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Books

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Government Sponsored Conferences (Invited)

17th Annual Harry S. Truman Legacy Symposium and Truman Fire Form. National Fallen Firefighters Foundation. Congressional Fire Service Institute. Key West, FL. May 5-7, 2019.

Smith, D.L. "Heart to Heart: Strategizing an Evidence-Based Approach to Reduced Cardiac Disease and Death in the Fire Service". NORA (National Occupational Research Agenda) Public Safety Sector Council Meeting. Washington D.C., June 8-9, 2016.

Smith, D.L. "Firefighting PPE: An Integrated Ensemble Approach". Personal Protective Equipment Conference. Hollywood, FL, November 27-30th, 2012.

Smith, D.L. "Firefighting PPE: An Integrated Ensemble Approach". Personal Protective Equipment Conference. Hollywood, FL, November 27-30th, 2012.

Smith, D.L. "Heat Stress: The Role of PPE". Personal Protective Equipment Conference. Fort Lauderdale, FL, November 29-December 3rd, 2010.

Smith, D.L. and Horn, G. "Effect of Aspirin on Hemostatic and Vascular Function After Live Firefighting". Department of Homeland Security, Assistance to Firefighters Grants Research and Development Annual Meeting. Chicago, IL, August 24-25th, 2010.

Smith, D.L. "Improving Structural Firefighting Gear – From the Inside Out". Department of Homeland Security, Assistance to Firefighters Grants Research and Development Annual Meeting. Chicago, IL, August 24-25th, 2010.

Fehling, P.C. and **Smith, D.L.** "Effect of Physical Fitness on Physiological Recovery from Firefighting Duties". Assistance to Firefighters Grants Research and Development Annual Meeting. Chicago, IL, August 24-25th, 2010.

Smith, D.L., Miles, S., Merinar, T. "NIOSH Fire Fighter Fatality Investigation and Prevention Program: SCBA Facepiece Work Group". Workshop on Emergency First Responder Respirator Thermal Characteristics. Pittsburgh, PA, July 27-28th, 2010.

Smith, D.L. "Heat Stress in the Fire Service: The Role of PPE". National Personal Protective Technology Laboratory Seminar. Pittsburgh, PA, June 9th, 2010.

Smith, D.L. "Rehabilitation". Community Emergency Response Team Expert Panel Meeting. Alexandria, VA, February 25-26th, 2010.

Smith, D.L. "A Researchers Perspective on Physiological Monitoring Technologies". 11th Annual Technologies for Critical Incident Preparedness Conference and Exposition. Philadelphia, PA, February 2-4th, 2010.

Smith, D.L. "Cardiovascular Effects of Heat Stress". Technical Support Working Group (TWSG) Personal Protective Equipment Conference. Fort Lauderdale, FL, November 17-19th, 2009.

Smith, D.L. "Physiological Monitoring of Firefighters". Precision Indoor Personnel Location and Tracking for Emergency Responders Technology Workshop. Worcester Polytechnic Institute, Worcester, MA, August, 3-4th, 2009.

Fire Service Presentations

Smith, D.L. "Combatting Cardiovascular Disease". International Association of Fire Fighters. Affiliate Leadership Training Summit. Lake Buena Vista, FL., January 20, 2020.

Smith, D.L. "Firefighter Health and Safety: Combatting Cardiovascular Disease and Decreasing Cancer Risk". Northern Virginia Fire & Rescue Leadership Development Institute. VA, October 21, 2019.

Smith, D.L., and Haigh, C. "Firefighter Health and Safety". Vermont Fire Academy Training Seminar. Pittsford, VT, October 19, 2019.

Smith D.L. "Physiological Status Monitoring for Firefighters: Potential and Challenges". Fire Service Innovation in Safety Symposium. Philadelphia PA, September 24-26, 2019

SmithD.L. "Firefighter Survival: The Two Major Types of Cardiovascular Disease." View From the Top: A Chiefs Briefing on Firefighter Health Research. Kansas City, KS, September 13, 2019.

Smith D.L. "A 360 Medical Size-Up: Understanding and Mitigating CVD Risk". International Fire Service Journal of Leadership and Management Research Symposium 19. Tulsa, OK, July 13, 2019.

Smith, D.L. "Cardiovascular Risks of Firefighting". Surviving The Fire Service. Oregon State Training Acamedy. Salem, OR, May 13, 2019.

Smith, D.L. "Firefighter Survival: The Two Major Types of Cardiovascular Disease". Fire Department Instructors Conference. Indianapolis, IN, April 10, 2019.

Haigh, C.A., Wilkson, A., **Smith, D.L.** "The Right Gear for the Job: Balancing Protection vs. Physiologic Strain". F.I.E.R.O. PPE Symposium. Raleigh, NC. March 13, 2019.

Smith, D.L. "Understanding and Preventing Cardiovascular Events". Northern Virginia Fire & Rescue Leadership Development Institute. Front Royal, VA, October 15, 2018.

Smith, D.L. "Understanding and Preventing Cardiovascular Events". South Metro Fire Rescue. Denver, CO, June 19, 2018.

Smith, D.L., Horn, G., Madrzykowski, Zevotek, R., Fent, K. "Science in the Fire Service". Fire Department Instructors Conference. Indianapolis, IN, April 26, 2018.

Smith, D.L. "Potential Use of Technology to Address Major Health and Safety Concerns in the Fire Service". Fire Department Instructors Conference. Indianapolis, IN, April 23, 2018.

Smith, D.L. and Kales, S.N. "Cardiovascular Disease in the Fire Service". International Association of Fire Fighters. Affiliate Leadership Training Summit. Lake Buena Vista, FL., January 30, 2018.

Smith, D.L. "Understanding and Combatting CVD in the Fire Service." NYSPFFA Health and Safety Conference. Syracuse, NY, September 19, 2017.

Horn, G. and **Smith, D.L.** "Critical Lessons from the IFSI Cardiovascular & Chemical Exposure Risk Studies". International Association of Fire Fighters, Occupational Health, Safety, and Medicine Conference. Charlotte, NC, July 25, 2017.

Smith, D.L. "Combatting Cardiovascular Disease in the Fire Service: Translating Research to Fire Ground Safety". Oregon Fire Chiefs Association. Spring Conference. Redmond, OR, May 12, 2017.

Smith, **D.L.** "The Heart of a Firefighter". Featured speaker, Fire Department Instructors Conference. Indianapolis, IN, April 27, 2017.

Smith, D.L. "Heart Attack in the Fire Service". NY Fire Coordinators, 2017 Spring Fire Coordinators Conference. Montour Falls, NY, April, 6, 2017.

Stewart, D.F., Kales, S., **Smith, D.L.**, "Cardiovascular Disease in the Fire Service". International Association of Fire Fighters. Affiliate Leadership Training Summit. Anaheim, CA, January 26, 2017.

Smith, D.L. "Health & Safety in the Fire Service". Northern Virginia Fire Chiefs Working Group Leadership Development Institute. Front Royal, VA, October 15, 2016.

Smith, D.L. "Understanding and Preventing Sudden Cardiac Events in the Fire Service". Assistance to Firefighters Grant Meeting. San Antonio, TX, August 18, 2016.

Smith, D.L., and Batalin, M. "Physiological Monitoring of Firefighters". NFFF Fire Service Technology Summit. Oakland, CA, July 24-26, 2016.

Smith, D.L., Kales, S., and Horn, G. "Cardiovascular Disease in the Fire Service". A. Michael Mullane Health and Safety Symposium. Boston, MA, May 19-20, 2016.

Smith, D.L., and Haigh, C. "Firefighter Incident Rehabilitation: Reducing Risk and Enhancing Performance". Fire Department Instructors Conference. Indianapolis, IN, April 20, 2016.

Smith, D.L., Fent, K., Kerber, S., and Horn, G. "Cardiovascular and Chemical Exposure Risks on the Modern Fireground". Fire Department Instructors Conference. Indianapolis, IN, April 19, 2016.

Smith, D.L. "Cardiovascular Stress of Firefighting". Institution of Fire Engineers – USA Branch Annual General Meeting (AGM) Educational Session. Orlando, FL, March 14, 2016.

Smith, D.L. "Cardiac Strain and Sudden Cardiac Events". FireHouse World. San Diego, CA, February 3, 2016.

Smith, D.L. and Horn, G. "Firefighter's Leading Health Risks on the Modern Fireground". FireHouse World. San Diego, CA, February 2, 2016.

