The winning student will receive \$1,000, the cost of attendance at the Annual Meeting of the Transportation Research Board, and a certificate from the US-DOT. The winner of the award will be announced next month, so be sure to check our website for updates.

Jonathon Vivoda, M-CASTL's program coordinator and a graduate student in the U-M School of Public Health recently gave a poster presentation about M-CASTL and UMTRI as part of his graduate program. The poster session is intended to give first-year graduate students an idea of some of the different types of jobs that are available related to the field of public health.

As part of the professional education program, several faculty and staff will be traveling to Atlanta, GA to participate in the 62<sup>nd</sup> Annual Scientific Meeting of the Gerontological Society of America (GSA). Several of the faculty and staff will be presenting research results from M-CASTL funded projects.





## Research News

M-CASTL was very pleased to award funding to four new projects for the upcoming year. The new projects are entitled "*Assessing Driving in Older Adults: Perspectives of Vision Care Providers*" with principal investigator (PI) Nancy Janz of the School of Public Health (SPH), "*Development of a Protocol to Assess the Effects of Workload on Older Drivers: A First Step*" with PI Paul Green of UMTRI, "*Driving Cessation and Caregiving Continuum: Adult Child/Parent Dynamic*" with PI Cathleen Connell of SPH, and "*Using Vehicle Instrumentation to Better Understand the Transitioning Process: An Exploratory Study*" with PI David Eby of UMTRI/M-CASTL. These projects are now underway, and we look forward to hearing about exciting new results at this time next year.

Active work on M-CASTL's first round of research projects has now ended. Reports from two of these projects are now available in the technology transfer section of our website (<http://m-castl.org/node/4>). Principal investigators from these projects were also required to prepare a 5-minute video to describe the study and its results. These videos are also available on our website. Click the link above to hear directly from the project director and staff about what these projects found.

The two research projects funded during M-CASTL's second-year funding cycle have received no-cost time extensions. Both projects are expected to wrap up by the end of December. Once completed, reports and 5-minute videos from these projects will be added to our website and announced here in the *Messenger* and on our Facebook page.

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## Upcoming Events

### Technology Matters Conference

November 9, 2009; Brighton, MI  
<http://alz.org/mglc/>

### SMART's Sustainable Urban Mobility & Accessibility Summit

November 9-12, 2009; Ann Arbor, MI  
<http://um-smart.org/resources/conference09/overview.html>

### 62<sup>nd</sup> Annual Scientific Meeting of the Gerontological Society of America (GSA)

November 18-22, 2009; Atlanta, GA  
<http://www.geron.org/Annual%20Meeting>

### 89<sup>th</sup> Annual Meeting of the Transportation Research Board (TRB)

January 10-14, 2010; Washington, DC  
<http://www.trb.org/AnnualMeeting2010/Public/AnnualMeeting2010.aspx>

### Michigan Traffic Safety Summit

March 30-April 1, 2010; East Lansing, MI  
<http://www.michigan.gov/ohsp>

### M-CASTL Transportation Research and Education Conference

April 7, 2010; Ann Arbor, MI  
<http://m-castl.org/>

### Lifesavers Annual Conference on Highway Safety Priorities

April 11-13, 2010; Philadelphia, PA  
<http://www.lifesaversconference.org/registration.html>

**Save the Date**  
M-CASTL's annual Transportation Research and Education Conference will be held April 7, 2010 at the Michigan League.  
*Detailed information will be available at*  
<http://m-castl.org>



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