

october 28, 2016 | ft. collins, colorado

Adaptive Challenges

a symposium on work, knowledge,
and safety in the U.S. Fireservice



application deadline: 0800, september 23

apply at: <https://goo.gl/forms/DwyCxRbDKtzppeGz1>

acceptances announced: september 26

for inquires or questions: Dr. Tim Amidon, tim.amidon@colostate.edu



Colorado
State
University

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symposium description |

Firefighter safety and health outcomes remain a [wicked problem](#) despite improved strategies and tactics, advancements in protective equipment and technology, increased opportunities for education and training, and breakthroughs in fire science and behavior. Human factors such as risk perception, cognition, stress, communication, information exchange, risk taking behavior, decision making, and incident command contribute to workplace injuries, line of duty deaths, and near miss events, but a research gap exists regarding the ways these factors coincide to impact firefighter safety and health outcomes.

Adaptive Challenges is a free one-day symposium hosted by Poudre Fire Authority and facilitated by an interdisciplinary research team from Colorado State University. We seek to bring together leaders from the fireservice, private-sector, government, and academia who are interested in designing innovative solutions to this problem. We are highly interested in how interdisciplinary research might be leveraged to better understand the nexus of human factors and firefighter safety and health outcomes. Participants will:

- examine accepted knowledge about firefighter safety, injury, and fatality;
- investigate how human factors contribute to firefighter injuries and fatalities;
- identify barriers and opportunities for interventions;
- explore the role of learning and knowledge within the fireservice work activities;
- and envision solutions to this problem.

During the symposium attendees will participate in activities and group discussions on issues such as training and education, adaptive and technical challenges, post-incident analysis, situational awareness, risk seeking behavior, crew-integrity, information sharing, communication, and incident command. Our keynote speakers, Dr. Bill Hart-Davidson from Michigan State University, Division Chief Scott Heiss from Denver Fire Department, and Dr. Ron Timmons from the University of North Texas will help us to contextualize how we might think through these challenges. Groups will report out on their discussions and breakout activities.

When: 0900-1700, Friday, October 28, 2016, Ft. Collins, Colorado

Cost: Free | Coffee, a light breakfast, and lunch will be provided. Participants are invited to attend a reception after the symposium.

Target Audience: Executive and Chief Fire Officers, Training Officers, Leaders of National and State Fireservice Organizations, Government Agencies, Industry Partners, and Researchers

Apply at: <https://goo.gl/forms/hZrASkF2IDnm6jhw2> before 0800, September 23rd, 2016

Acceptances announced: September 26th, 2016

For more information contact: Dr. Tim Amidon, Colorado State University, tim.amidon@colostate.edu

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poudre fire authority |

The Poudre Fire Authority (PFA) is a consolidated Fire/Rescue service agency dedicated to the protection of lives, property and the quality of life for all of the citizens we serve. Our service area is approximately 235 square miles including the City of Fort Collins and the Poudre Valley Fire Protection District including the Town of Timnath, the communities of LaPorte and Bellvue and areas surrounding these communities. The PFA district has a population of approximately 189,635 people and an estimated property value in excess of \$15 billion. Our employees and volunteers are highly motivated, highly trained professional men and women who take their service to the community very serious. The foundation of our success is based on our commitment to continuous quality improvement at all levels of service delivery.

The PFA was organized in 1981 with the consolidation of the City of Fort Collins and Poudre Valley Fire Departments. The goal was to improve fire and rescue services by improving response times to emergencies, eliminate duplicate services thereby reducing costs to both the citizens of Fort Collins and the Poudre Valley Fire Protection District. At that time, both the city and district adopted an inter-governmental agreement establishing the authority. This contract outlines the governance, funding and operation of the authority. Poudre Fire Authority's Fire Chief is Tom DeMint.

symposium facilitators |

Timothy R. Amidon (Ph.D. University of Rhode Island 2014) is an Assistant Professor in the Department of English and the Department of Environmental and Occupational Health in the Colorado School of Public Health at Colorado State University. Prior to arriving at Colorado State University, he spent over fifteen years in the fire-service serving as a Firefighter, Lieutenant, and Captain in the Westerly Fire Department (volunteer), was a member of Rhode Island Urban Search and Rescue Task Force-1, and a Fire Instructor with the Rhode Island Fire Academy and the Union Fire District. Broadly framed, Tim's research seeks to better understand workplace and non-academic literacies with a specific emphasis on the ways knowledge is created through and circulates within embodied, analog, and digital technology. For example, Tim has used digital research methods to trace the ways knowledge circulates on firegrounds as firefighters perceive risk, communicate, and coordinate work activities. He also holds a number of fire service certifications, including Firefighter I & II (NFPA 1001), Driver Operator (NFPA 1002), Fire Officer I (NFPA 1021), Fire Instructor (NFPA 1041 and 1403 A&B), Incident Safety Officer (NFPA 1521).

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symposium facilitators | (cont.)

