

HUNTLEY-FENNERADVISORS

Gavin Huntley-Fenner, Ph.D.

Dr. Gavin Huntley-Fenner is a nationally recognized expert in human factors and safety whose problem-solving skills and communication style have made him widely sought after as a consultant. Along with providing comprehensive risk analyses for a wide variety of product types, Dr. Huntley-Fenner often serves as an expert witness for matters relating to risk perception, hazard communications, safety and human development, human perception-response time, and decision-making.

With a background of over twenty-five years as a researcher, author, educator and business consultant, Dr. Huntley-Fenner applies the latest findings and research methods in cognitive psychology and related disciplines to real world, often life-and-death, situations. Dr. Huntley-Fenner's recent consulting and forensic projects have involved diverse products such as consumer electronics, pharmaceuticals, professional products, and medical devices. He has conducted investigations into human behavior in homes, schools, workplace and public roadway settings. He regularly employs a range of tools including literature reviews and incident databases reviews as well as specific human behavioral research methods, such as surveys and human subjects testing.

Prior to focusing full-time as a human factors consultant (HFA 2009-present and Exponent 2004-2009), Dr. Huntley-Fenner was a business consultant at McKinsey & Company (2001-2003). He began his professional career as an Assistant Professor at the University of California, Irvine (1996-2001), where his National Science Foundation-supported research focused on problem solving, language processing and language development, cognitive development, and normal and abnormal brain development. Today, as principal consultant at Huntley-Fenner Advisers, Dr. Huntley-Fenner provides to all his clients cutting-edge scientific, psychological and real-world expertise.

Professional Highlights

Academic Credentials

- Ph.D. Brain and Cognitive Sciences, Massachusetts Institute of Technology, 1995

Professional and Community Service

- Member, Mattel Medical and Scientific Safety Council (2023-present)
- Steering Committee Member, The National Academies of Sciences, Engineering, and Medicine, Committee for Environmental Health Matters Initiative (2019-2025)
- Member, The National Academies of Sciences, Engineering, and Medicine, Study Committee on Processes to Evaluate the Safety and Efficacy of Drugs for Rare Diseases or Conditions in the United States and the European Union (2024)
- Member, The National Academies of Sciences, Engineering, and Medicine, Committee on Mutual Recognition Agreements in the Regulation of Medicines (2019-2020)
- Member, U.S. FDA Risk Communication Advisory Committee (2010–2014)
- Member, U.S. Technical Advisory Group contributing revisions to ISO/IEC Guide 50: Guidelines for child safety (2012–2014)
- California and Illinois Certified Minimum Continuing Legal Education (MCLE) Provider re: Human Factors and the Law

Recent Publications and Presentations

- Huntley-Fenner G. Panelist on “The Wicked Problems: Real World Experiences and Opportunities to Share the Path Ahead” at The National Academies of Sciences, Engineering, and Medicine, Committee for Environmental Health Matters Initiative “How We Move Matters” workshop. July 16, 2021.
- Lean G, Huntley-Fenner G, Deak G. “Train now arriving: A study of auditory looming using naturalistic stimuli.” Association for Psychological Science Convention: May 26-27, 2021.
- Bond K, Huntley-Fenner G, Rågo L, Op Ed “Opinion: For medicine regulators, reliance is a global imperative”, STAT, February 27, 2020.
- Huntley-Fenner G. Op Ed: “Ebola lapses show lab safety protocols should factor in human error,” *Los Angeles Times*, January 2, 2015.

Selected Academic Credentials and Honors

- Ph.D., Brain and Cognitive Sciences, Massachusetts Institute of Technology, 1995
- B.A., Cognitive Sciences, Vassar College (*with honors*), 1990
- Phi Beta Kappa
- National Science Foundation Post-Doctoral Scholar (1995–1996)

