

ESV 2023 Award Recipients

U.S. Government Special Awards of Appreciation

In recognition of and appreciation for outstanding leadership and special contributions in the field of motor vehicle safety.

UNITED STATES



Jane Lappin

Chairperson and Founder, Standing Committee on Road Vehicle Automation
Transportation Research Board
United States

Ms. Jane Lappin chairs the National Academies of Engineering Transportation Research Board Vehicle-Highway Automation Committee and is co-founder of the annual Automated Road Transportation Symposium, now in its 12th year. She recently retired as Director of Public Policy and Government Affairs for Toyota Research Institute where she monitored global activities related to the safe operations of highly automated vehicles. Previously, Ms. Lappin worked for USDOT Volpe Center where she managed projects assessing public response to advanced vehicle technologies and the impact of those technologies on driver behavior. Ms. Lappin served as USDOT secretariat to the trilateral US-EU-Japan international research collaboration on intelligent transportation and as the US co-chair of the US-EU-Japan Automation in Road Transportation Working Group. Before discovering her true calling in transportation, Ms. Lappin worked for Abt Associates in their business strategy group, for the Canadian International Development Agency evaluating women's economic development programs in Bangladesh and co-directing a public health survey in Haiti. She studied sociology as an undergraduate at Boston University and earned an MBA from the Simmons College Graduate School of Management, the world's only all women's business school. Ms. Lappin is currently consulting on automated vehicles safety, operations, and policy issues.

GERMANY



Prof. Dr.-Ing. Lothar Wech
Professor
Technische Hochschule Ingolstadt
Germany

Since the 2000s, Dr. Wech has become one of the world's leading service providers in the fields of active and passive safety, new drive technologies, and assisted and automated driving. He established intensive cooperation with leading national and international institutions and was responsible for TÜV SÜD's contributions to the development of test procedures, standards, and regulations for innovative vehicle systems. In 2016, Dr. Wech was appointed full Professor for vehicle safety and technical mechanics at Technische Hochschule Ingolstadt. He actively conducted research on future concepts of vehicle safety at the Center of Automotive Research on Integrated Safety Systems and Measurement Area (CARISSMA) at THI. Serving as speaker for the leading scientific center for vehicle safety in Germany CARISSMA, he tirelessly played a pivotal role in promoting and advancing traffic safety using his extensive network in the community and beyond.

SWEDEN



Cecilia Sunnevång
Vice President, Research
Autoliv
Sweden

Dr. Cecilia Sunnevång is the Vice President of Research at Autoliv, a global market leader for automotive safety systems that saves more than 30,000 lives annually. In her role, she drives research and innovation towards maximizing real-life impact, and to provide solutions for mobility and society. During her 20 years within Autoliv she has worked with development and engineering before joining the Research department in 2006 as

a biomechanical expert. She has a PhD from Umeå University in Sweden and has published and presented her work extensively in scientific journals and conferences.

JAPAN



Terunao Kawai

National Agency for Automobile and Land Transport Technology
National Traffic Safety and Environment Laboratory
Japan

Terunao Kawai is the Managing Director for Research Affairs on Automated Driving Technology and the Director of the Automotive Safety Research Department at the National Traffic Safety and Environment Laboratory, Japan (NTSEL) as well the Director of the Institute for Automated and Connected Vehicle Standardization, Japan, where he currently engages in research and test methodology of autonomous vehicle safety.

Mr. Kawai has over 30 years of experience as a scientific researcher in the field of internal engine combustion research and emissions measurement. In addition, Mr. Kawai has spent over a decade developing master plans of testing methodology for both the performance of electric vehicles as well as vehicle safety issues for autonomous vehicles. He continues to contribute to the establishment of international safety regulations for autonomous vehicles.

JAPAN



Koji Mizuno
Professor
Nagoya University
Japan

Professor Koji Mizuno has conducted research in areas of motor vehicle crash safety and impact biomechanics for over 30 years. He worked eleven years at the National Traffic Safety and Environment Laboratory (NTSEL). From 2000 to present, he has been working at the Nagoya University. Dr. Mizuno has made significant contributions to vehicle safety while being in academia. He has published more than 80 English technical journal papers on vehicle safety. He has enhanced the progress of vehicle safety and established the field of vehicle safety as an academic field through serving as journal editors, providing lectures in various universities, and publishing books. Dr. Mizuno has demonstrated outstanding leadership in JNCAP and has been a member of the JNCAP committee and its working groups since 1998. He served as chair in the pedestrian and child safety working groups in JNCAP. From his technical knowledge of vehicle safety, he has contributed by developing test procedures for use by the JNCAP, especially for introducing frontal impact tests, an MPDB test, and a pedestrian test. Dr. Mizuno played a central role in the JNCAP working group in developing an evaluation method of injury risks to occupants and pedestrians. In 2022, Dr. Mizuno was elected as a chairperson in JNCAP.

