

# ASSOCIATION OF FORCE SCIENCE®

## Conference Program October 24th - 25th, 2018 Des Plaines, IL

**Oct. 23<sup>rd</sup>** Pre-Conference Training: Body Cameras & Other Recordings in Law Enforcement

**Oct. 23<sup>rd</sup>** Advanced Force Science Specialist Meeting & Reception (6-7:30 PM)

**Oct. 24<sup>th</sup> – 25<sup>th</sup>** Association of Force Science® Conference

**Oct. 24<sup>th</sup>** Evening Social Reception for all Attendees (5:30 – 7:30 PM)

**Oct. 25<sup>th</sup>** Conference Awards Ceremony (4:30-5 PM)

**Oct. 26<sup>th</sup>** Post-Conference Training: Principles of Training, Performance, and Learning

### About the Conference

Welcome to the first Annual Association of Force Science Conference! As Force Science® graduates, and for newcomers interested in learning more about behavioral science and human performance in law enforcement, you will have the opportunity to receive continuing education and networking opportunities. The latest Force Science® findings will be revealed. You will hear how experienced law enforcement practitioners, attorneys, and researchers are applying Force Science® in the courtroom, on the street, and in training.

### Questions? Feedback?

Email - [conference@forcescience.org](mailto:conference@forcescience.org) or Call: 1-866-683-1944

**Tuesday, October 23rd**

<b>Start</b>	<b>End</b>	<b>Pre-Conference Training</b>
<b>8:00 AM</b>	<b>5:00 PM</b>	<b>Body Cameras &amp; Other Recordings in Law Enforcement; Dr. William Lewinski, Force Science® Director, Co-Founder, &amp; Lead Instructor and Sgt. (Ret.) Jamie Borden, Henderson PD; Advanced Force Science® Specialist &amp; Instructor</b>

The training will discuss the strengths & limitations of body cameras & other recording devices that need to be understood & considered during investigations. You will understand the difference between human memory vs. electronic recording and the implications of that reality during force investigations. You will be able to understand & explain why what a camera sees may not be what an officer sees during a high-stress, rapidly unfolding force encounter. The impact of lighting, camera angle, and frame rate on recordings of fast moving events; recommendations and timing considerations related to whether officers should view video of their encounters before submitting to formal interviews; technology and techniques that can help agencies “flesh out” two-dimensional video footage in an effort to present the most realistic picture of an officer’s sensory experience during a high-stress, rapidly unfolding force encounter will be discussed. Lastly, you’ll receive tips for appropriately presenting & positioning footage of a filmed force encounter in a manner that helps maximize understanding of the realities of human performance.



Dr. William (Bill) Lewinski is the Director and Co-Founder of the Force Science Institute, which brings together experts from a wide variety of academic and research disciplines to study officer behavior in force encounters. Dr. Lewinski has a Ph.D. in Police Psychology. Dr. Lewinski is a behavioral scientist specializing in human performance and incident dynamics related to law enforcement. Dr. Lewinski has led studies in the United States, United Kingdom, and Canada. His research has appeared in a variety of journals and media and been highlighted on 48 Hours Investigates, BBC's Panorama and the Canadian Discovery Channel. He has served as an international expert witness in over 200 coroner’s inquests, grand juries, criminal and civil cases, and arbitration hearings. He is a professor emeritus from the law enforcement department at Minnesota State University, Mankato.

An 18-year veteran of the Henderson Police Department, Sgt. (Ret.) James Borden is currently assigned as the Use of Force Training and Analysis Officer for the agency, a position created specifically for the utilization of training received through the Force Science Institute. In addition to attaining Certification in Force Science Analysis, Borden was the first individual in the country to complete the Advanced Force Science Specialist Program put on by the Institute. Borden’s current position has focused on the study and application of human factors & behavioral science as it applies to officers on the street involved in deadly force situations & critical incidents. In this capacity he has been responsible for the management and oversight of Use of Force on the Henderson Police Department. This Oversight includes investigations, case analysis and review, policy review, policy writing and training.



## Wednesday, October 24th

Start	End	Topic
8:00 AM	8:45 AM	<b>Pre-Registration Check-In &amp; Refreshments</b>
8:45 AM	9:00 AM	<b>Opening Remarks, Dr. William Lewinski, Director</b>
9:00 AM	10:20 AM	<b><i>Director's Invited Presentation: Developing a Human Factors Unit at Henderson PD, Sgt. (Ret.) Jamie Borden, Henderson PD; Advanced Force Science® Specialist and Instructor</i></b>

Sgt. (Ret.) Jamie Borden developed a Force Investigations Unit based in human performance and the scientific principles that define human factors for police officers in a crisis situation and working under the extreme compression of time. The Use of Force Training and Analysis position at Henderson PD in Nevada was developed by Borden after becoming the first ever Advanced Force Science® Specialist. The position was later expanded into a "Unit" by Sgt. (Ret.) Borden, Officer Daniel King, and Lieutenant Bryan Hartshorn, also Advanced Specialists. Borden also created a Use-of-Force investigative checklist, based on scientific principles of human performance and factors, based on studies of human performance and findings of the Force Science Institute. Sgt. Borden will discuss concepts on how to develop and incorporate scientific principles and an investigative checklist that fits the environment and needs of your force



investigation unit. Borden will discuss how to navigate and overcome obstacles when bringing science to your agency.