Professional and Community Service

- Member, Mattel Medical and Scientific Safety Council (2023-present)
- Advisory Committee Member, University of California, Irvine Black Thriving Initiative Advisory Board (March 2021 to present)
- Steering Committee Member, The National Academies of Sciences, Engineering, and Medicine, Committee for Environmental Health Matters Initiative (2019 to 2025)
- Member, The National Academies of Sciences, Engineering, and Medicine, Study Committee on Processes to Evaluate the Safety and Efficacy of Drugs for Rare Diseases or Conditions in the United States and the European Union (2024)
- Member, The National Academies of Sciences, Engineering, and Medicine, Committee on Mutual Recognition Agreements in the Regulation of Medicines (2019-2020)
- California Bar Association Certified Minimum Continuing Legal Education (MCLE) Provider for “Human Factors” (2010-present)
- Illinois State Bar Association Certified Minimum Continuing Legal Education (MCLE) Provider for “Human Factors & Grade Crossing Safety” (2019 to present)
- Board member, Department of Education Chair’s Advisory Board, University of California, Irvine (2009–2019)
- Member, U.S. FDA Risk Communication Advisory Committee (2010–2014)
- Member, U.S. Technical Advisory Group contributing revisions to ISO/IEC Guide 50: Guidelines for child safety (2012–2014)
- United States Army Southern California Community Advisory Board (2008–2012)
- Board member, Black Alumni of Massachusetts Institute of Technology (2010–2012)
- Member, California’s Statewide Committee on Autism and Education (2007)
- Elected Member/President, Irvine Unified School District Governing Board (2005–2013)

Publications

Peer-Reviewed Publications

Kerger B. D., Bernal A., Paustenbach D. J., Huntley-Fenner G. (2016). Halo and spillover effect illustrations for selected beneficial medical devices and drugs. *BMC Public Health*, 16(1), 979.

Huntley-Fenner G. Human Factors. In *Communicating Risks and Benefits: An Evidence-Based User's Guide*. B. Fischhoff, N.T. Brewer and J.S. Downs (Eds). Washington DC: United States Food and Drug Administration, 2011.

Huntley-Fenner G, Harley E, Trachtman D, Young D. ANSI Z535.6 and conspicuity: A test of the new state of the art format for instructional manuals. *Proc Human Factors Ergon Soc* 2007; 51:1029–1033.

Huntley-Fenner G. Warnings and pedestrian behavior: A case study of unintended effects. *Proc Human Factors Ergon Soc* 2006; 50:2202–2206.

Huntley-Fenner G, Arndt S, Sanders K. Case study: Pedestrian behavior at grade crossings. *Proceedings of the International Conference on Industrial Engineering and Practice*, 2005; 10:69–73.

Young D, Huntley-Fenner G, Trachtman D, Krauss D. Human performance issues in auditory collision-avoidance systems. *Proceedings of the International Conference on Industrial Engineering and Practice*, 2005; 10:64–68.

Huntley-Fenner G, Carey S, Solimando A. Objects are individuals but stuff doesn't count: Perceived rigidity and cohesiveness influence infants' representations of small groups of discrete entities. *Cognition* 2002; 85(3):203–221.

Uller C, Carey S, Huntley-Fenner G, Klatt L. What representations might underlie infants' numerical knowledge? *Cognitive Develop* 2001; 14:1–26.

Huntley-Fenner G. Children's understanding of number is similar to adults' and rats': Numerical estimation by 5- to 7-year-olds. *Cognition* 2001; 78(3):B27–40.

Huntley-Fenner G. Why count stuff?: Young preschoolers do not use number for measurement in continuous dimensions. *Develop Sci* 2001; 4(4):456–462.

Huntley-Fenner G, Cannon E. Preschoolers' magnitude comparisons are mediated by a preverbal analog mechanism. *Psychol Sci* 2000; 11(2):147–152.

Huntley-Fenner G. The effect of the whole object bias on preschoolers' understanding of collective nouns. *Proc 27th Child Language Research Forum* 1995; 27:145–155.

Peer-Reviewed Published Abstracts

Bernal A, Huntley-Fenner G, Kerger B and Paustenbach D. Risk Communication and Perceptions for Highly Beneficial Medical Devices and Pharmaceuticals with Limited Scientific Evidence for Adverse Consequences. 54th Annual Meeting of the Society of Toxicology, San Diego, CA. March 22-26, 2015.