Smith, D.L., and Haigh, C. "Firefighter Incident Rehabilitation: Reducing Risk and Enhancing Performance". Vincent J. Bollon Affiliate Leadership Training Summit. Lake Buena Vista, FL, January 20-21, 2016.

Smith, **D.L.** "Cardiac Strain and Sudden Cardiac Events". Heart to Heart: Strategizing an evidencebased approach to reduce CVD in the FS. Washington D.C., December 3-4, 2015.

Smith, D.L. "Acute Cardiovascular Strain of Firefighting, Sympathetic Activation, Physical Workload, Heat, Dehydration, and Particulate Exposure". Future Directions in CVD Research NFFF/NHLBI. Washington D.C., September 1-2, 2015.

Smith D.L. and Moore-Merrel, L. "Multiphase Study on Firefighter Safety and the Deployment of Resources: High-Rise Field Experiments". 2015 IAFF John P. Redmond Symposium. National Harbor, MD, August 27, 2015.

Smith, D.L. "Understanding and Preventing Sudden Cardiac Events in the Fire Service". Assistance to Firefighters Grant Meeting. National Harbor, MD, August 25, 2015.

Smith, D.L. and Horn, G. "Cardiovascular and Carcinogenic Risks of Firefighting". Presented at Underwriters Laboratories Advisory Meeting. Jackson Hole, WY, August 17, 2015.

Smith, D.L. "Understanding and Preventing Sudden Cardiac Events in the Fire Service". Keynote Address; International Fire Service Journal of Leadership and Management Research Symposium 15. Tulsa, OK, July 11, 2015.

Smith, D.L. "The Fitness Imperative". Fire Department Instructors Conference. Indianapolis, IN, April 22, 2015.

Smith, **D.L.** "The Physiological and Medical Case for a Wellness-Fitness Program". Indiana Fire Chiefs Association/Professional Fire Fighters Union of Indiana (IFCA/PFFUI) Wellness-Fitness Symposium. Indianapolis, IN, December 5, 2014.

Smith, D.L. "Medical Causes of Cardiac Death among Firefighters". New York State Professional Firefighters Association. Syracuse, NY, October 30, 2014.

Smith, D.L. "The Effect of Heat Stress and Dehydration on Vascular and Hemostatic Function". Assistance to Firefighters Grant Meeting. Dallas, TX, August 13-14, 2014.

Smith, D.L. "Cardiovascular Disease, Fitness and the Work Firefighters Do". Safety/Training Officers' National Summit. Philadelphia, PA, May 13-15, 2014.

Smith, D.L. "The Fitness Imperative: The Why and How of Fitness for the Fire Service". Fire Department Instructors Conference. Indianapolis, IN, April 9, 2014.

Smith, D.L. "Advancing Firefighter Health and Safety". International Association of Women in Fire & Emergency Services Conference. Tucson, AZ, February 28, 2014.

Smith. D.L. "Sudden Cardiac Events: Why Are Firefighters at Risk?" Keynote Address. 14th Annual 2013 Pilot Research Project Symposium. Cincinnati, OH, October 11, 2013.

Smith, D.L. "Investigating the Medical Cause of Firefighter Cardiovascular Fatalities to Develop Preventative Strategies". International Fire Service Journal of Leadership and Management Research Symposium. Tulsa, Oklahoma. July 13, 2013.

Smith, D.L. "Strategies for Improving Firefighting Health and Safety". Keynote Address. Professional Firefighters of Massachusetts. Hyannis, MA, June 11, 2013.

Smith, D.L. "Safety and Cardiac Data for Fire Service Personnel". Health and Wellness in the Public Safety Arena Symposium. Fort Wayne, IN, May 18, 2013.

Smith, D.L. "Cardiovascular Strain of Firefighting: Biochemical and Physiologic Correlates". Cambridge Health Alliance Symposium, Orlando, FL, April 29, 2013.

Brown, J. and **Smith, D.L.** "Physiological Stress of Firefighting". Fire Department Instructors Conference. Indianapolis, IN, April 23-25, 2013.

Smith, D.L., Horn, G., Haigh, C. "Use of Technology to Improve FF Training". Fire Department Instructors Conference. Indianapolis, IN, April 23-25, 2013.

Smith, D.L. "Mitigating Cardiovascular Strain of Firefighting". Training seminar. Colonie, NY, October, 3, 2012.

Smith, D.L. "Heading Off Cardiovascular Events in the Fire Service". Occupational Medicine Clinic. Buffalo, NY, September, 15, 2012.

Smith, D.L. "The Fitness Imperative". Fire Department Instructors Conference. Indianapolis, IN, April 18, 2012.

Smith, D.L. "Sudden Cardiac Events: A Challenge for the Fire Service". New York State Association of Fire Chiefs, FIRE Conference. Verona, NY, June 15-18, 2011.

Smith, D.L. "Improving PPE from the Inside Out". 2nd National Fire Service Research Agenda Symposium. Emmitsburg, MD, May 20-22, 2011.

Smith, D.L. "Cardiac Events in the Fire Service: Understanding the Cause and Mitigating the Risk". Fire Department Instructors Conference. Indianapolis, IN, March 24, 2011.

Smith, D.L. "Heat Stress and Cardiovascular Strain Following Firefighting Activities". New York State Professional Fire Fighters Associatioin Seminar. Liverpool, NY, September 29, 2010.

Mapar, J., Orr, J., **Smith, D.L.**, Ames, J., Batalin, M. Panel Discussion: "Protecting the Protectors: Ensuring Health and Safety of First Responders Through Wireless Localization and Physiological Monitoring". Wireless Health Conference. San Diego, CA, October 5-7, 2010.

Smith, D.L. "Physiological Strain of Firefighting". Firefighter Cardiovascular Health & Safety Research Summit. Champaign, IL, September 16-17, 2010.

Smith, D.L. and Horn, G. "Effects of On-Scene Rehabilitation on Physiological Recovery from Firefighting Activities". International Association of Fire Chiefs, Fire-Rescue International. Chicago, IL, August 24-28, 2010.

Smith, D.L. "Sudden Cardiac Events: Why Are Firefighters at Risk?" Fire Department Instructor's Conference. Indianapolis, Indiana, April 21, 2010.

Smith, D.L. "Physiological Stress of Firefighting". Association of Fire Districts of the State of New York. Saratoga Springs, NY, April, 17, 2010.

Smith, D.L. "Physiological Monitoring of Firefighters". Precision Indoor Personnel Location and Tracking for Emergency Responders Technology Workshop. Worcester Polytechnic Institute, Worcester, MA, August, 3-4, 2009.

Smith, D.L. "Fire Fighter Fatalities and Injuries: The Role of Heat Stress and PPE". National Fire Protection Agency Conference & Exposition. Chicago, Illinois, June 8-11, 2009.

Smith, **D.L.** "Heat Stress: Physiological Enemy on the Fireground". Fire Department Instructor's Conference. Indianapolis, Indiana, April 22, 2009.

Smith, D.L. "Heat Stress: Physiological Enemy on the Fireground". Florida State Firefighter Health and Safety Conference. Orlando, FL, December 10, 2008.

Smith, D.L. "Heat Stress: Physiological Enemy on the Fireground". New York State Professional Firefighters Health and Safety Conference. Syracuse, NY, October, 29, 2008.

Smith, D.L., Horn, G., Haigh, C. "Fireground Fatalities and Injuries: The Role of Heat Stress and PPE". International Association of Fire Chiefs Fire Rescue International. Denver, CO, August 15, 2008.

Smith, D.L. and Haigh, C. "MABAS Rehab". Geveva Fire & Air Angels Rehab. Geneva, IL, June 10, 2008.

Smith, D.L. "Heat Stress: Physiological Enemy on the Fireground". Fire Department Instructor's Conference. Indianapolis, IN, April 9, 2008.

Smith, D.L. and Haigh, C. "MABAS Rehab". MABAS XII Rehab Training. Hanover Park, IL, December 3-4, 2007.

Smith, D.L. and Haigh, C. "The Importance of Effective On-Scene Fire Rehab in Reducing Workers' Compensation Liability". Illinois Public Employer Labor Relations Association. Geneva, IL, October 23, 2007.

Smith, D.L. and Haigh, C. "Improving Performance and Decreasing the Risk of Firefighter Fatalities: The Role of Rehab". International Association of Fire Chiefs Fire Rescue International. Atlanta, GA, August 23, 2007.

