

NDRS SESSION 2018 SCHEDULE

Conference Program will be App based, including voting for poster session. Instructions at www.ndr-symposium.com

27
MON

6:00-7:00 PM Free and optional tour of Smart Road facilities,
including the new expansions (shuttle provided)

28
TUES

7:00-9:30 AM Registration

7:30 AM Continental Breakfast

8:00-8:30 AM Welcoming Remarks

Jon Hankey, Director of Research

Miguel Perez, Director of Center for Data Reduction and Analysis Support

Virginia Tech Transportation Institute,

8:30-10:15 AM Speeding, Cell phones, Distraction, OH MY! Examining Risky Driving Behavior
through Naturalistic Driving Research

MODERATOR: Chris Hayes, Travelers

- "Predictors of observed speeding behavior in SHRP 2 NDS data"

Christian M. Richard, Joonbum Lee, Randolph Atkins

Battelle, NHTSA

- "Who speeds more often: Comparisons between motorcyclist and
car driver speed selections"

Cameron Rainey, Shane McLaughlin, Tim Buche

Virginia Tech Transportation Institute, Motorcycle Safety Foundation

- "Using European naturalistic driving data to assess secondary task
engagement when stopped at a red light"

Tina Morgenstern, Tibor Petzoldt, Josef F. Krems, Frederik Naujoks, Andreas Keinath

TU Chemnitz, TU Dresden, BMW Group

- "Evaluate the causal relationship between crash risk and cellphone use
using propensity score method"

Danni Lu, Feng Guo

Virginia Tech

10:15-10:45 AM Break/Networking (Refreshments Provided)

10:45 AM-12:15 PM Beyond Police Reports: Crash and Near-crash Analyses Using Naturalistic Data

MODERATOR: Martin Walker, Federal Motor Carrier Safety Administration

- "Analysis of differential crash and near-crash involvement based on
naturalistic driving data"

Wenyan Huang, Johan Engström, Andrew Miller, Felix Dreger, Susan Soccolich,

Joost de Winter, Sahar Ghanipoor Machiani

Virginia Tech Transportation Institute, Delft University, San Diego State University

- "Near-crash characteristics among risky drivers using the SHRP 2
Naturalistic Driving Study"

Thomas Seacrist, Ethan Douglas, Aditya Belwadi, Helen Loeb

The Children's Hospital of Philadelphia

- "Analysis and Classification of Crashes and Near-Crashes involving 16-19 year old drivers"

Yohan Chang, Nipjyoti Bharadwaj, Praveen Edara, Carols Sun

University of Missouri

- "Understanding fixed object crashes with SHRP 2 Naturalistic Driving Study data"

Haiyan Hao, Eric Li, Alejandra Medina, Ron Gibbons

Virginia Tech Transportation Institute

12:30-1:45 PM Lunch (Provided) and Keynote (Russell Neudorf)
Latham Ballroom

1:45-3:15 PM Weather and Work Zones: Exploring Infrastructure and Environmental Conditions with Naturalistic Driving Research

MODERATOR: Mike Fontaine, Virginia Transportation Research Center

- "Use of the SHRP 2 safety data for investigation of driver behavior in adverse weather conditions: Lessons learned from the Wyoming Department of Transportation Implementation Assistance Program"
Mohamed Ahmed, Ali Ghasemzadeh, Britton E. Hammit, Nasim Khan, Anik Das, Elhashemi Ali, Rhonda Kae Young, Hesham Eldeeb
University of Wyoming, Gonzaga University, Deep Numerics, LLC
- "The development of new insights into driver behavior to improve high visibility enforcement programs"
Kevin Majka, John Pierowicz, Panagiotis Anastasopoulos, Grigorios Fountas, Sarvani Sonduru Pantangi
CUBRC, SUNY at Buffalo
- "Modeling driver work-zone speed on 4 lane divided highways"
Amrita Goswamy, Shauna Hallmark, Omar Smadi, Sue Chrysler
Institute for Transportation at Iowa State University, Human Factors Consultant
- "Utilization of SHRP2 Naturalistic Driving Study adverse weather data to evaluate driver behavior"
Cristian Druta, Andrew Kassing
Virginia Tech Transportation Institute

3:15-3:45 PM Break/Networking (Refreshments Provided)

3:45-5:15 PM Canada Naturalistic Driving Study, Eh? Happenings From Our Northern Neighbours

MODERATOR: John Pearson, Council of Deputy Ministers Responsible for Transportation and Highway Safety Secretariat