Elizabeth Williams (Ph.D. Purdue University, 2011) is an Assistant Professor and Director of Undergraduate Studies in the Department of Communication Studies and Lead of the Health Communication Section of the Colorado School of Public Health at Colorado State University. Elizabeth's research focuses on the processes and practices that enable and constrain communication between members of the multiple teams that comprise an emergency response system. More broadly, her work focuses on identification, leadership, and learning in a variety of organizational contexts. She co-edited *Organizations, Communication, and Health* and her work has been published in a variety of journals and various edited volumes.

Kim Henry (Ph.D. Pennsylvania State University, 2002) is an Associate Professor in the Psychology Department and the Colorado School of Public Health at Colorado State University. As a behavioral scientist oriented toward prevention, her work focuses on the psychological and social factors that produce or mitigate risky behaviors that compromise health and well-being. Her goals are to develop and test theoretical models in order to understand the complex interactions of risk, promotive, and protective factors that influence these risk behaviors and, ultimately, to create and test methods for prevention and intervention. Kim is also a well-trained and accomplished methodologist with expertise in the design and execution of intervention trials as well as the collection and analysis of complex data.

Tiffany Lipsey (M.Ed. University of Virginia, 1997) is an Assistant Professor in Health and Exercise Science and Assistant Director of the Human Performance Clinical Research Lab (HPCRL) at Colorado State University. Tiffany is a certified American College of Sport Medicine Clinical Exercise Physiologist and directs the cardiovascular firefighter testing program that serves 20 fire agencies in Colorado. Tiffany's research explores the intersections of firefighter fitness and health, which has included studies of cardiorespiratory fitness and metabolic syndrome in firefighters and noise exposure in firefighter training activities. She holds an Advanced Cardiac Life certification, serves as a consultant with the Colorado Firefighter Heart and Circulatory Benefits Trust, and spent 7 years in EMS at the Western Albemarle Rescue Squad (Crozet, VA) and Owings Mills Fire Department (Owings Mills, MD).

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symposium facilitators | (cont.)

Michael R. Czaja (Ph.D. Colorado State University, 2012) is the Associate Director, Office of Defense Engagement, and Affiliate Faculty, Department of Human Dimensions of Natural Resources, Colorado State University. Prior to arriving at Colorado State University, Mike was the site manager for a Science Applications International Corp. contract providing instructor and curriculum developer support to the Special Operations Forces Education Element at the US Army Command and General Staff College. Mike also spent 22 years as a commissioned officer in the US Army, serving in Military Police, Civil Affairs, and joint organizations. His doctoral work in wildland fire social science examined public perceptions of prescribed fire as a management tool. Mike's professional interests include leadership in high-risk organizations and wildland firefighter safety. Under the wildland fire qualification system, he is a Firefighter Type 2 (FFT2) and a Public Information Officer trainee (PIOF).

keynote speakers|

Chief Scott Heiss is currently the Division Chief of Safety and Training for the Denver Fire Department. He is a 26-year veteran of the department. Immediately after being promoted to Division Chief, the Denver Fire Department partnered with the National Fallen Firefighters Foundation. The Denver Fire Department has over 1000 members and responds to 115000 calls a year. Prior to his promotion to Division Chief, he served with the busiest stations in the department.

Bill Hart-Davidson (Ph.D. Purdue University, 1999) is an Associate Professor of Rhetoric and Writing at Michigan State University and Associate Dean of Graduate Education in the College of Arts & Letters. He is a Senior Researcher in the Writing, Information, and Digital Experience (WIDE) Research Center. Bill's research interests lie at the intersection of Technical Communication and User Experience, and he has published more than fifty peer reviewed articles and chapters in such areas as visualizing knowledge work processes, information and user experience design, and computational rhetoric. He is co-editor with Jim Ridolfo of the 2015 volume *Rhetoric and the Digital Humanities* from the University of Chicago Press. Also in 2015, Bill and the WIDE Research Center won the Conference on College Composition and Communication "Technology Innovator Award," a prize that recognizes a career-long dedication to driving technological change in the fields of Rhetoric, Writing, and Technical and Professional Communication.

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keynote speakers | (cont.)

Ron Timmons (Ph.D. University of Texas at Dallas, 2009) teaches in the undergraduate Emergency Administration and Planning program in Public Administration and is the Internship Coordinator. Prior to coming to the University of North Texas, he was a director at the city of Plano, serving in emergency management and public safety communications department head roles. His duties included designation as the emergency management coordinator for the Metroplex city of 270,000 people. He previously served as a firefighter, emergency medical technician, and fire chief in New York State. Ron also concurrently taught for 13 years, as an adjunct assistant professor at the graduate and undergraduate levels, in the Rochester, New York area. Dr. Timmons has conducted research on technical support of emergency operations, crisis decision-making, and sensory influences impacting responders. His research has been published and presented in a variety of emergency services and human factors publications and venues.

thanks |

Adaptive Challenges is funded by a PRECIP grant awarded by Colorado State University's Office of the Vice President of Research (OVPR). Our interdisciplinary research team would like to personally recognize Dr. Meghan Suter and Dr. Alan Rudolph for their past and continuing support. We also want to personally thank Chief Tom DeMint, Battalion Chief Randy Callahan, and the Poudre Fire Authority for their extraordinary contributions to this symposium.

image credits |

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