

Kerber, Stephen			Vice President & Executive Director, Fire Safety Research Institute
UL Research Institutes			
University of Maryland, College Park	BS	2003	Fire Protection Engineering
University of Maryland, College Park	MS	2005	Fire Protection Engineering
Lund University, Lund, Sweden	Ph.D.	2020	Fire Safety Engineering

Licensed Professional Engineer, State of Maryland 36808

Positions

2019 – Present	Vice President, UL Research Institutes, Columbia, MD, USA
2013 – Present	Executive Director, Fire Safety Research Institute UL Research Institutes, Columbia, MD, USA
2009 – 2013	Research Engineer Underwriters Laboratories Inc., Northbrook, IL, USA
2002 – 2008	Fire Protection Engineer National Institute of Standards and Technology, Gaithersburg, MD, USA
1999 – 2009	Deputy Chief College Park Volunteer Fire Department, College Park, MD, USA

Service

Society of Fire Protection Engineers – Fellow, Director, Board of Directors (2012-2017)
National Fire Protection Association - Member, Research Section Executive Committee, Fire Service Training Technical Committee (2008), Fundamentals of Fire Control Within a Structure Utilizing Fire Dynamics (2015-Present), Fire Investigations Committee (2017-Present)
International Association for Fire Safety Science - Member
International Association of Fire Chiefs - Regular Member, Volunteer and Combination Officer Section
International Society of Fire Service Instructors – Member
University of Maryland Fire Protection Engineering Department - Board of Visitors

Honors

University of Maryland Fire Protection Engineering Distinguished Alumni, 2022
Metropolitan Fire Chiefs President’s Award of Distinction 2019
Senator Paul S. Sarbanes Fire Service Safety Leadership Award, UL FSRI 2018
ISFSI George D. Post Fire Service Instructor of the Year 2014
Honorary Battalion Chief, Fire Department of New York 2012
Department of Commerce Gold Medal Award 2008
- Research on Wind Driven Fires and Positive Pressure Ventilation
Department of Commerce Bronze Medal Award 2007
- Research on Positive Pressure Ventilation in High-rise Buildings
Department of Commerce Bronze Medal Award 2005
- Research on the Station Nightclub Fire
Prince George's County Fire Department Silver Medal of Valor 2002
Fire House Magazine Heroism Award 2002

Selected Peer Reviewed Publications

Kerber, S., Regan, J., Fent K. Horn, G., and D. Smith. “*Effect of Firefighting Intervention on Occupant Tenability during a Residential Fire.*” *Fire Technology*, 55:2289–2316, 2019.
Kerber, S. “*Analysis of Changing Residential Fire Dynamics and its Implications on Firefighter Operational Timeframes.*” *Fire Technology*. Volume 48, Number 4, 2012, p 865-891.

- Kerber, S. "Analysis of One and Two-Story Single Family Home Fire Dynamics and the Impact of Firefighter Horizontal Ventilation." Fire Technology, Online First 28 August 2012.
- Horn, G., Kesler, R., Kerber, S., Fent, K., Schroeder, T., Scott, W., Fehling, P., Fernhall, B. & Smith, D. (2018) Thermal response to firefighting activities in residential structure fires: impact of job assignment and suppression tactic, *Ergonomics*, 61:3, 404-419.
- Kenneth W. Fent, Barbara Alexander, Jennifer Roberts, Shirley Robertson, Christine Toennis, Deborah Sammons, Stephen Bertke, Steve Kerber, Denise Smith & Gavin Horn. (2017) Contamination of firefighter personal protective equipment and skin and the effectiveness of decontamination procedures, *Journal of Occupational and Environmental Hygiene*, 14:10, 801-814.
- Kenneth W. Fent, Douglas E. Evans, Kelsey Babik, Cynthia Striley, Stephen Bertke, Steve Kerber, Denise Smith & Gavin P. Horn (2018) Airborne contaminants during controlled residential fires, *Journal of Occupational and Environmental Hygiene*, 15:5, 399-412, DOI: 10.1080/15459624.2018.1445260
- Gavin P. Horn, Jacob W. Stewart, Richard M. Kesler, Jacob P. DeBlois, Steve Kerber, Kenneth W. Fent, William S. Scott, Bo Fernhall, Denise L. Smith "Impact of training fire environment on physiological responses" *Ergonomics*
- Alexander C. Mayer, Kenneth W. Fent, Stephen Bertke, Gavin P. Horn, Denise L. Smith, Steve Kerber, and Mark J. La Guardia "Firefighter Hood Contamination: Laundered vs. Unlaundered" Submitted to JOEH
- Kenneth W. Fent, Christine Toennis, Deborah Sammons, Shirley Robertson, Stephen Bertke, Antonia Calafat, Joachim D. Pleil, M. Ariel Geer Wallace, Steve Kerber, Denise Smith, Gavin P. Horn. "Firefighters' absorption of PAHs and benzene during controlled residential fires" Submitting to JOEH
- Nicholas Traina, Richard M. Kesler, Steve Kerber, Robin Zevotek, Tonghun Leeb, Gavin P. Horn. "Ex-vivo porcine skin model for prediction of trapped occupant burn risk applicable to pre- and post-suppression fire environments" Submitting to Fire Technology.
- Horn, Kesler, Kerber, Fent, Schroeder, Scott, Fehling, Fernhall & Smith (2017): *Thermal response to firefighting activities in residential structure fires: impact of job assignment and suppression tactic*, *Ergonomics*, DOI: 10.1080/00140139.2017.1355072
- Kerber, S., Madrzykowski, D. "Wind Driven Structure Fire and Mitigation Strategy Experiments." 2009 International Symposium on Fire Science and Fire-Protection Engineering Proceedings, Beijing, China, 2009.
- Madrzykowski, D., Kerber, S., "Fire Fighting Tactics Under Wind Driven Conditions: Laboratory Experiments." National Institute of Standards and Technology, NIST TN 1618, 2009.
- Kerber, S., Madrzykowski, "Evaluating Positive Pressure Ventilation In Large Structures: School Pressure and Fire Experiments." National Institute of Standards and Technology, NIST TN 1498, 2008.
- Kerber, S., "Evaluation of Fire Service Positive Pressure Ventilation Tactics on Large Structures." International Congress: Smoke Control in Buildings and Tunnels Proceedings, Santander, Spain, 2008.
- Kerber, S., Madrzykowski, "Evaluating Positive Pressure Ventilation In Large Structures: High-Rise Fire Experiments." National Institute of Standards and Technology, NISTIR 7468, 2007.
- Kerber, S. "Evaluation of Fire Service Positive Pressure Ventilation Tactics on High-rise Buildings." Interflam Proceedings 2007.
- Kerber, S., Madrzykowski, D., Stroup, D. "Evaluating Positive Pressure Ventilation In Large Structures: High-Rise Pressure Experiments." National Institute of Standards and Technology, NISTIR 7412, 2007.
- Kerber, S. "Evaluation of the Ability of Fire Dynamic Simulator to Simulate Positive Pressure Ventilation in the Laboratory and Practical Scenarios." National Institute of Standards and Technology, NISTIR 7315, 2006.

Research Support

Previous research support from DHS-FEMA, National Institute of Justice, City of New York, USFA and the US Department of Commerce during tenure at NIST from 2002 – 2008