- "An overview of the Canada Naturalistic Driving Study and Canada Truck Naturalistic Driving Study"
Charlie Klauer
Virginia Tech Transportation Institute
- "Crash types & contributing factors: Canadian & US naturalistic driving studies"
Joanne Harbluk, Peter Burns, Paul Boase, Shu Han, Charlie Klauer, Jon Hankey
Transport Canada, Virginia Tech Transportation Institute
- "Overview and preliminary analysis of Naturalistic Canadian Truck Naturalistic Driving Study"
Abhijit Sarkar, Charlie Klauer, Jon Pearson, Rich Hanowski, Jon Hankey
Virginia Tech Transportation Institute, Council of Deputy Ministers Responsible for Transportation and Highway Safety
- "Will tough regulation reduce cellphone use: a comparison of driver behavior using Canada Naturalistic Driving Study and SHRP2 Naturalistic Driving Study"
Feng Guo, Charlie Klauer, Shu Han
Virginia Tech Transportation Institute

5:15-5:45 PM Break

5:45-7:45 PM Poster Potpourri (voting via app) and Reception

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WED

7:30 AM Continental Breakfast

8:00-8:15 AM Welcoming Remarks

Jon Hankey, Director of Research
Virginia Tech Transportation Institute

8:15-9:45 AM Highway to Health: Using Naturalistic Driving Studies to Explore Relationships Between Health and Safety

MODERATOR: David Plazak, Transportation Research Board

- **"The impact of sleeping and on driving performance over long trips for commercial truck drivers"**
Yi Liu, Feng Guo, Richard Hanowski
Virginia Tech, Virginia Tech Transportation Institute
- **"Crash rates among young drivers diagnosed with externalizing and internalizing psychopathology "**
Kellienne R. Sita, Pnina Gershon, Jeremy W. Luk, Bruce G. Simons-Morton
The Eunice Kennedy Shriver National Institute of Child Health and Human Development
- **"Road choices of low mileage older drivers: Findings from the Ozcandrive older cohort study"**
Daniel Griffiths, Sjaan Koppel, Judith L. Charlton, Peter Lui, Peteris Darzins, Marilyn Di Stefano, Morris Odell, Michelle M. Porter, Shawn Marshall
Monash University Accident Research Centre, Monash University Eastern Health Clinical School, La Trobe University, Victorian Institute of Forensic Medicine, Department of Health Studies and Gerontology, University of Waterloo, Ottawa Hospital Research Institute
- **"Does arthritis affect behavior of drivers?"**
Mohammed Almannaa, Max Bareiss, Luke Riexinger, Feng Guo
Virginia Tech

9:45-10:15 AM Break/Networking (Refreshments Provided)

10:15-11:45 AM Teen Drivers: Decoding the Early Years

MODERATOR: Jane Terry, National Safety Council

- **"Teenage drivers: Multitasking, visual inattention, and crash risk"**
Pnina Gershon, Johnathon P. Ehsani, Kellienne R. Sita, Sheila G. Klauer, Tom Dings, Bruce Simons-Morton
The Eunice Kennedy Shriver National Institute of Child Health and Human Development (NIH/NICHHD), Johns Hopkins Bloomberg School of Public Health, Virginia Tech Transportation Institute
- **"Driving errors and crashes during early independent licensure among teenage drivers"**
Johnathon P. Ehsani, Chunming Zhu, Pnina Gershon, Sheila G. Klauer, Bruce Simons-Morton
Johns Hopkins Bloomberg School of Public Health, The Eunice Kennedy Shriver National Institute of Child Health and Human Development (NIH/NICHHD), Virginia Tech Transportation Institute
- **"Do real time and post hoc feedback reduce teen drivers' engagement in secondary tasks"**
Gayatri Ankem, Charlie Klauer, Peter Baynes, Feng Guo, Bruce Simons-Morton, Pnina Gershon, Johnathon Ehsani, Tom Dings
Virginia Tech Transportation Institute, Johns Hopkins Bloomberg School of Public Health, The Eunice Kennedy Shriver National Institute of Child Health and Human Development (NIH/NICHHD)
- **"The effect of passenger presence and passenger type on novice teenage drivers crash/near-crash rates"**
Pnina Gershon, Kellienne R. Sita, Johnathon P. Ehsani, Sheila G. Klauer, Tom Dings, Bruce Simons-Morton
The Eunice Kennedy Shriver National Institute of Child Health and Human Development (NIH/NICHHD), Johns Hopkins Bloomberg School of Public Health, Virginia Tech Transportation Institute

12:00-1:15 PM Lunch (Provided) and Keynote (Tom Dings)

Latham Ballroom

1:15-2:45 PM Caution: Innovation ahead! Exploring Automation and Technology through Naturalistic Driving Research

MODERATOR: John Capp, General Motors

- "Examining visual behavior of drivers while using adaptive cruise control on commercial motor vehicles"
Kevin Grove, Susan Soccolich, Rich Hanowski, Johan Engstrom
Virginia Tech Transportation Institute
- "MIT autonomous vehicle technology study"
Lex Fridman, Bryan Reimer
MIT
- "Exploring human-vehicle communication to balance transportation safety and efficiency"
Micah Roediger, Jeffrey Hickman, E. Scott Geller
Virginia Tech Transportation Institute, Virginia Tech
- "Examining senior drivers adaption to mixed level automated vehicles: Focus group results from a naturalistic driving study"
Dan Liang, Stephanie Baker, Nathan Lau, Jon Antin
Virginia Tech, Virginia Tech Transportation Institute