Huntley-Fenner G, Munro M. Could we have seen it coming?: On the prospect of mining online consumer review data in order to forecast product safety issues. American Marketing Association Marketing and Public Policy Conference. Washington, DC May 28-30, 2009.

Huntley-Fenner G, Wood CT, Sala JB. Study of the impact of California's Proposition 65 warnings on safety related awareness and behaviors. Society for Risk Analysis Proceedings Abstracts, San Antonio TX, December 9–12, 2007.

Babb K, Gage N, Perales O, Huntley-Fenner G, Hickok G. Tonal, verbal, and spatial memory span in Williams syndrome. *Cognitive Neuroscience Society Abstracts* 1998; 5:79.

Huntley-Fenner G, Duclos A, Iliescu A, Babb K, Gage N, Hickok G, Perales O. Knowledge of count/mass syntax in Williams syndrome. *Cognitive Neuroscience Society Abstracts* 1998; 5:80.

Gage N, Huntley-Fenner G, Hickok G. Grammatical competence in Williams syndrome. *Cognitive Neuroscience Society Abstracts* 1998; 5:81.

Huntley-Fenner G, Xu F. Further evidence for infants' numerical competence. *Infant Behavior and Development* 1998; 21:216.

Huntley-Fenner G, Hanson D. Evidence for the anticipation of material kind in infants' reaching for objects and portions of sand. *Infant Behavior and Development* 1998; 21:476.

Huntley-Fenner G. The quantification of portions of nonsolid substances. *Infant Behavior and Development* 1996; 19(1):522.

Selected Other Publications including Op Eds

Bond K., Huntley-Fenner G, Răgo L, Opinion: For medicine regulators, reliance is a global imperative, STAT, February 27, 2020. <https://www.statnews.com/2020/02/27/medicine-regulators-reliance-global-imperative/>

Huntley-Fenner G. Op Ed: Ebola lapses show lab safety protocols should factor in human error, *Los Angeles Times*, January 2, 2015. <https://www.latimes.com/opinion/op-ed/la-oe-huntley-disease-lab-safety-20150102-story.html>

Huntley-Fenner G. How will the Searchable Consumer Product Safety Incident Database Improve Product Safety? Analysis and Perspective, *Product Safety and Liability Reporter* (Bureau of National Affairs). November 9, 2009.

Huntley-Fenner G. A Human Factors perspective on summer safety. *Industrial Heating – International Journal of Thermal Technology*. July 2008. Vol. 75, Iss. 7; p. 22.

Huntley-Fenner G. Letter to the Editor: Autism and rainfall hypothesis. *Wall Street Journal*, March 9, 2007.

Huntley-Fenner G. We have obligations to speak up. *Irvine World News Op-Ed*, September 15, 2005.

Planning and Organization of Forums/Workshops/Conferences

Member of the Planning Committee for the workshop on “Characterizing and Communicating Uncertainty in the Assessment of Benefits and Risks of Pharmaceutical Products,” Institute of Medicine, National Academies of Science, Engineering and Medicine, Board on Health Sciences Policy - Forum on Drug Discovery, Development, and Translation, Washington DC, February 12-13, 2014.

Books/Edited Volumes/Committee Reports

Committee on Mutual Recognition Agreements and Reliance in the Regulation of Medicines; National Academies of Sciences, Engineering and Medicine. *The Need for Increased Reliance Among Regulators*. The National Academies Press, 2019. doi:10.17226/25594.

National Research Council and Institute of Medicine. *Potential Risks and Benefits of Gain-of-Function Research: Summary of a Workshop*. Washington, DC: The National Academies Press, 2015. doi:10.17226/21666.

Forum on Drug Discovery, Development, and Translation; Board on Health Sciences Policy; Institute of Medicine. *Characterizing and Communicating Uncertainty in the Assessment of Benefits and Risks of Pharmaceutical Products: Workshop Summary*. Washington (DC): National Academies Press (US); 2014 Dec 19.

Autism Advisory Committee. *A call for action: Improved services for children with autism spectrum disorders*. California Superintendent of Public Instruction Autism Advisory Committee Final Report, August 30, 2007.