UNITED STATES

**Deborah Hersman**

Board of Directors, NiSource

Board of Directors, Velodyne

United States

Ms. Deborah Hersman is a passionate safety leader who has served as the Chairman of the National Transportation Safety Board (NTSB), CEO of the National Safety Council, and Chief Safety Officer at Waymo. During her 10 years at the NTSB, she led efforts to address distracted and impaired driving, demand advances in vehicle safety and drove improvements in child passenger safety, issuing reports and recommendations, and testifying dozens of times in state legislatures and before Congress. At the National Safety Council, she led a multi-year public education campaign called “My Car Does What?” to educate consumers about the driver assistance technologies in their vehicles; she chaired “The Road to Zero Coalition” established by the National Highway Traffic Safety Administration, Federal Highway Administration, and the Federal Motor Carrier Safety Administration to bring together diverse interest groups and stakeholders to address the death toll on our roadways; and she created a coalition of industry, non-profits, and academics to engage the public on vehicle automation called “PAVE (Partners for Automated Vehicle Education).” She served as the first Chief Safety Officer of Waymo, Google’s self-driving car project, and established processes and built teams to oversee system safety, worker safety and field safety of autonomous vehicles. Earlier in her career, she served as a legislative staffer in the U.S. House of Representatives and U.S. Senate, contributing to milestone laws addressing vehicle and road safety as well as legislation that created the Federal Motor Carrier Safety Administration, the modal agency responsible for overseeing bus and truck safety in the U.S. She also held license endorsements to drive commercial trucks, school buses, and motorcycles and was a certified child passenger safety seat technician for over a decade.

ESV 2023 Award Recipients

U.S. Government Awards for Safety Engineering Excellence

In recognition of and appreciation for exceptional scientific contributions in the field of motor vehicle safety engineering and for distinguished service to the motoring public.

JAPAN



Yuichi Kitagawa

Toyota Motor Corporation
Japan

Dr. Yuichi Kitagawa has devoted his career to human modeling research for over 20 years. He graduated from Tokyo University of Science in 1998 and earned his PhD degree at Tokyo Institute of Technology in 1996. He worked for Nissan Motor from 1999 to 2003. During that period, he visited Wayne State University in Michigan to study impact biomechanics. He joined Toyota Motor Corporation in 2004 and participated in the development team of the whole body virtual human model THUMS. Dr. Kitagawa has led the application team at Toyota for 18 years. He published more than 30 technical papers on injury simulation using THUMS. Dr. Kitagawa is the Chief Professional Engineer in Advanced R&D and Engineering Company of Toyota. He served as Assistant Chairman of Technical Committee, GHBM from 2006 to 2009. He served as Council Member of IRCOBI from 2019 to 2020. He became a fellow member of JSAE in 2020.

GERMANY



Markus Hermle
Mercedes-Benz AG
Germany

Dr. Markus Hermle has been working in the passive safety department at Mercedes-Benz since 2011 and is currently in charge of the passive safety and painted body EVA (Electro Vehicle Architecture), e-mobility, computer-aided engineering (CAE) department.

He is responsible for the further development of the CAE methods for all aspects of passive safety from structural calculations to occupant protection. These activities resulted in a wide range of publications and new standards that are used worldwide today in the development of passive safety functions.

On this basis, he assumed responsibility for the development of the first passive safety purpose design electric vehicle platform from Mercedes-Benz at the end of 2016. This platform was launched with the lead vehicle EQS in 2021. This vehicle shows that the high safety standard of Mercedes-Benz can be transferred to the world of electromobility: Safety is not a question of the drivetrain.