2:45-3:00 PM Break/Networking (Refreshments Provided)

3:00-4:45 PM Modern Marvels in Naturalistic Data Methodologies and Applications

MODERATOR: Jon Hankey, Virginia Tech Transportation Institute

- "A method for identifying aggressive driving by using naturalistic driving data"
Jordanka Kovaceva, Irene Isaksson-Hellman
Chalmers University Of Technology, If P&C Insurance
- "The role of driver attributes in understanding driver behavior"
Rachel M. James, Britton E. Hammit
The University of Texas at Austin, University of Wyoming
- "Developing a methodology to reduce the heterogeneity of driver behavior and increase the transferability of the results in SHRP2 Naturalistic Driving Study"
Ali Ghasemzadeh, Mohamed M. Ahmed
University of Wyoming
- "Risk situation prediction with near-miss incident data base"
Tsukasa Sugino, Julian Eggert
Honda Research Institute Europe GmbH

4:45-5:00 PM Concluding Remarks

Jon Hankey, Director of Research
Virginia Tech Transportation Institute,



8:30 AM-3:00 PM Workshop: Developing a Framework for Advancing Marijuana-Impaired Driving Research
Virginia Tech Transportation Institute

POSTER POTPOURRI

Poster voting will be done via conference app. Please see instructions below:

Using Network App

1. Visit get.networkapp.eu on your device for the correct version for your iPhone, Android or Windows Phone or search for "Networkapp" in the your device's app store.
2. Set up an account; Register via LinkedIn or email.
3. Enter the code ndrs2018 to access the event.

Voting in the Poll

1. Scroll to the bottom of the main section and click on the "Vote for best poster!" button located below program preview.
2. Choose your favorite poster presentation and then click "Vote".

Note: Once you submit your vote the voting screen will disappear.

"Automatic extraction of driver behavior in car following from SHRP2 video: a preliminary analysis of SHRP 2 NDS training data"

Max Bareiss, Hampton C. Gabler Virginia Tech

"Characterization of conventional cruise control engagement using naturalistic driving data"

Alexandria Noble, Danni Lu, Alexis Basantis, Feng Guo, Charlie Klauer, Miguel Perez
Virginia Tech Transportation Institute

"Simulating the relative influence of factors relating to forward collision accident rates"

Daniel Christ, Fabrice Goizet Michelin Research North America, Michelin Research France

"Assessing a risky driving survey's effect on driver crash prediction"

Jon Atwood Virginia Tech Transportation Institute

"The relation between driving context and drivers' self-regulation of mobile phone use"

Michiel Christoph, Simone Wesseling, Nicole van Nes SWOV Institute for Road Safety Research

"Investigation of car-following behavior in adverse weather conditions using the SHRP 2 Naturalistic Driving Study"

Britton E. Hammit, Rachel M. James, Ali Ghasemzadeh, Mohamed Ahmed University of Wyoming, University of Texas at Austin

"Developing an experimental task to identify neurophysiological correlates of hazard detection: A novel application of SHRP 2 naturalistic driving videos"

Johnathon P. Ehsani, Mitchell L. Doucette, Neale Kinnear

Johns Hopkins Bloomberg School of Public Health, Transport Research Laboratory

"Crash rates over time among novice and older drivers in the SHRP 2 Naturalistic Driving Study"

Bruce Simons-Morton, Pnina Gershon, Sheila G. Klauer, Johnathon P. Ehsani, Tom Dingus

The Eunice Kennedy Shriver National Institute of Child Health and Human Development (NIH/NICHHD), Virginia Tech Transportation Institute, Johns Hopkins Bloomberg School of Public Health

"Effect of age and intersections on motor vehicle crashes"

Jose A. Calvo IV, Carryl L. Baldwin, Brian H. Philips George Mason University, Federal Highway Administration

"A new method for near-crash identification with Roadside LiDAR data"

Jianqing Wu, Hao Xu University of Nevada, Reno

"Kinematic event-based driver risk assessment using NDS"

Huiying Mao, Feng Guo, Xinwei Deng Virginia Tech

"Quantifying driver behavior in SHRP-2 bicycle crashes and near-crashes"

Samantha H. Haus, H. Clay Gabler Virginia Tech

"Improper passing related crashes: Identifying patterns using negative binomial precise rules"

Subasish Das, Lisa Minjares-Kyle, Raul Avelar Moran, Bharadwaj Bommanayakanahalli

Texas A&M Transportation Institute