A Call for Action: Improved Services for Children with Autism Spectrum Disorders. Sacramento, CA. California Superintendent of Public Instruction Autism Advisory Committee. August 30, 2007. Final Report. Available from <http://www.caspwebcasts.org/pdfs/ctoctl.pdf>

Selected Presentations

Selected Invited Colloquia and Seminars

Huntley-Fenner G. Panelist on “Dangerous Ideas? Addressing Safety When a Physical Toy is also an IP Asset” at the ICPHSO Annual Meeting and Symposium. February 16, 2022.

Huntley-Fenner G. Panelist on “Re-examining the Cognitive Science of Risk in the COVID-19 Pandemic Era” at the Yuma Pacific Southwest Section 47th Annual Meeting. January 21, 2022.

Huntley-Fenner G. Facilitator on “California’s New Ethnic Studies Requirement: What Is It and Why Is It Necessary?” Orange County Bar Association Thurgood Marshall Bar Association, Continuing Legal Education, December 8, 2021.

Huntley-Fenner G. Panelist on “The Wicked Problems: Real World Experiences and Opportunities to Share the Path Ahead” at The National Academies of Sciences, Engineering, and Medicine, Committee for Environmental Health Matters Initiative “How We Move Matters: Exploring the Connections Between New Transportation and Mobility Options and Environmental Health” workshop. July 16, 2021.

Huntley-Fenner G, Sanchez Jennifer T. Warning! How to Prepare Your Failure to Warn Case. National Association of Subrogation Professionals. NASP 2019 Subrogation Litigation: Skills and Management Conference. Rancho Mirage, CA, March 28-29, 2019.

Huntley-Fenner G. Panelist and presenter on “Evaluating and Mitigating Risk Associated with Lithium-Ion Batteries” at ICPHSO 2017 Annual Meeting & Training Symposium: "Evaluating & Managing Risk." Orlando FL, February 19-23, 2017.

Huntley-Fenner G. Invited Panelist “Human Factors” GAO Meeting on Oversight of Select Agents in High-Containment Laboratories at the National Academy of Sciences. January 23-24, 2017 Room 125 2101 Constitution Avenue, NW, Washington, DC.

Huntley-Fenner G. Panelist and presenter on “A Guide to Engineers’ Involvement in Litigation: Human Factors” at the Institute of Electrical and Electronics and Engineers Symposium on Product Compliance Engineering. Anaheim CA, May 17, 2016.

Huntley-Fenner G. Panelist and presenter on “Best Practices in Safety Communications, Warnings and Instructions: Human Factors” at the Institute of Electrical and Electronics and Engineers Symposium on Product Compliance Engineering. Anaheim CA, May 17, 2016.

Huntley-Fenner G. Panelist and presenter on “Human Error” at the Board on Life Sciences Policy; Institute of Medicine. Gain-of-Function Research: The Second Symposium. Washington, DC, March 10-11, 2016.

Huntley-Fenner G. Discussion Leader/Facilitator. “Ecological Validity.” Symposium conducted at the 2016 Grantee Meeting on Emerging Research on Tobacco Product Warnings: Advancing Theory and Methods. National Cancer Institute. Chicago, IL, March 1, 2016.

Huntley-Fenner G. Panel Chair and presenter on “Risk Communication: Exploring the impact of litigation on the content and the effectiveness of communicating risks and benefits.” At the ABA Current Issues in Pharmaceutical, Medical Device and Biotech Litigation CLE. New York, NY, October 2, 2015.

Huntley-Fenner G. Panelist and presenter on “What Can Human Factors Research Tell Us About Using New Information for Decision Making?” at the “Implementation and Adoption of Next Generation Diagnostic Systems in Far Forward Military Settings” for the Committee on Support to the Department of Defense Programs to Counter Biological Threats. Washington, DC, February 5-6, 2015.

Huntley-Fenner G. Panelist and presenter on “Human Factors” at the Board on Life Sciences Policy; Institute of Medicine. Risks and Benefits of Gain-of-Function Research: A Symposium. Washington, DC, December 15-16, 2014. Published as National Research Council and Institute of Medicine. Potential Risks and Benefits of Gain-of-Function Research: Summary of a Workshop. Washington, DC: The National Academies Press, 2015. doi:10.17226/21666.