Smith, D.L. "What's Been Missing: Implementing Effective On-Scene Rehabilitation". Fire Department Instructor's Conference. Indianapolis, Indiana, April 26-30, 2006.

Smith, D.L. "Fighting Cardiovascular Disease in the Fire Service". Fire Department Instructor's Conference. Indianapolis, Indiana, April 13, 2005.

Smith, D.L. "Reducing Cardiovascular Disease in the Fire Service". Illinois Fire Safety Conference. Peoria, Illinois, October 22, 2004.

Smith, D.L. "Reducing Cardiovascular Disease in the Fire Service". Fire Department Instructor's Conference. Indianapolis, Indiana, April 27-30, 2004.

Smith, D.L. "Reducing Cardiovascular Disease in the Fire Service". Fire Department Instructor's Conference. Indianapolis, Indiana, March 31-April 5, 2003.

Smith, D.L. "Heat Stress and Heart Attacks". Health and Safety Lecture. Illinois Fire Service Institute, Fire Company Officer Course. Champaign, Illinois, June, 2001.

Smith, D.L. "Improved Fitness Can Decrease Heat Stress and Accompanying Cardiovascular Strain". Champaign Fire Department. Champaign, Illinois, May 15-17, 2001.

Smith, D.L. "Heat Stress and Heart Attacks". Health and Safety Lecture. Illinois Fire Service Institute, Certified Fire Fighter II Academy. Champaign, Illinois, March 6, 2001.

Smith, D.L. "Heat Stress". Rapid Intervention Training Program Seminar. Chicago, Illinois, January 30, 2001.

Smith, D.L. "Research in support of the Fire Service". Illinois Fire Service Institute Field Staff Meeting. Champaign, Illinois, January 20, 2001.

Smith, D.L. "Effect of Firefighting on Cardiovascular Function". Laboratory Continuing Education Meeting, Champaign Regional Blood Bank. Champaign, Illinois, January 18, 2001.

Smith, D.L. "Physiological Stress Assoicated with Fire Fighting". Illinois Fire Service Institute, Advanced Breathing Apparatus Course. Champaign, Illinois, October 31, 2000.

Smith, D.L. "Physiological Responses to Fire Fighting". National Fire Academy, Training Resources and Data Exchange, Region V, Annual meeting. Champaign, Illinois, September 12, 2000.

Smith, **D.L.** "Heat Stress and Heart Attacks". Health and Safety Lecture. Illinois Fire Service Institute, Certified Fire Fighter II Academy. Champaign, Illinois, September 11, 2000.

Smith, D.L. "Heat Stress and Firefighting". Fire Department Instructor's Conference. Indianapolis, Indiana, March 1998.

Smith, D.L. and Bone, B. "Lessening Heat Stress and Cardiovascular Strain during Firefighting". Paxton Fire Department. Paxton, Illinois, July 30, 1997.

Smith, D.L. "Physiological Responses of Firefighters to Strenuous Live-Fire Drills". Firefighter Certification Academy course, University of Illinois Fire Service Institute. Champaign, Illinois, July 29, 1997.

Smith, D.L. "Physiological and Psychological Responses of Firefighters". Saving Our Own course, University of Illinois Fire Service Institute. Champaign, Illinois, July 18, 1997.

Smith, D.L. "Heat Stress and Firefighters". Emergency Medical System Training for Champaign Firefighters. Champaign, Illinois, July 14-16, 1997.

Smith, D.L. "Assessing Heat Strain During Firefighting Activity". Technical Meeting on Heat Stress sponsored by the U.S. Department of Energy. Los Alamos, New Mexico, June 25 1996.

Smith, D.L. "The Impact of Gear Configuration on Heat Stress". New York State Professional Fire Fighters Association Annual Health and Safety Conference. Montour Falls, New York, October 12, 1995.

Smith, D.L. "Monitoring physiological heat stress induced by working in heavy protective clothing". Experimental Biology Conference. Atlanta, Georgia, April 1995.

Smith, D.L. "Physiological Responses of Women Firefighters to Training Drills". National Women in the Fire Service Conference. Rockford, Illinois, May 12, 1993.

Fire Service Workshops (Invited)

Smith, D.L. BETTER HEART. Medical Advisory Team Meeting. Fort Lauderdale, FL, February 19-20, 2019. Skidmore College. First Responder Health and Safety Laboratory. Served as PI on grant and keynote at conference.

Smith, D.L. BETTER HEART Kick Off Symposium. Saratoga Springs, NY, December 11-12, 2018. Skidmore College. First Responder Health and Safety Laboratory. Served as PI on grant and keynote at conference.

Draft Meeting for NFPA 1500 Committee on Fire Service Occupational Safety and Health. San Antonio, TX, November 14-16, 2018.

Smith, D.L. Firefighter Physiological Monitoring Technology Summit. Washington, D.C., March 28-30, 2018. Skidmore College and National Fallen Firefighters Foundation. Principal Investigator and co-host.

Messaging for Cardiac Health in the Fire Service. Baltimore, MD, September 26-28, 2016. National Fallen Firefighters Foundation. Served as Chair.

Second Draft Meeting for NFPA 1500 and NFPA 1582 Technical Committee on Fire Service Occupational Safety and Health. Denver, CO, July 12-15, 2016.

Smith, D.L. Heart to Heart: Strategizing an evidence-based approach to reduce CVD in the FS. Washington D.C., December 3-4, 2015. National Fallen Firefighters Foundation. Served as PI on grant and keynote at conference.

Smith, D.L. National Fire Service Research Agenda Symposium. National Fallen Firefighters Foundation. Arlington, VA, November 15-18, 2015.

Smith, D.L. Future Directions in CVD Research NFFF/NHLBI. Washington D.C., September 1-2, 2015.

Smart Fire Fighting, Where Big Data and Fire Service Unite. National Institute of Standards and Technology and National Fire Protection Association/Fire Protection Research Foundation. Arlington, VA, March 24-25, 2014.

Safety, Health and Survival Section of the International Association of Fire Chiefs, Summit on Physicals for Firefighters. International Association of Fire Chiefs. Tampa, FL, March 13, 2014.

Tampa 2, 10th Anniversary of the Firefighter Life Safety Initiatives: Building for the Future. National Fallen Firefighters Foundation. Tampa, FL, March 10-12, 2014.\

Vulnerability Assessment Project: Phase I Concludes. National Fallen Firefighters Foundation. Linthicum, MD, July 26, 2011.

2nd National Fire Service Research Agenda Symposium. National Fallen Firefighters Foundation. Emmitsburg, MD, May 20-22, 2011.

National Fire Service Research Agenda Symposium. National Fallen Firefighters Foundation. Emmitsburg, MD, June 1-3, 2005.

International Presentations

Smith, D.L. Firefighters Cardiovascular Health and Physical Fitness Assessment: A Call for Action. Presented at the 2nd International Symposium on Health and Physical Fitness among Public Safety Workers, Brazil, March 22th, 2019.

Smith, **D.L.** The Role of Dehydration on Firefighters' Cardiovascular Risk Profile. Presented at the 2nd International Symposium on Health and Physical Fitness among Public Safety Workers, Brazil, March 20th, 2019.

Smith, D.L. Cardiovascular Strain and Firefighting Activity. Presented at the 1st International Symposium on Health and Physical Fitness among Public Safety Workers, Brazil, March 9, 2017.

Smith, D.L. Heat Stress and Cardiovascular Function. Presented at the 1st International Symposium on Health and Physical Fitness among Public Safety Workers, Brazil, March 8, 2017.

Smith, D.L., DeBlois, J.P., Wharton, M., Fehling, P.C. Effects of Heat Stress and Dehydration on Cardiac Performance Following Exercise. Presented at the Physiology and Pharmacology of Temperature Regulation Symposium, Skukuza, Kruger National Park, South Africa, September 7-12, 2014.

Smith D.L., Arena, L., DeBlois, J., Haller, J., Hultquist, E., Lefferts, W., Russell, T., Wu, A., Fehling, P. Effect of Base Layers on Physiological and Perceptual Responses to Exercise in Personal Protective Equipment. Presented at the 14th International Congress on Environmental Ergonomics, Nafplio, Greece, July 10-15, 2011.

Smith, D.L. and McDonough, M.W. Effects of Short Bouts of Firefighting Activity on Platelet Number and Aggregability. Presented at the 13th International Congress on Environmental Ergonomics, Boston, MA, August 3-7, 2009.