JAPAN

**Atsuhiro Konosu**

Japan Automobile Research Institute
Japan

Dr. Atsuhiro Konosu works at the Japan Automobile Research Institute and has made exceptional technical contributions in the area of pedestrian safety by developing innovative test tools and test methods for passive safety. He began by developing the biofidelic flexible pedestrian legform impactor (FlexPLI) and also took a major role in the development of the advanced pedestrian legform impactor (aPLI). Furthermore, he was at the forefront in the development of the headform test method in the International Harmonized Research Activity (IHRA) led by the United States Department of Transportation - National Highway Traffic Safety Administration (NHTSA) in the early 2000's, which contributed to development activity of regulations in Japan, the EU, and the UN. His meticulous research and enthusiastic activities in the field of pedestrian safety more than 25 years have contributed to the remarkable decrease in severe and fatal injuries in car-pedestrian accidents worldwide.

SWEDEN



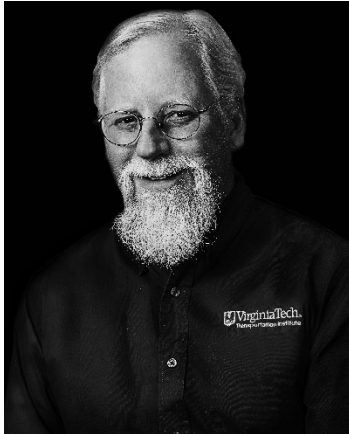
Katarina Bohman
Biomechanics Technical Expert
Volvo Cars
Sweden

With more than 25 years of experience in vehicle and restraint development at Autoliv Research and Volvo Cars in Sweden, Dr. Katarina Bohman is an internationally recognized expert in the area of passenger car occupant protection. She holds a PhD from the Department of Clinical Neuroscience at Karolinska Institutes, Sweden.

With more than 70 publications, Dr. Bohman is an acknowledged expert in occupant protection. With a fundament in real-world safety needs, she initiates and executes studies for understanding the users' behavior and preferences, combining her expertise in biomechanics and experience in restraint technology towards development of protection principles and assessment methods.

Today, as a Technical Expert in Biomechanics at Volvo Cars Safety Centre, Dr. Bohman provides leadership in the analysis and research on occupant protection in the design of new passenger cars, working towards the stringent safety zero-vision.

UNITED STATES

**Thomas Dingus**

Distinguished Technical Fellow (retired)
Virginia Tech Transportation Institute
United States

Now a Distinguished Fellow for Virginia Tech's Institute for Critical Technology and Applied Science, Dr. Thomas Dingus previously served as director of Virginia Tech Transportation Institute (VTTI) for 25 years. With a background of performing transportation safety and human factors research going back to 1984, Dr. Dingus pioneered the naturalistic driving study research method, which involves instrumenting vehicles with unobtrusive video cameras and instrumentation that assesses crash and near-crash causation, which then helps to determine crash countermeasures. During his time at VTTI, he managed more than \$800 million in research funding on projects designed to enhance transportation safety, improve the efficiency of our transportation system across multiple users, assess driver performance and behavior, and ensure the safe and efficient development and deployment of advanced vehicles (including automated vehicles). Dr. Dingus also led the development and enhancement of a suite of test beds on the VTTI campus—that include weather-making and lighting functionalities—used for researching driver behavior on highway, surface street, and rural roadways.

Recognized as a world-renown transportation safety pioneer, Dr. Dingus was interviewed by the Washington Post in 2021 to discuss how to keep Americans alive on the roads and how transportation has evolved in the past 25 years. In 2019, he was selected as one of the top 100 people to meet in 2020 by Virginia Business Magazine. In 2017, Dr. Dingus was invited to give a TEDx Salon Talk in Wilmington, DE, about automated-vehicle development and deployment. Because of his exemplary leadership and innovation in the transportation arena, Dr. Dingus was named a White House Champion of Change in 2013. He was the recipient of the Best Ergonomics in Design article award for 'Estimating Crash Risks' from the Human Factors and Ergonomics Society (2012), the A. R. Lauer Safety Award from the Human Factors and Ergonomics Society for outstanding contributions to the understanding of human factors in safety (2000), and the Jerome H. Ely Human Factors Award for the most outstanding paper (1998). Dr. Dingus is a Fellow of the Human Factors and Ergonomics Society and has provided key testimonials about issues of driver distraction and attention for U.S. Congressional subcommittees, the National Transportation Safety Board, and the National Council of State Legislatures.