Huntley-Fenner G. Panelist and presenter on “The Role of Human Factors” at the Forum on Drug Discovery, Development, and Translation; Board on Health Sciences Policy; Institute of Medicine. Characterizing and Communicating Uncertainty in the Assessment of Benefits and Risks of Pharmaceutical Products. Washington DC. February 13, 2014.

Huntley-Fenner G. Session Chair for “Warning Cues and Detection Aids” panel at the Human Factors and Ergonomics Society Meeting. San Diego CA, October 3, 2013.

Huntley-Fenner G. and Martin R “Incident Investigations in a Risk-Reduction Context” presented to the Longshore Claims Association Roundtable Meeting, San Diego, CA, July 26, 2013.

Huntley-Fenner G. Panelist and presenter for “Warnings and risk communication: navigating the next generation of the regulatory and legal landscape.” Perrin Conferences Continuing Legal Education Webinar, October 19, 2010.

Huntley-Fenner G. “Warnings effectiveness and adequacy.” Continuing Legal Education, Murchison and Cumming, Los Angeles, CA, September 22, 2010.

Huntley-Fenner G. Panelist and presenter for “Expert witnesses at trial: find, prepare and present.” Langston Bar Association, Los Angeles, CA, October 29, 2009.

Huntley-Fenner G. “Failure to warn claims: Science, the law and the limits of common sense.” Orange County Bar Association, Product Liability Group, Continuing Legal Education, Costa Mesa, CA, March 2009.

Huntley-Fenner G. “Consumer product safety.” Continuing Legal Education Webinar, Costa Mesa, CA, December 2008.

Huntley-Fenner G. “Warnings and behavior: a study of pedestrian behavior at grade crossings.” 2008 Rail Corridor Safety Conference. May 12 – 14, 2008, Ventura, California.

Huntley-Fenner G. “WARNING!: Substantial dangers in product liability law (managing failure to warn cases).” Orange County Bar Association Product Liability Group, Irvine CA, July 2007.

Huntley-Fenner G. “Warnings and behavior.” Propane Gas Defense Association Annual Meeting, San Antonio, TX, October 2006.

Huntley-Fenner G. “Warnings and safety.” Snell & Wilmer, Costa Mesa, CA (National Videocast), July 2006.

Huntley-Fenner G. “Introduction to human factors.” Morrison and Foerster, Irvine, CA (National Videocast), May 2004.

Huntley-Fenner G. “Young children’s understanding of numbers.” Keynote address to the Southern California Psychology Conference for Community Colleges, Mission Viejo, CA, 2000.

Huntley-Fenner G. “What does verbal counting have to do with numerical judgments?” Paper presented to the Cognitive Psychology Group in Department of Psychology, University of California, Los Angeles, CA, 1999.

Huntley-Fenner G. “The effect of ratio and magnitude on preschoolers’ numerical judgments.” Paper presented to the Developmental Psychology Group in Department of Psychology, University of California, Los Angeles, CA, 1999.

Huntley-Fenner G. “The effect of material properties on children’s judgments of quantity.” Paper presented to the Department of Psychology, California State University, San Diego CA, 1998.

Huntley-Fenner G. “The effect of material properties on children’s judgments of quantity.” Paper presented to the Phi Delta Kappa Society Meeting, Orange Coast Community College, Orange, CA, 1998.

Huntley-Fenner G. “The representation of objects and nonsolid substances in infancy.” Paper presented at San Francisco State University, San Francisco, CA, 1997.

Huntley-Fenner G. “The effect of material properties on children’s judgments of quantity.” Paper presented to the Multivariate Neurocognitive Development Program in the Department of Psychology, University of Southern California, Los Angeles, CA, 1997.

Selected Research Presentations

Lean G, Huntley-Fenner G, Deak G. Train now arriving: A study of auditory looming using naturalistic stimuli. Association for Psychological Science. APS Convention: May 26-27, 2021.