Sgt. (Ret.) Borden has years of experience in the application of behavioral science to force investigations, analysis, reporting, presenting, and application to deposition and litigation through his private expert witness company. Sgt. (Ret.) Borden is responsible for the periodic review of all policies pertaining to use of force or force implementations as well as dating and subsequently training officers of the Henderson Police Department both mechanical and discretionary. His unit is also responsible for lesson plan development, presentation of all use of force and 4th Amendment seizure-related citizen contact courses to include the Citizens Academy, the Regional Police Academy, and all in service Use of Force training.

10:30 AM	11:20 AM	<b>Science in the Courtroom, Eric Daigle, J.D., Daigle Law Group; Advanced Force Science® Specialist</b>
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Science is under fire in the courtroom. This seminar will focus on the evaluation of the admissibility of science as it applies to Law Enforcement including utilization of experts and the admissibility of the video. We will discuss how litigation teams can use your Force Science training and video in the courtroom. What are the challenges you face when speaking about science, adversarial attitudes regarding science and how to address or mitigate those concerns? Finally, we will review strategies for helping to prepare your client, witnesses, or legal team utilizing force science training.



**11:30 AM    1:00 PM    Lunch, on your own**

**1:00 PM    1:50 PM    Using Force Science Principles to Prevent Tragedies, Chief (Ret) Mike Ranalli, J.D., Lexipol; Advanced Force Science® Specialist**



While understanding the impact of stress on human performance factors is critical in conducting proper investigations, this aspect is only part of the value. Training officers on the realities of human performance factors can help them make proper tactical decisions before the use of force becomes necessary. All too often, officers follow a path under the guise of officer safety without comprehending that their actions are actually placing them at more risk - violating the concept of Priority of Life (POL). Without an understanding of concepts such as the limitations of human attention, perception, and action versus reaction, tactical decision making may be based upon flawed assumptions. Legal applications of the use of force upon an individual require three perceptual aspects of the individual's behavior to come together

and overlap: Intent - Ability - Opportunity. A lack of understanding of human performance factors can lead to officers actually providing the aspect of Opportunity to the individual, resulting in the completion of the necessary blend of the three, resulting in a use of force that is commonly called "lawful but awful". You will receive an overview of the application of POL and the three perceptual aspects of force. Video from controversial contemporary incidents will be used to apply the concepts and understand what could have happened can be as important as what did happen.

**2:00 PM    2:50 PM    Fidelity in Simulation Training, Lon Bartel, VirTra; Advanced Force Science® Specialist**

This presentation is on how psychological and physical fidelity play into the effectiveness of all types of simulated event training. Simulated Event Training includes various law enforcement training methodology such as "Force on Force" as well as "Digital Video Simulation". Attendees will learn about key training components that can be manipulated to modulate stress in the training environment. The focus is on all simulated training not just that of digital video simulations. You will be able to define and relate "psychological and physical fidelity" to simulated event training. Secondly, we will identify and discuss at least two aspects of fidelity that can be adjusted as training variables and how they affect the training environment and arousal.



3:00 PM

3:50 PM

**The Bridge from De-Escalation to the Use-of-Force: Legal & Behavioral Considerations, Von Kliem, J.D., Von Kliem Consulting; Advanced Force Science® Specialist**



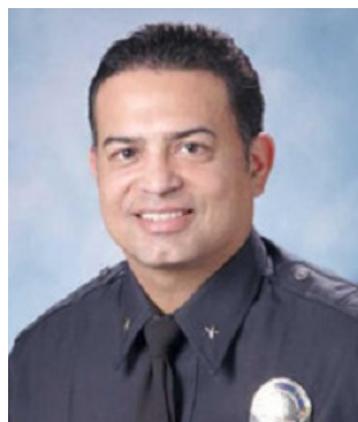
“Why didn’t the officer use de-escalation? Why didn’t the officer try harder to de-escalate the situation?” These are frequent questions voiced by well-meaning citizens. Attorney & Advanced Force Science® Specialist Von Kliem will discuss legal and behavioral concepts that bridge de-escalation, persuasion, and the use-of-force. When are officers justified in their decisions to stop talking and force compliance? You will learn the current state of law relative to creating exigency, imminence, and minimum force arguments. Then, you will learn approaches to analyze and justify reasonable force responses.