Hur, P., Rosengren, K.S., Horn, G.P., **Smith, D.L.**, Hsiao-Wecksler, E.T. "Effect of fatigue and protective clothing on functional balance of firefighters." Presented at the 17th Congress of the International Society of Electromyography and Kinesiology, Niagara Falls, Ontario, Canada, June 18-21, 2008.

Park, K., Rosengren, K.S., Horn, G.P., **Smith, D.L.,** Hsiao-Wecksler, E.T. "Assessing gait changes due to fatigue and protective clothing." Presented at the 17th Congress of the International Society of Electromyography and Kinesiology, Niagara Falls, Ontario, Canada, June 18-21, 2008.

Smith, D.L., Dyer, K., Petruzzello, S.J. Blood chemistry and immune cell changes during one-week of intensive firefighting training. Presented at the 1st Symposium on Physiology and Pharmacology of Thermal Biology Temperature Regulation, Rhodes, Greece, October 10-15, 2004.

McLennan, P.L., Gordon, C.J., Thoicharoen, P., Armstrong, K.A., **Smith, D.L.**, Steele, J.R., Fogarty, A.L., Groeller, H., Taylor, N.A.S. The physiological and functional significance of gender differences from a military perspective. Presented at the 10th International Congress on Environmental Ergonomics, Fukuoka, Japan, September 23-27, 2002.

Smith, D.L., Petruzzello, S.J., Chludzinski, M.A., Reed, J.J., Woods, J.A. Effects of strenuous live-fire fighting drills on hematological, blood chemistry, and psychological measures. Presented at the International Thermal Physiology Symposium, Wollongong, Australia, September, 2001.

Smith, D.L., Petruzzello, S.J., Woods, J.A., Chludzinski, M.A., Reed, J.J. Immune Responses to strenuous live-fire firefighting activities. Presented at the 8th International Congress on Environmental Ergonomics, San Diego, CA, October, 1998.

Smith, D.L., Burrows, S., Fehling, P.C. The Effect of mild hyperbaria on the performance of a reaction time test and profile of mood states. Presented at the 8th International Congress on Environmental Ergonomics, San Diego, CA, October, 1998.

Smith, D.L., MacPherson, C. Fehling, P.C. Comparison of infra-red tympanic temperatures and rectal temperatures during exercise under different environmental conditions. Presented at the 5th International Congress of the International Society of Adaptive Medicine, Boston, MA, September, 1997.

Smith, D.L. and Manning, T.S. Physiological responses of women and men to exercise-induced heat stress in firefighting gear. Presented at the 7th International Congress on Environmental Ergonomics, Jerusalem, Israel, October, 1996.

Smith, D.L., Petruzzello, S.J., Kramer, J.M., Misner, J.E. Estimation of myocardial workload during treadmill exercise in different ensembles of firefighting turnout gear. Presented at the 6th International Conference on Environmental Ergonomics, Montebello, Canada, September, 1994.

Mittleman, K., Bailey, S., Advis, J., **Smith, D.L.** Comparison of brain and tympanic temperatures during passive heating and exercise in ewes. Presented at the 6th International Conference on Environmental Ergonomics, Montebello, Canada, September, 1994.

Smith, D.L., Petruzzello, S.J, Kramer, J.M., Misner, J.E. Physiological and psychological responses of firefighters to training drills in a thermal environment. Presented at the XXXII Congress of the International Union of Physiological Sciences Meeting, Glasgow, Scotland, August, 1993.

Smith, D.L. Measurement of aortic peak velocity, mean velocity and time velocity integrals during sustained maximal handgrip exercise. Presented at the annual meeting of the International Congress on Sports Medicine and Human Performance, Vancouver, B.C., Canada, April, 1991.

National Presentations

Barreto, K.A., Martin, D.S., Fonseca, R.X., Soares, E.M.K., Castro, M., Nogueira, R.M., Molina, G.E., **Smith, D.L.,** Porto, L.G.G. Handgrip Strength Levels in Male and Female Brazilian Military Firefighters. Presented at the American College of Sports Medicine's 64th Annual Meeting, Orlando, FL, May 29-Jun 2, 2019.

Porto, L.G.G, Segedi, L.C., Martin, D.S., Soares, E.M.K., Molina, G.E., Janssen da Cruz, C., Nogueira, R.M., **Smith, D.L.,** Kales, S.N. Firefighters' Quality of Life is Positively Associated with Cardiorespiratory Fitness Both on Men and Women. Presented at the American College of Sports Medicine's 64th Annual Meeting, Orlando, FL, May 29-Jun 2, 2019.

Nogueira, R.M., Soares, E.M.K., Nogueira, E.C., Gomes, J., Molina, G.E., Fontana, K.E., Korre, M., **Smith, D.L.,** Kales, S.N., Junqueira Jr., L.F., Porto, L.G.G. Exploring Factors Related to Blood Pressure Increase After A 12-hour Shift-work in Firefighters. Presented at the American College of Sports Medicine's 64th Annual Meeting, Orlando, FL, May 29-Jun 2, 2019.

Wilkinson, A.F., Matias, A.A., Eddy, C.I.K., King, J.L., Soares, E.M.K., **Smith, D.L.** Physiologic Strain of SCBA (Maze) Training Compared to Circuit Training and Live Fire Training. Presented at the American College of Sports Medicine's 64th Annual Meeting, Orlando, FL, May 29-Jun 2, 2019.

Smith, D.L. Chair, Thematic Poster – Firefighting. American College of Sports Medicine's 63rd Annual Meeting, Minneapolis, MN, May 29-June 2, 2018.

Segedi, L.C., Saint Martin, D, Von Koenig Soares, E.M.K., Nogueira, R.M., Fontana, K.E., Korre, M., Molina, G.E., **Smith, D.L.,** Kales, S.N., Porto, L.G.G. Physical activity intensity of Brazilian military firefighters during a 24-hour on-duty period. Presented at the American College of Sports Medicine's 63rd Annual Meeting, Minneapolis, MN, May 29-June 2, 2018.

Saint Martin, D, Segedi, L.C., Von Koenig Soares, E.M.K., Nogueira, R.M., Fontana, K.E., Korre, M., Molina, G.E., **Smith, D.L.,** Kales, S.N., Porto, L.G.G. Accelerometer-based physical activity and sedentary time assessment in Brazilian wildland military firefighters – Brasilia Firefighters Study. Presented at the American College of Sports Medicine's 63rd Annual Meeting, Minneapolis, MN, May 29-June 2, 2018.

Wilkinson, A., Fehling, P. Haigh, L., **Smith, D.L.** "Comparison of Firefighters and Instructors Physiological Responses Throughout a Day of Live-fire Training." Presented at the American College of Sports Medicine's 65th Annual Meeting, Minneapolis, MN, May 29-June 2, 2018.

Chizewski, A., Greenlee, T.A., Greene, D.R., Rougeau, K., **Smith, L.D.**, Petruzello, S.J. (2017). Improved Fitness Trends In Firefighter Recruits Over a 12-year Span. *Medicine & Science in Sports & Exercise*. 49(5): S455.

Nogueira, R.M., Soares, E.M.K.V.K., Nogueira E.C., Nogueira, E.C., Cruz, C.J.G., Molina, G.E., Fontana K.E., Korre, M.K., **Smith, D.L.** (2017). 12-hour Period Of Firefighting Is Associated with Short But Intense Periods Of Cardiac Strain. *Medicine & Science in Sports & Exercise*. 49(5): S502.

Porto, L.G.G., Nogueira, R.M., Soares, E.M.K.V.K., Nogueira, E.C., Cruz, C.J.G, Molina, G.E., Fontana, K.E., Korre, M., **Smith, D.L.,** Kales, S.N., Junquiera Jr, L.F. (2017). Vagal Modulation and its Association With Cardiorespiratory Fitness During a Routine Firefighting Shift-Work. *Medicine & Science in Sports & Exercise*. 49(5). S503.

Rougeau, K., Chizewski, A., Greenlee, T.A., Greene, D.R., **Smith, D.L.** (2017). Improvements In Recruit Fitness During A 6-week Firefighter Training Academy. *Medicine & Science in Sports & Exercise*. 49(5): S796.