Huntley-Fenner G, Bernal A, Kerger B, Paustenbach D. Risks of Unintended Health Consequences Associated with Negative Halo Effects. American Marketing Association Marketing and Public Policy Conference. Washington, DC June 4-6, 2-15.

Bernal A, Huntley-Fenner G, Kerger B, Paustenbach D. Risk Communication and Perceptions for Highly Beneficial Medical Devices and Pharmaceuticals with Limited Scientific Evidence for Adverse Consequences. 54th Annual Meeting of the Society of Toxicology, San Diego, CA. March 22-26, 2015.

Huntley-Fenner G, Munro M. Could we have seen it coming?: On the prospect of mining online consumer review data in order to forecast product safety issues. American Marketing Association Marketing and Public Policy Conference. Washington, DC May 28-30, 2009.

Huntley-Fenner G. A study of the impact of California’s Proposition 65 warnings on safety related awareness and behaviors. Society for Risk Analysis 2007 Annual Meeting. San Antonio TX, December 2007.

Huntley-Fenner G. ANSI Z535.6 and conspicuity: A test of the new state of the art format for instructional manuals. Annual Meeting of the Human Factors and Ergonomics Society, 51st Annual Meeting, Baltimore, MD, October 2007.

Huntley-Fenner G. Warnings and pedestrian behavior: A case study of unintended effects. 50th Annual Meeting of the Human Factors and Ergonomics Society, San Francisco, CA, October 2006.

Huntley-Fenner G. Case study: Pedestrian behavior at grade crossings. 10th Annual International Conference on Industrial Engineering—Theory, Applications and Practice, Clearwater, FL., December 2005.

Huntley-Fenner G. Children’s understanding of number as similar to adults’ and rats’: Numerical estimation by 5-, 6-, and 7-year-olds. Biennial Meeting of the Society for Research in Child Development, Minneapolis, MN, 2001.

Selected Workshops and Seminars

Huntley-Fenner G. Consumer product hazard analysis workshop. Toronto, Canada, March 23, 2010.

Huntley-Fenner G. An introduction to kid safety and quality reviews. Emeryville, CA, October 15, 2009.

Huntley-Fenner G. An introduction to consumer product safety hazard analysis. Toronto, Canada, January 2009.

Huntley-Fenner G. Designing for product safety: compliance and beyond. Emeryville, CA, December 18, 2007.

Huntley-Fenner G. Seminar in language and culture/language and thought. Cincinnati, OH, July 9–15, 2000.

Huntley-Fenner G. Seminar in language and culture/language and thought. Cincinnati, OH, September 1–5, 1998.

Selected Non-Research Related Invited Talks

Huntley-Fenner G. Panelist and presenter at screening of the education documentary “Race to Nowhere: The Dark Side of American Achievement Culture.” Merage Jewish Community Center of Orange County, Irvine, CA, October 2010.

Huntley-Fenner G. “What do toys, pharmaceuticals and trains have in common?: A former academic talks about consulting, research and publishing in applied settings,” University of California, Irvine CA, October, 2009.

Huntley-Fenner G. “Irvine: A case study in civic geography.” Urban Spaces II: The future of cities, Tilburg, Netherlands, March, 2009.

Huntley-Fenner G. “Careers in cognitive sciences.” Vassar College Cognitive Science Program 25th Anniversary, Poughkeepsie, NY, November 2007.

Huntley-Fenner G. “Regarding The Role of Religion in Public Education Settings.” Americans United for the Separation of Church and State, Irvine, CA, March 2007.

Peer Reviewer

Human Factors and Ergonomics Society; Child Development; Cognition; Developmental Psychology; Israel Science Foundation; Journal of Experimental Child Psychology; Language and Cognitive Processes; National Science Foundation; Psychological Bulletin; Psychological Science

Professional Affiliations

- American Psychological Association
- American Railway Engineering and Maintenance-of-Way Association (Technical Committee 36, Highway-Rail Grade Crossing Warning Systems)
- Association for Psychological Science
- ASTM Committee Member: E34 Occupational Health and Safety and F15 Consumer Products
- Human Factors and Ergonomics Society
- International Consumer Product Health and Safety Organization