4:00 PM

4:50 PM

**Training and Evaluation of Pre-Force Conduct at LAPD  
Asst. Chief Jorge Villegas, Cpt. John McMahon, & Ofcr. Annalise Shearer; LAPD; Advanced Force Science® Specialists**

Nationwide, use of force incidents are dramatically displayed on television and social media. Often times these videos cause public outrage, driving a wedge between law enforcement and the public. Based on these brief videos, the public expects to see de-escalation in every use of force incident. The overwhelming access to the internet, 24-hour information and social media platforms, provides for political pressure that impacts an administrative adjudicating of a use of force incident. With a case study, we will go through the administrative review the Los Angeles Police Department utilizes in every use of force. We will highlight the pre-force conduct expectations for the involved and how this affects that officer’s use of force and/or tactics findings in the adjudication process. How we hold officers accountable for this pre-force conduct is directly correlated to our ability to provide consistent and effective training. We will introduce tactical de-escalation as the pre-force conduct guide and how it is taught to our officers.



**4:50 – 5 Closing Comments; 5:30– 7:30 PM Social Reception at Hilton Garden Inn Salon A/B**

## Thursday, October 25th

Start	End	Topic
8:00 AM	8:45 AM	<b>Pre-Registration Check-In &amp; Refreshments</b>
8:45 AM	9:00 AM	<b>Announcements</b>
9:00 AM	10:30 AM	<b><i>Keynote Address: Optimal Case Preparation for Officers and Experts, Cory Brente, J.D., Los Angeles City Attorney's Office; Certified Force Science® Use-of-Force Analyst</i></b>

Properly preparing your officers and experts is a key part of maximizing your chances for success at trial. Knowing how to prepare, what to look for and the best ways to address problematic issues is often a challenge, but there are things you can do to put yourself in the best position to win. If you are a lawyer, you need to know the best way to prepare your officers and experts. If you are an officer, there are things you can do to help prepare yourself and assist your counsel in preparing your case. If you are an expert, you need to know how to work with counsel to best focus your analysis and target your testimony. Mr. Brente will walk you through the preparation process and will share his thoughts and tips that lawyers, officers and experts should consider as they prepare to go through the litigation process.



An attorney for the last 34 years, Mr. Brente has spent the last 27 years representing LAPD officers in state and federal court jury trials involving the alleged use of excessive force, false arrest and other constitutional violations. As a Senior Assistant City Attorney in the Los Angeles City Attorney's Office, he supervises the Police Litigation Unit and its thirteen attorneys whose sole mission is to represent and defend LAPD officers in civil lawsuits alleging police misconduct. In addition to his litigation and trial work, Mr. Brente advises the LAPD on a variety of issues and is a standing member of the Department's Tactics and Training Review Committee and the Command Level Working Group on best practices and constitutional policing. Mr. Brente also regularly provides training for LAPD officers on a variety of topics focused on civil liability including the litigation process and what officers can expect as a defendant in a civil lawsuit alleging police misconduct and civil liability issues related to the SWAT crisis negotiation process.

**10:40 AM    11:30 AM    Force Science® Research Spotlight: New & Emerging Research  
Paul Taylor, ABD, State University of New York at Albany;  
Advanced Force Science® Specialist and Instructor**

The Force Science Institute is actively engaged in innovative and collaborative research with law enforcement agencies, academies, and academic institutions across the United States and Canada. This

presentation will spotlight some of the new and emerging Force Science research on the human factors related to use-of-force encounters and their implications for law enforcement training, tactics, and investigations. These projects include the examination of the effects of exertion on shooting accuracy and decision-making; the perception versus the reality of police use-of-force encounters; the context surrounding unintentional discharges; novice shooting patterns; the impact of load-bearing vests on short sprinting performance; attentional limitations; and the effectiveness of current training practices.



**11:30 AM      1:00 PM      Lunch, on your own**

**1:00 PM      1:50 PM      Application of Human Factors to Use of Force Analysis & Court Proceedings, Insp. (Ret.) Chris Butler, Calgary Police Service; Advanced Force Science® Specialist and Instructor**

This presentation will involve examination of biomechanics, action/reaction, speed of assault and decision error. Insp. (Ret.) Butler will rapidly explore several cases focusing on the relevant FSI aspects and how they were applied to each case both in formal use-of-force analysis and court proceedings. Incident video and photographs will be utilized to highlight critical learning points. You will develop a practical understanding of the application of numerous FSI research principles & findings & other related human factor issues in actual officer-involved shootings. You will observe numerous examples of written use-of-force expert reports & hear about the application of FSI & other interdisciplinary research principles in the related court



**2:00 PM      2:50 PM      Human Error and the Importance of Tactical Resilience, Paul Taylor, ABD, State University of New York at Albany; Advanced Force Science® Specialist and Instructor**

This presentation will discuss the findings and implications of two experiments conducted by Mr. Taylor in the course of his doctoral research studies. The first, Dispatch Priming and the Police Decision to Use Deadly Force, examines the effects of dispatched information on the "shoot/no-shoot" decision making of experienced officers. The second, The Effects of Muzzle Position on Police Shooting Decisions, examines the effects of muzzle position on the "shoot/no shoot" decision making of experienced officers when they are confronted with ambiguously armed subjects (i.e. people with their hands in their pockets).