DeBlois, J.P., Fahey, E.J., Fung, M., Sauerbrunn, N.C., Sulistio, J.G., **Smith, D.L.,** Fehling, P.F. "Assessment of Dehydration Using Salivary Osmolality and Urine Specific Gravity." Presented at the American College of Sports Medicine's 63rd Annual Meeting, Boston, MA, May 31-June 4, 2016.

Ives, S.J., Lefferts, W.K., Wharton, M., Fehling, P.C., **Smith, D**. "Exercise-induced Heat Stress Disrupts the Shear-dilatory Relationship in the Brachial Artery." Presented at the Experimental Biology Annual Meeting, Boston, MA, March 28-April 1, 2015.

DeBlois, J.P., Fehling, P.C., Wharton, M., **Smith, D.L.** "Effect of Exercise-Induced Heat Stress on Carotid Wave Intensity." Presented at the American College of Sports Medicine's 61st Annual Meeting, Orlando, FL, May 27-31, 2014.

Haller, J.M., Fehling, P.C., **Smith, D.L.** "Effects of Heat Stress and Dehydration on Heart Rate during Exercise in Personal Protective Equipment." Presented at the American College of Sports Medicine's 61st Annual Meeting, Orlando, FL, May 27-31, 2014.

Poh, P.Y.S., Goldstein, E., Horn, G.P., **Smith, D.L.**, Petruzzello, S.J. "Career vs. Volunteer Firefighters: Differences in Physiological and Perceptual Responses to Acute Firefighting Activity." Presented at the American College of Sports Medicine's 61^{st h} Annual Meeting, Orlando, FL, May 27-31, 2014.

Boland, D.M., Dolezal, B.A., Batalin, M., **Smith, D.L.,** Cooper, C.B. "Individualized Feedback to Firefighters via PHASER-Net Enhances Adherence and Benefits of Exercise Training." Presented at the American College of Sports Medicine's 61st Annual Meeting, Orlando, FL, May 27-31, 2014.

Batalin, M., Yuen E., Dolezal B., **Smith D.L.,** Cooper C., Mapar J. "PHASER: Physiological Health Assessment System for Emergency Responders". Body Sensor Networks Conference, Cambridge, MA, May 6-9, 2013.

Haller, J.M., Hultquist, E.M., Lefferts, W.K., **Smith, D.L.**, Fehling, P.C. "Influence of Clothing Layers Under Firefighting Protective Clothing on Physiological/Perceptual Responses to Intermittent Work." Presented at the American College of Sports Medicine's 59th Annual Meeting, San Francisco, CA, May 30-June 2, 2012.

Lefferts, W.K., Hultquist, E.M., Barr, D.A., Storer, T.W., Cooper, C.B., Fehling, P.C., **Smith, D.L.** "Cardiovascular and Metabolic Responses during Maximal Incremental Exercise in Firefighter's Personal Protective Equipment." Presented at the American College of Sports Medicine's 59th Annual Meeting, San Francisco, CA, May 30-June 2, 2012.

Smith, D.L., Hultquist, E.M., W.K., , Haller, J.M., Fehling, P.C., Storer, T.W., Cooper, C.B. "Does Exercise Mode or Protocol Alter the Chronotropic Index?" Presented at the American College of Sports Medicine's 59th Annual Meeting, San Francisco, CA, May 30-June 2, 2012.

Hultquist, E.M., Arena, L., Lefferts, W.K., Storer, T.W., Cooper, C.B., Fehling, P.C., **Smith, D.L.** "The Effect of Pre-cooling on Cardiovascular and Metabolic Strain during Incremental Exercise." Presented at the American College of Sports Medicine's 59th Annual Meeting, San Francisco, CA, May 30-June 2, 2012.

Lane, A.D., Fahs, C., Yan, H., Rossow, L., Ranadive, S., Agiovlastis, S., Horn, G., **Smith, D.L.,** Rowland, T., Fernhall, B. "Acute Vascular Changes Following Prolonged Live Firefighting." Presented at the American College of Sports Medicine's 58th Annual Meeting, Denver, CO, May 31-June 4, 2011. Mattila, T.A., Petruzzello, S.J., Horn, G., **Smith, D.L.** "Cognitive Behavior on a Continuous Performance Task Following Short-Term Firefighting Activity." Presented at the American College of Sports Medicine's 58th Annual Meeting, Denver, CO, May 31-June 4, 2011.

Yan, H., Fahs, C.A., Ranadive, S., Rossow, L.M., Agiovlastis S., Lane, A.D., Echols, G., **Smith, D.L.,** Horn, G., Rowland, T., Fernhall, B. "Evaluation of Carotid Wave Intensity in Firefighters Following Firefighting." Presented at the American College of Sports Medicine's 58th Annual Meeting, Denver, CO, May 31-June 4, 2011.

DeBlois, J.P., **Smith, D.L.,** Wharton, M., Rowland, T. "Influence of Sex on Ventricular Remodeling in Collegiate Athletes." Presented at the American College of Sports Medicine's 58th Annual Meeting, Denver, CO, May 31-June 4, 2011.

Smith, D.L., Hultquist, E., Arena, L., Lefferts, W., Fehling, P.C. "Effect of Heat Acclimation on Cardiac and Vascular Function, Oxygen Consumption, and Body Fluids." Presented at the American College of Sports Medicine's 58th Annual Meeting, Denver, CO, May 31-June 4, 2011.

Fehling, P.C., Liebig, J.P., Ormsbee, L.T., **Smith, D.L.** "Cardiovascular Responses to Firefighting Activities: A Field Study." Presented at the American College of Sports Medicine's 58th Annual Meeting, Denver, CO, May 31-June 4, 2011.

Liebig, J.P., Trantham, L., **Smith, D.L.**, Fehling, P.C. "Heart Rate Variability during Recovery from Exercise in Firefighting Clothing." Presented at the American College of Sports Medicine's 57th Annual Meeting, Baltimore, MD June, 2-5, 2010.

Trantham, L., Liebig, J.P., Fehling, P.C., **Smith, D.L.** "Effect of Training Status on Hemodynamic Variables during Recovery from Exercise in Firefighting Clothing." Presented at the American College of Sports Medicine's 57th Annual Meeting, Baltimore, MD, June 2-5, 2010.

Petruzzello, S.J., Horn, G., Fahey, G., Goldstein, E., **Smith, D.L.** "Effect of On-Scene Rehabilitation on Psychological and Cognitive Responses to Short-term Firefighting Activity." Presented at the American College of Sports Medicine's 57th Annual Meeting, Baltimore, MD, June 2-5, 2010.

Rossow, L., Ranadive, S, Fahs, C, Agiovlasitis, S., Echols, G., Heffernan, K., Horn, G., **Smith, D.L.,** Fernhall, B. "Obesity is Associated with Increased Blood Pressure and Decreased Vascular Function in Firefighters." Presented at the American College of Sports Medicine's 56th Annual Meeting, Seattle, WA, May 27-30, 2009.

Winke, M., Shalmiyeva, I., DeBlois, J., Britt, E., **Smith, D.L.** "Salivary Osmolality as a Measure of Moderate Dehydration." Presented at the American College of Sports Medicine's 56th Annual Meeting, Seattle, WA, May 27-30, 2009.

Smith, D.L., Gutzmer, S., Horn, G. "Effect of On-scene Rehabilitation in Recovery from Firefighting Activity." Presented at the American College of Sports Medicine's 55th Annual Meeting, Indianapolis, Indiana, May 28-31, 2008.

Horn, G., Ahmad, U., Assian, S., Freund, G., **Smith, D.L.** "Acute Effect of Firefighting Activity on Platelets". Presented at the American College of Sports Medicine's 55th Annual Meeting, Indianapolis, Indiana, May 28-31, 2008.

Goldstein, E., Horn, G., Petruzzello, S., **Smith, D.L.**" Effect of Firefighting Gear on Physiological and Perceptual Responses to Short-term Fire Fighting Activity". Presented at the American College of Sports Medicine's 55th Annual Meeting, Indianapolis, Indiana, May 28-31, 2008.

Smith, D.L. The Role of Exercise Science in Firefighter Health and Safety. Presented at the annual meeting of the Mid-Atlantic American College of Sports Medicine. Hershey, PA, Nov. 2007.

Petruzzello, S.J. and **Smith, D.L.** Perceptual and Physiological Heat Strain: Examination in Firefighters Performing Simulated Firefighting Activities in the Heat. Presented at the annual conference of the American College of Sports Medicine, Denver, CO, June, 2006.