UNITED STATES

**Eric Heitkamp**

Chief Engineer for Automotive Safety
Honda Development and Manufacturing of America, LLC
United States

Eric Heitkamp is a chief engineer and a crashworthiness technical leader in Automotive Safety of Honda Development & Manufacturing of America, LLC (HDMA). In this role, Mr. Heitkamp oversees frontal and side crashworthiness for all Honda and Acura vehicles developed in the U.S. and manages technical strategy to advance Honda's leadership in vehicle safety performance. In 2019, he led research that created the world's first passenger front airbag intended to address what was a newly recognized issue of severe brain trauma associated with angled frontal collisions. The innovative multi-chamber front passenger airbag technology debuted in the all-new 2021 Acura TLX sport sedan and is now standard equipment in multiple Honda and Acura vehicles. The airbag was awarded a 2020 "Best of What's New" for 2020 by Popular Science. In 2022, he took on his current role as the chief engineer in Automotive Safety, in addition to his crashworthiness technical leader role. Mr. Heitkamp also leads vehicle research initiatives for restraint systems and vehicle structure. He holds 14 patents for various safety technologies. Mr. Heitkamp holds a B.S. in Mechanical Engineering from the Ohio State University.

JAPAN



Yukou Takahashi
Honda R&D Company, Ltd.
Japan

Dr. Takahashi, chief engineer of Honda R&D Co., Ltd. and chair of pedestrian protection experts' group of Japan Automobile Manufacturers Association, has made outstanding scientific contributions in the area of development of injury assessment tools, injury metrics and risk functions, and testing and assessment protocols. The injury probability functions and injury assessment reference values proposed by Dr. Takahashi for the flexible pedestrian legform impactor, FlexPLI, has been implemented in UN GTR No.9 and UN R127. As the project leader of the ISO aPLI Task Group, he has led an international effort to develop hardware, design and performance specifications, associated injury probability functions and ISO Technical Specifications for the advanced Pedestrian Legform Impactor. aPLI has been implemented in Euro NCAP, C-NCAP pedestrian testing and assessment protocols and is expected to be used in other assessment programs worldwide.

JAPAN



Yoichi Sugimoto
Honda R&D Company, Ltd.
Japan

Mr. Yoichi Sugimoto started working for Honda R&D Co., Ltd. in 1986. Involved in research and development of advanced safety technologies, he developed a variety of technologies including Electronic Brake Force Distribution (EBD) and the world's first Automatic Emergency Braking, that is CMBS (Collision Mitigation Brake System). In 2012, Mr. Sugimoto was transferred to Honda R&D Americas in Detroit, where he engaged in the advanced research of Intelligent Transportation System (ITS) field. Since Mr. Sugimoto returned to Japan as an Executive Chief Engineer in 2015, he has overseen technologies in the active safety, advanced driver assistance, and automated driving fields. Mr. Sugimoto also led development on highway automated driving system. In March 2021, Honda introduced the world's first Level 3 automated driving vehicle into the Japanese market. In 2016, Mr. Sugimoto was assigned to the program sub-director of automated driving system project in Strategic Innovation promotion Program (SIP-adus) organized by the Cabinet Office of Japan. Since 2023, Mr. Sugimoto has been assigned to a Fellow of Honda R&D Co., Ltd.

UNITED STATES



Rini Sherony
Senior Principal Engineer
Toyota's Collaborative Research Center
United States

Ms. Rini Sherony is a Senior Principal Engineer at Toyota's Collaborative Safety Research Center (CSRC), part of Toyota Motor North America in Ann Arbor, Michigan. Ms. Sherony has extensive experience in active safety and automated driving research, system design, evaluation/planning and big data analytics.

At CSRC, Ms. Sherony leads active safety, automated driving research collaborations including data analytics. Her responsibilities include development of standardized test procedures, test targets, testing, sensor requirements, benefit estimation, etc. for ADAS and AD systems. She has led the development of SAE's pedestrian/bicyclist/roadside test targets' recommended practices and is involved in SAE/ISO Automated Driving activities. She is on the advisory board for the Association for the Advancement of Automotive Medicine (AAAM) and the University of Michigan's Center for Connected and Automated Transportation (CCAT). Ms. Sherony has served as an organizer for many conferences including SAE ADAS to Automated Driving (AD), SAE Government/Industry, and SAE World Congress ADAS/AD sessions. Ms. Sherony has authored/coauthored more than 180 papers/publications and has been granted 20 U.S. patents. She is the recipient of SAE's 2019 Forest R. McFarland Award. She has a master's degree in Electrical Engineering.