**3:00 PM      3:50 PM      Vehicle Dynamics and Officer Responses, Chris Lawrence, Ontario Police College; Advanced Force Science® Specialist and Certification Course Faculty**

When an officer fires upon an approaching motor vehicle, many are unaware of vehicle dynamics and capacities that may cause an officer to perceive a deadly threat even when not standing or moving directly in front of an oncoming vehicle. This presentation will explore the issues of vehicle turning capacities, acceleration, and visual factors along with the methods to measure these same issues as they have been successfully applied in court proceedings and investigations. The concepts will be explained in tandem with Force Science's research concerning officer movement capability while wearing duty gear.



**4:00 PM      4:50 PM      *Director's Address: Six Psychological Factors to Consider before Conducting a Post-Incident Officer Interview, Dr. William Lewinski, Force Science® Institute Director & Co-Founder***

Dr. William Lewinski, will provide a synthesis of all conference presentations, review the impact of the Institute over the past year, and share the vision and mission of the Institute moving forward. Then, Dr. Lewinski will emphasize six psychological factors to consider before conducting a post-incident interview. Ongoing debate about current policies and practices involving when to interview may not consider all of the current scientific evidence. The conditions under which the best quality and quantity of information can be evoked should be at the core of the decision of when to interview. The post-incident interview, which may be the most important conversation of the officer's career, is not only a consideration of memory, but how physical exertion, exhaustion, emotional arousal, physiological arousal, environmental factors, and attentional limitations can all impact an officer's perception at time of the incident and how it is recalled during the interview.



**4:50 PM      5:00 PM      Awards Ceremony & Closing Comments**

## Friday, October 26th

Start	End	Post-Conference Training
8:00 AM	5:00 PM	<b>Principles of Training, Performance, and Learning, Insp. (Ret.) Chris Butler, Calgary Police Service; Advanced Force Science® Specialist &amp; Instructor &amp; Dr. John O'Neill, BCBA-D, Advanced Force Science® Specialist &amp; Behavioral Scientist</b>

This training will begin by dispelling common myths of learning, such as practice makes perfect or that perfect practice leads to perfect performance in the field. You will learn how to assess and track objective changes in performance. You will learn how to train under the optimal conditions; the benefit of random, variable interleaved vs block training, how exercise, memory, and sleep can impact learning and performance. The training will discuss specific instructional techniques to optimize student learning and longer-term retention. The latest Force Science® findings from law enforcement academies on effective training methods that result in long-term skill retention and how to incorporate them into a training program will be revealed. Learn how to identify and avoid training scars. Lastly, we will discuss considerations for implementing evidence-based training principles and how to influence positive change at your agency.



A 32-year law enforcement veteran, Chris Butler was an Inspector with the Calgary Police Service and is currently an international instructor for the Force Science® Institute. Chris has served as a staff sgt. in charge of the delivery of all firearms, fitness, officer safety, subject control tactics, emergency vehicle operations, Incident Command and Strategic Communication. Chris has worked as an operational Duty Inspector (Street Commander) by serving as an incident commander for several major events including major fires, multi casualty accidents and acts of violence claiming multiple lives. Chris currently serves as the Commanding officer of the Major Event and Emergency Management Section, responsible for planned and spontaneous incident emergency planning, interoperability with external agencies, public safety, incident command and search

management. He has qualified at Provincial and Federal court as an expert in police use-of-force training and evaluation.

Dr. John O'Neill has over 10 years of experience in research administration. For the last three years, Dr. O'Neill has conducted a series of studies about police training across regional and state academies. In total, Dr. O'Neill has published 16 works including book chapters, peer-reviewed journal articles, and magazine articles. His area of expertise is in the analysis of human behavior and cognition. He has a Ph.D. with specialization in Behavior Analysis and Therapy, and is a Board Certified Behavior Analyst - Doctoral. He serves on the editorial board of the Journal of Contextual Behavioral Science, as a Behavioral Scientist in the Division of Research and Instructor at Force Science Institute, and as Associate Graduate Faculty at Minnesota State University Mankato.