Gilbert, J.A., Petruzzello, S.J., Horn, G., **Smith, D.L.,** Bell, S., Brauer, B., Glosser, K., Schroeder, T. Perceptions of Fitness in Career and Volunteer Firefighters. Presented at the annual conference of the American College of Sports Medicine, Denver, CO, June, 2006.

Bell, S.J., Petruzzello, S.J., **Smith, D.L.,** Gilbert, J.A., Brauer, B.R., Schroeder, T., and Glosser, K. Fitness-Related Changes Resulting from a 6-Week Fire Academy Course for Recruit Firefighters. Presented at the annual conference of the American College of Sports Medicine, Denver, CO, June, 2006.

Smith, D.L. Fitness-Related Changes Resulting from a 6-Week Physical Training Program Fire Academy Course. Presented at the annual conference of the American College of Sports Medicine, Nashville, TN, May, 2005.

Smith, D.L., Snook, E., Petruzzello, S.J. Perceptual and Physiological Heat Strain: Examination in Firefighters Performing Simulated Firefighting Activities in the Heat. Presented at the annual conference of the American College of Sports Medicine, Indianapolis, IN, June 2-5, 2004.

Smith, D.L., Dyer, K., Petruzzello, S.J. Changes in Hematological Variables during One-Week of Intensive Firefighting Training. Presented at the annual conference of the American College of Sports Medicine, San Francisco, CA, May, 2003.

Smith, D.L. Acute Effects of Fire Fighting Activity on Coagulation. Presented at the annual conference of the American College of Sports Medicine, St. Louis, MO, May, 2002.

Smith, D.L. Body Temperature Comparison at Various Sites Following Firefighting Activities. Presented at the annual conference of the American Alliance for Health, Physical Education, Recreation and Dance, San Diego, CA, March, 2002.

Smith, D.L., Brilhart, E., Ortiz, P., Garcia, M., Gabey, D., Arciero, P.J. Acute effects of oral glucosamine-chondroitin on oral glucose tolerance test results in humans. Presented at the annual conference of the American Physiological Society meeting, Portland, ME, September, 2000.

Smith, D.L., Kocher, B.E., Kolesnidoff, A.L., Rowland, T.W. Cardiovascular Responses to Isometric Contractions. Presented at the annual conference of the American College of Sports Medicine, Indianapolis, IN, May, 2000.

Smith, **D.L.** and Fehling, P.C. The Use of Electronic Motion Sensors to Measure Physical Activity. Presented at the annual conference of the American Alliance for Health, Physical Education, Recreation and Dance, Orlando, FL, March, 2000.

Smith, D.L. Running with the Academies: Interdisciplinary Applications for Sport and Physical Education. Presented at the annual conference of the American Alliance for Health, Physical Education, Recreation and Dance, Orlando, FL, March, 2000.

Smith, **D.L.** Teaching Exercise Physiology Laboratories. Presented at the annual conference of the American Alliance for Health, Physical Education, Recreation and Dance, Orlando, FL, March, 2000.

Smith, **D.L.**, Hunt, K.E., Fehling, P.C. The effects of mild hyperbaria on submaximal exercise performance. Presented at the annual meeting of the American College of Sports Medicine, Seattle, WA, June, 1999.

Smith, D.L. and Petruzzello, S.J. Selected Physiological and Psychological Responses of Firefighters to Live-Fire Drills in Different Configurations of Firefighting Gear. Presented at the American College Sports Medicine conference, Orlando, FL, June, 1998.

Arciero, P.J., Astacio, T., Fehling, P.C, **Smith, D.L.** Energy Expenditure, Leisure Time Activity, and Fat Distribution in Women of Three Ethnic Groups. Presented at the American College Sports Medicine conference, Orlando, FL, June, 1998.

Fehling, P.C, Astacio, T., Arciero, P.J., **Smith, D.L.** Differences in Regional Fat Distribution in Women of Three Ethnic Groups. Presented at the American College Sports Medicine conference, Orlando, FL, June, 1998.

Smith, **D.L.**, Kleine, S., Fehling, P.C. Validity of a Shallow-Water Sprint Test to Predict Anaerobic Performance. Presented at the annual conference of the American Alliance for Health, Physical Education, Recreation and Dance, Reno, NV, April, 1998.

Smith, D.L., Petruzzello, S.J., Woods, J.A., Chludzinski, M.A., Reed J.J. Hematological Responses to Strenuous Live-Fire Firefighting Activities. Presented at the American College of Sports Medicine annual meeting, Denver, CO, June, 1997.

Arciero, P.J., **Smith, D.L.**, Calles-Escandon, J. Effects of 7-10 days of Inactivity on Glucose Tolerance, Blood Flow, and Energy Expenditure in Trained Subjects. Presented at the American College of Sports Medicine annual meeting, Denver, CO, June, 1997.

Smith, **D.L.** The Physiological Profile of Adolescent Dancers. Presented at the National Women's Studies Conference, Saratoga Springs, NY, June, 1996.

Smith, D.L., Dean, E.C., Fehling, P.C. A comparison of Caltrac Accelerometer in estimates of energy expenditure with indirect calorimetry during different intensities and modes of exercise. Presented at the American College of Sports Medicine's National Meeting, Cincinnati, OH, June, 1996.

Smith, D.L., Petruzzello, S.J., Manning, T. Cardiac responses to firefighting activities. Presented at the American College of Sports Medicine's National Meeting, Minneapolis, MN, June, 1995.

Fehling, P.C., **Smith, D.L.**, Warner, S., Dalsky, G.P. Validation of the Caltrac and Tritrac accelerometers in older adults during walking and stepping exercise. Presented at the American College of Sports Medicine's National Meeting, Minneapolis, MN, June, 1995.

Smith, **D.L.**, Lau, P., Dean, E., and Fehling, P.C. Estimation of caloric intake and expenditure in college dancers. Presented at the Nutrition and Physical Activity to Optimize Performance and Well-Being Conference, Atlanta, GA, April, 1995.

Fehling, P.C., Immke, D.C., **Smith, D.L.** Body composition changes in body builders following a competitive season as measured by dual energy x-ray absorptiometry. Presented at the Nutrition and Physical Activity to Optimize Performance and Well-Being Conference, Atlanta, GA, April, 1995.

Petruzzello, S.J., **Smith, D.L.,** Kramer, J.M., Bone, B., Misner, J.E. Psychological and responses of firefighters to a training drills in different thermal environments. Presented at the American College of Sports Medicine Annual Meeting, Indianapolis, IN, June, 1994.

Smith, D.L., Petruzzello, S.J., Kramer, J.M., Warner, S.E., Bone, B., Misner, J.M. Effects of firefighting clothing on physiological responses to exercise. Presented at the American College of Sports Medicine Annual Meeting, Seattle, WA, June, 1993.

Kramer, J.M., Petruzzello, S.J., **Smith, D.L.,** Warner, S.E., Bone, B., Misner, J.M. Psychological responses to physical activity in different configurations of firefighting gear. Presented at the American College of Sports Medicine Meeting, Seattle, WA, June, 1993.

Smith, **D.L.**, Misner, J.E., Patrick, T., Meirelles, E., Schmale, J. Changes in left ventricular volumes during two minutes sustained maximal isometric exercise and post-exercise occlusion. Presented at the annual meeting of the American Physiological Society, Colorado Springs, CO, September, 1992.

Smith, D.L. Echocardiographic measurements of Doppler velocities and stroke volume during maximal handgrip exercise. Presented at the annual meeting of the American Heart Association, Chicago, IL, July, 1992.

Smith, D.L., Patrick, T., Meirelles, E., Misner, J.E. Cardiovascular responses to sustained maximal isometric contraction and post-exercise occlusion. Presented at the annual meeting of The Federation of American Societies for Experimental Biology, Aneheim, CA, April, 1992.

Smith, D.L., Misner, J.E., Essandoh, L.K. Doppler echocardiographic measurements of flow velocity in the ascending aorta during sustained maximal isometric contractions. Presented at the American College of Sports Medicine Annual Meeting, Orlando, FL, May, 1991.

Smith, D.L., Misner, J.E., Massey, Bloomfield, D.K., Essandoh, L.K. Cardiovascular responses to two minutes of sustained maximal isometric contractions of the finger flexors. Presented at the annual meeting of the American Physiological Society, Orlando, FL, October, 1990.

Smith, D.L., Bender-Schmale, J., O'Conner, R., Misner, J.E., Essandoh, L.K. Effect of two minute maximal handgrip exercise on the ascending aortic diameter. Presented at the American College of Sports Medicine Annual Meeting, Salt Lake City, UT, 1990.

Smith, D.L., Bender-Schmale, J., Misner, J.E., Essandoh, L.K. Day-to-day consistency of left ventricular outflow as measured by Doppler echocardiography during two minutes of sustained maximal isometric contraction. Presented at the annual meeting of the Federation of American Societies of Experimental Biology, Washington, DC, April, 1990.

Smith, **D.L.** and Gewe, S.C. A proposed diet for wheelchair athletes recovering from integumentary trauma. Presented at the Nutrition and Behavior Conference, Champaign, IL, September, 1988.

Lohman, T.G., **Smith, D.L.,** Slaughter, M.H. Calf skinfold as an alternative to subscapular skinfold in the health related physical fitness test. Presented at the American Alliance of Health, Physical Education, Recreation and Dance Conference, Atlanta, GA, April, 1985.

Media Presentations/Interviews/Videos

Fire Engineering Webcast, "Firefighter Survival: The Two Major Types of Cardiovascular Disease", Decmber 12, 2019. https://event.webcasts.com/starthere.jsp?ei=1273521&tp_key=c14f3fb237

Daily Herald, "Hanover Park leads national study to improve firefighter safety", March 28, 2017.

Schenectady Gazette, "Firefighter safety is aim of 1.5M grant to Skidmore", September 6, 2016.

Firehouse roundtable discussion during the Cardiovascular and Carcinogenic Risks of Modern Firefighting AFG-funded Study. June 25, 2015. http://www.firehouse.com/video/12087135/video-ifsiresearch-on-firefighter-cardiovascular-carcinogen-risk

Fire Engineering Talk Radio: Live from Illinois Fire Institute: Cardiovascular and Carcinogenic Risks of Modern Firefighting AFG-funded Study. June 24, 2015. http://www.fireengineering.com/fe-talk/msa-cardiovascular-and-carcogenic-hazards-of-modern-firefighting.html

Underwriters Laboratories Video: Cardiovascular and Carcinogenic Risks of Modern Firefighting AFG-funded Study. June 2015. https://www.facebook.com/ULfirefightersafety/videos/399171603606327/

First Responder Health and Safety Laboratory Video: Effect of Heat Stress and Dehydration on Cardiovascular Function AFG-funded Study. March 9, 2015.

International Association of Fire Chiefs, Webinar Panelist, "Saving Your Life Through Scientific Research", January 13, 2015.

Fire Engineering Talk Radio, Episode 738: Firemedically Speaking, "Sudden Cardiac Events in Firefighters". March 14, 2014.

Fire Engineering Webcast, "Understanding the Physical Effects of Firefighting". February 20, 2014.

Christian Science Monitor, "Why firefighter deaths have hit historic lows", June 17, 2013.

Discovery Channel. "Firefighting Burn". Daily Planet. January 25th, 2006.

Advanced Rescue Technology. "Firefighter Health Expert Says You Can Do It". Interviewed by Kathryn Robyn. October/November, 2004.

Fire and Emergency Training Network-American Heat Series. "Heat, Heart, and Health", September 2002.

Fire and Emergency Training Network- Fireside Chat Series. "Firefighter Fitness", September 2002.

National Public Radio, "The Best of Our Knowledge" - aired by 83+ stations.

National Public Radio, "The Health Show" - aired by 142+ stations.

WICD (2x) – Central Illinois Television News Station – segment on research aimed at reducing heat stress and heart attacks among firefighters.

News Gazette - Central Illinois Newspaper – articles on research.

Grant Funding/Support

External

Department of Homeland Security. United States Fire Administration – Assistance to Firefighters Grant Program: Fire Prevention and Safety Grant. "BETTER HEART (Building Evaluations That Translate Evidence and Research for Health Evaluations and Related Training)". \$1,500,000 (Denise Smith, Principal Investigator). Applied: March 2018. Awarded: September 2018.

Department of Homeland Security. United States Fire Administration – Assistance to Firefighters Grant Program: Research and Development Grant. "Impact of PPE and Base Layer on Fireground Vapor & Particulate". \$1,500,000 (Denise Smith, Principal Investigator with Gavin Horn). Applied: March 2018. Awarded: September 2018.

Department of Homeland Security. United States Fire Administration – Assistance to Firefighters Grant Program: Research and Development Grant. "Protection from Chemical, Thermal, and Cardiovascular Risks: Impact of PPE Laundering and Hood Design". \$1,500.000 (Denise Smith, Principal Investigator with Gavin Horn). Applied: March 2017. Awarded: September, 2017.

Department of Homeland Security. United States Fire Administration – Assistance to Firefighters Grant Program: Fire Prevention and Safety Grant. "SMARTER (Science Medicine And Research &

Technology for Emergency Responders)". \$1,500,000 (Denise Smith, Principal Investigator). Applied: May 2016. Awarded: September, 2016.

Department of Homeland Security. United States Fire Administration – Assistance to Firefighters Grant Program: Fire Prevention and Safety Grant. "Cardiovascular and Carcinogenic Risks in Training Structures". \$1,500.000 (Denise Smith, Principal Investigator with Gavin Horn). Applied: March 2016. Awarded: September, 2016.

Department of Homeland Security. United States Fire Administration – Assistance to Firefighters Grant Program: Fire Prevention and Safety Grant. "ALIVE Training: Cardiovascular Health of Firefighters", subcontract to New York University Polytechnic Institute. \$100,000 (Denise Smith, Principal Investigator at Skidmore College). Applied: March 2015. Awarded: October, 2015.

Department of Homeland Security. United States Fire Administration – Assistance to Firefighters Grant Program: Fire Prevention and Safety Grant. "Cardiovascular and Carcinogenic Risks Associated with Realistic Firefighting Environments". \$1,500,000 (Denise Smith, Principal Investigator with Gavin Horn). Applied: March 2014. Awarded: September, 2014.

Department of Homeland Security. United States Fire Administration – Assistance to Firefighters Grant Program: Research and Development Grant. "Understanding and Preventing SCD in the Fire Service". \$1,469,000 (Denise Smith, Principal Investigator). Applied: March 2014. Awarded: August, 2014.

Department of Homeland Security. United States Fire Administration – Assistance to Firefighters Grant Program: Research and Development Grant. "Non-invasive Identification of LVH/Cardiomegaly in Firefighters". \$999,900 (Denise Smith, co-investigator; Stefanos Kales, Harvard, PI). Awarded: Sept 2012.

Department of Homeland Security. Science and Technology Directorate. "Physiological Health Assessment Systems for Emergency Responders – Rapid Product Development Center", subcontract to UCLA. Funding Request: \$200,000 (Denise Smith, Principal Investigator at Skidmore College). Applied: December, 2011. Awarded: May, 2012.

Department of Homeland Security. United States Fire Administration – Assistance to Firefighters Grant Program: Research and Development Grant. "Effect of Dehydration and Heat Stress on Vascular and Hemostatic Function". \$999,997 (Denise Smith, Principal Investigator; Patricia Fehling, Co-PI). Applied: February, 2011. Awarded: June 17, 2011.

Department of Army. National Protection Center. "Wearable Advanced Sensor Platform for Emergency Responder Health and Safety". Funding Request: \$110,000 (Denise Smith, Principal Investigator). Applied: January, 2011. Awarded: June 23, 2011.

Department of Homeland Security. Science and Technology Directorate. "Physiological Health Assessment Systems for Emergency Responders", subcontract to UCLA. Funding Request: \$300,000 (Denise Smith, Principal Investigator at Skidmore College). Applied: October, 2009. Awarded: June 22, 2010.

Department of Homeland Security. United States Fire Administration – Assistance to Firefighters Grant Program: Research and Development Grant. "Improving Structural Firefighting Gear- From the Inside Out". \$569,403 (Denise Smith, Principal Investigator; Patricia Fehling, Co-PI). Applied: October, 2009. Awarded March 29, 2010.

Department of Homeland Security. United States Fire Administration-Assistance to Firefighters Grant Program: Fire Prevention and Safety Grant. "Effect of Aspirin on Hemostatic and Vascular Function After Live Fire Fighting". Funding Request: \$998,000 (Co-Investigator; Gavin Horn, PI). Applied: October, 2009. Funded April, 2010. Department of Homeland Security. United States Fire Administration – Assistance to Firefighters Grant Program: Fire Prevention and Safety Grant. "The Effect of Physical Fitness on Physiological Recovery From Firefighting Duties". Funding request: \$994,000 (Co PI; Patricia Fehling, PI). Applied: November, 2007. Funded, June 25, 2008.

Department of Homeland Security. United States Fire Administration-Assistance to Firefighters Grant Program: Fire Prevention and Safety Grant. "Cardiovascular and Biomechanical Responses to Firefighting". Funding Request: \$990,000 (Principal Investigator, with Gavin Horn). Applied: January 2007. Funded, July 2007.

National Institute of Occupational Safety and Health (NIOSH). R03 0H009111-01. "Effects of Firefighting and On-Scene Rehabilitation on Hemostasis". Funding Request: \$153,000 (Co-investigator; Gavin Horn, PI). Applied: Summer 2006. Funded, August 2007.

MED ENG systems. "Effects of Personal Cooling Device (PCD) on Immune Function During Exercise Induced Heat Stress (EIHS)." Funding request: \$10,000. Awarded: September, 2003.

Experimental and Applied Sciences. "Effects of a low carbohydrate diet and resistance and cardiovascular training program on metabolic and cardiovascular risk factors in overweight men and women." (Co-investigator; Paul Arciero, Principal Investigator). Funding request: \$80,000. Awarded March, 2003.

Illinois Fire Service Institute. \$20,000. To support the acquisition of data and analysis of blood for the research that I conducted in the fall of 2000.

Illinois Fire Service Institute Scholarship Fund. \$1580. To support travel to meet with federal agencies; National Institute of Occupational Health and Safety, National Institute of Standards and Testing, National Fire Academy, United States Fire Administration.

Darden Interests. The effect of mild hyperbaria on the performance of a reaction time test and profile of mood states. Funding request: \$7,600. Awarded: Fall 1998.

University of Illinois, Office of the Vice President for Academic Affairs Research Support. Funding request: \$15,000. Awarded: Summer 1997.

Project Improvement Grant. The effects of repeated bouts of firefighting activities on hormonal and immunological function in firefighters. Funding request: \$4,400. Awarded: Summer 1996.

National Volunteer Fire Council Foundation, Washington, DC. The effects of firefighting activities of decision-making ability and cardiovascular function. Funding request: \$15,200. Awarded June 1, 1994.

University of Illinois Research Board - Urbana, IL. The physiological and psychological responses to physical activity performed in federally mandated firefighting clothing. (J. Misner, P.I.). Funding request: \$10,800. Awarded: 1992.

Awards/Honors

Alice Hamilton Award for Excellence in Occupational Safety and Health – Exposure & Risk Assessment Category for the article "Contamination of firefighter personal protective equipment and skin and the effectiveness of decontamination procedures", published in the Journal of Occupation and Environmental Hygiene, 14(10):801-814. Awarded April 26, 2018.

Fire Department Instructors Conference Featured Speaker, April 2017.

Tisch Family Distinguished Professorship, Skidmore College, 2016-present.

International Association of Fire Chiefs Safety, Health and Survival Section Research Award. August 2016.

Dr. John Granito Award for Excellence in Fire Service Leadership and Management Research. May 2015.

Boston Firefighters Local 718 Award. Awarded for research that promotes Firefighter Health and Safety. June 2011.

Moseley Faculty Research Lecturer – Skidmore College. Sudden Cardiac Death: Why are Firefighters at Risk? February 2009.

Class of 1961 Term Professorship Skidmore College. 2006 – 2011.

Keck Fellow/Keck Scholar Award, Skidmore College. Body Composition and Regional Fat Distribution Among Young Women of Different Ethnicities. (T. Astacio, collaborator). 1996-1997.

Educational Leadership Corps. Mentor, Hudson Mohawk Association. A Comparison of Body Composition and Regional Fat Distribution Among Young African American, Latino, and Caucasian Women (T. Astacio, collaborator). 1996-1997.

Teacher Ranked as Excellent, University of Illinois (Measurement and Evaluation, Exercise Physiology) Spring 1989, Fall 1989, Spring 1990.

T.K. Cureton Graduate Research Award, 1990.

Professional Organizations/Offices Held

National Fallen Fire Fighters Technology Advisory Board.

National Institute for Occupational Safety and Health. NORA council member.

Advisory Committee Underwriters Laboratories Firefighter Safety Research Institute

Member (subject expert); National Fire Protection Agency, Technical Committee on Fire Service Occupational Safety and Health. 2011- Present

Fellow; American College of Sports Medicine (FACSM) National Health Initiative, Strategic Health Objectives Committee, 2000-2006 **Co-chair**, Occupational Physiology Interest Group, 2000 - 2002

American Alliance for Health, Physical Education Recreation and Dance (AAHPERD) **President**, Exercise Physiology Academy, 1997-2000

Mid-Atlantic American College of Sports Medicine (Northern New York State Representative, 1993-present; **Secretary/Treasurer** 1995/96; **Vice President**, 1996-1997)

American Physiological Society

International Association of Fire Chiefs (Health and Safety Section)

Editorial Work

Reviewer for: Medicine and Science in Sports and Exercise European Journal of Applied Physiology

	Metabolism Ergonomics Prehospital Emergency Care International Journal of Biometeorology
Editorial Board:	Extreme Physiology and Medicine International Fire Service Journal of Leadership and Management
Advisory Board:	OA Applied Physiology (an Open Access Journal)

Grant Reviewer. Federal Emergency Management Agency-Assistance to Firefighters Grant Program. 2008, 2009, 2010, 2012, 2013.

Grant Reviewer. American Heart Association Behavioral Clinical Health. 2013, 2014.

External Ad Hoc Expert Review Committee. American College of Sports Medicine Position Stand. Exertional Heat Illness During Training and Competition. Spring, 2006.

Professional Reviews/Consultations

External Department Reviewer:

Hanover College, Department of Physical Education (2004) Gettysburg College Department of Health and Exercise Sciences (2004) McDaniel College, Department of Exercise Science and Physical Education (2005). DePauw University, Department of Kinesiology (Spring, 2006).

Thesis Review:

Alison Fogarty – Effects of Protective Clothing on Cardiovascular and Thermal Responses to Heat Stress. University of Wollongong. MS (honors) thesis. Master of Science (honors) Dissertation. Spring, 2002.

Karen Armstrong – Theoretical Basis for a Personal Heat Stress Monitor. University of Wollongong. Master of Science (honors) Dissertation. Spring, 2006.

Deena C. Campbell – Experience Moderates Relationship between Cortisol Activity and Negative Affect in Firefighters Performing Dual-Stress Activity. University of New South Wales, Australia. Masters of Philosophy thesis. Spring, 2008.

Skidmore Community Service Activities

Elected/appointed, Dean of the Faculty and Vice President for Academic Affairs Search Committee, Vice Chair. 2017-2018

Faculty Executive Committee (Chair 2014-2015; Chair 2015-2016). 2014-present

Committee of Appointments, Promotions, and Tenure. Spring 2014

Institution Policy and Planning Committee. 2010–2013 (Vice Chair 2011–2012). (Also served on Budget and Finance Subcommittee (2010–present))

Science Facilities Task Force. 2011–2013

Standards of Business Conduct Working Group. 2010–2011

Policy on Policy Working Group. 2011–2012

Science Working Group. 2010–2011

Campus Campaign Committee. 2009–2010

Assessment Steering Committee. Subcommittee of CEPP. 2008–2011

Institution Policy and Planning Committee. 2004–2006 (Vice Chair 2005–06). (Also served on Faculty Executive Committee (2004–2006), Budget and Finance Subcommittee (2004–2006), Optimization Subcommittee (2005–2006)).

Financial Policy and Planning Committee (FPPC). 2002–2004

Institutional Review Board for the Use of Human Subjects in Research (IRB). 2002–2004

Diversity and Affirmative Action Committee (DAAC). 2001–2004

Benefits Committee 1999–2002 (Liaison to FPPC 99–00)

Ad-hoc Committee on Faculty Evaluation. 1999–2001

Committee on Academic Freedoms and Rights (CAFR). 1996–1998. Chair, 1997–98

Information Resource Council (IRC). 1995–1998

University Without Walls (UWW). 1993–1996

Skidmore Institutional Review Board (IRB). 1991–1994

United Way Steering Committee. 1992–1995 (Co-chair, 1996)