

October 2018

**Robert Mauro**

Department of Psychology  
University of Oregon,  
Eugene, OR 97403-1227

e-mail: [mauro@uoregon.edu](mailto:mauro@uoregon.edu)  
Voice: (541) 346-4917  
FAX: (541) 346-4911

Decision Research  
1201 Oak St., Suite 200  
Eugene, OR 97401

e-mail: [mauro@decisionresearch.org](mailto:mauro@decisionresearch.org)  
Voice: (541) 485-2400  
Fax: (541) 485-2403

**EDUCATION**

Stanford University, PhD, Psychology (Social) September 1984.

Yale University, M.S. Psychology, December 1981.

Stanford University, A.B. Sociology with Distinction and Departmental Honors, June 1979.

National Science Foundation Research Program in Social Psychophysiology, University of Iowa:  
NSF Fellow, June 1987.

Inter-University Consortium for Political & Social Research, Institute for Social Research,  
University of Michigan, Ann Arbor; Training Program in the Theory and  
Technology of Social Research, July 1980 - September 1980.

Focus Program in Comparative Anglo-American Legal Systems (Stanford Overseas Studies  
Program, England: Stanford Law School and Magdalene College, Oxford  
University), June 1977- December 1977.

**ACADEMIC EXPERIENCE**

Senior Research Scientist, Decision Research, 2003-present

Sabbatical, National Aeronautics & Space Administration Ames Research Center, 2001-2002.

Department Head, Department of Psychology, University of Oregon, 1998-2001

Associate Professor, University of Oregon, 1990-present.

Visiting Fellow, Yale University, 1990-1991.

Assistant Professor, University of Oregon, 1984-1990.

Instructor, Psychology & Law, Stanford University, 1983, 1984.

## GRANTS

- Principal Investigator, National Aeronautics & Space Administration /ARTS, "Training, Automation, and Operational Decision-Making III," 2015-2018.
- Principal Investigator, Federal Aviation Administration. "Development of Normal Procedures for Airline Operations," 2013-2016.
- Principal Investigator, National Aeronautics & Space Administration, "Detecting & Mitigating Automation Surprise," 2012-2016.
- Principal Investigator, Federal Aviation Administration, "Developing New Training Techniques and Educational Design Methods for Training Decisions About In Flight Icing" 2009-2010
- Principal Investigator, National Aeronautics & Space Administration /ARTS, "Training, Automation, and Operational Decision-Making II", 2012-2015.
- Principal Investigator, National Aeronautics & Space Administration /ARTS, "Training, Automation, and Operational Decision-Making I", 2009-2012.
- Co-Principal Investigator, National Aeronautics & Space Administration/Space Grant Program, "Human factors issues of ADS-B and cockpit displays of traffic information" 2009-2010.
- Principal Investigator, National Aeronautics & Space Administration /Dell Systems, "Visual Stimulation and Visually Based Control Research" 2009-2010
- Principal Investigator, San Jose State University Foundation, Analysis of National Aviation Operation Monitoring Service Data 2009-2010.
- Co-Principal Investigator, Office of Terrorism Analysis, "Analytic Methods & Tools for Terrorism Risk Analysis", 2006-2008 (\$943,392).
- Principal Investigator, National Aeronautics & Space Administration, "Adaptive Decision Support" 2007-2010 (\$313,000).
- Principal Investigator, Swales Aerospace, "Development of a Tool for Risk Identification, Assessment, & Display" 2006 (\$45,000).
- Principal Investigator, National Aeronautics & Space Administration, "Education & Training for Aircraft Icing" 2006 (\$25,000).
- Principal Investigator, National Aeronautics & Space Administration, "Human Oriented Procedure Design," 2005-2006 (\$140,000).
- Principal Investigator, National Aeronautics & Space Administration, "Developing New Training Techniques and Educational Design Methods for Training Decisions about In Flight Icing." 2003-2005 (\$150,000).
- Principal Investigator, National Aeronautics & Space Administration, "Affect and Aeronautical Decision Making," 2001-2004 (\$390,000).

Principal Investigator, National Aeronautics & Space Administration, "Development of a Self-paced Computer Based Training Program on In Flight Icing", 2001-2002 (\$330,000).

Principal Investigator, National Aeronautics & Space Administration, "Affect and Aeronautical Decision Making," 1998-2001 (\$320,000).

Principal Investigator, National Science Foundation, "Development of an Internet-based Decision Research System," 1998-2000 (\$140,000).

Program Director, National Institute of Mental Health, Emotion Research Training Grant, 1994-95, 1997-2001, (\$1,420,000).

Co-Principal Investigator, National Science Foundation "Regulation of Social Cognition by Non-verbal Emotion." (\$115,000).

## **OTHER PROFESSIONAL EXPERIENCE**

Editorial Board, New Criminal Law Journal, UC Davis Law School

Advisor, International Civil Aviation Organization, Human Performance Task Force.

Advisor, Oregon Law Commission, Judicial Selection Working Group.

Member, Review Board, International Journal of Aviation Psychology.

Member, Federal Aviation Administration Joint Safety Analysis Team - Pilot Decision Making, Expert Advisory Panel, 2002.

Member, Consortium on Meteorological Education & Training, University Consortium on Atmospheric Research, 1998-2000.

Reviewer, National Science Foundation, Law & Social Sciences Section, Behavioral Sciences Section, Decision Sciences Section.

Reviewer, International Journal of Aviation Psychology, Law & Society Review, Journal of Personality & Social Psychology, Journal of Applied Psychology, Behavioral Assessment, Psychophysiology, Psychological Bulletin, Cognition & Emotion, Journal of Cognitive Engineering & Decision-making.

Consultant, NAACP Legal Defense & Education Fund, 1981-1984.

Member, Yale Police Advisory Board, 1980-1981.

Research Associate & Special Services Unit Supervisor, Stanford Department of Public Safety, Santa Clara County Sheriff's Office, 1978-1979.

## **HONORS AND AWARDS**

National Aeronautics & Space Administration NESC Achievement Award 2005..

National Aeronautics & Space Administration Turning Goals Into Reality Award 2001.

Gustav Meyers Award for Outstanding Written Work in Human Rights, 1990.

Finalist, Society for Experimental Social Psychology Dissertation Award, 1985.

National Science Foundation Graduate Fellow 1979-1982.

Phi Beta Kappa, elected 1978.

National Merit Scholar, 1975-1979.

Golden Scroll of the American Academy of Achievement at the sponsorship of the International Association of Chiefs of Police, 1976.

Certificate of Appreciation of the Southern California Juvenile Officers' Association 1975.

### **PROFESSIONAL MEMBERSHIPS**

Member, American Psychological Society

Member, American Psychological Association

Member, American Psychology - Law Society

Member, Association of Aviation Psychology

Member, Society for Personality & Social Psychology

Member, Human Factors & Ergonomics Society

### **PUBLICATIONS**

Mauro, R. (1984). The constable's new clothes: Effects of uniforms on perceptions and problems of the police. Journal of Applied Social Psychology, *14*, 42-56.

Gross, S. & Mauro, R. (1984). Patterns of death: An analysis of racial disparities in capital sentencing and homicide victimization. Stanford Law Review, *37*, 27-153.

Mauro, R. (1988). Opponent processes in human emotions? An experimental investigation of hedonic contrast and affective interactions. Motivation & Emotion, *12*, 333-351.

Gross, S. & Mauro, R. (1988). Death and Discrimination: Racial Disparities in Capital Sentencing. Northeastern University Press: Boston, MA.

Mauro, R. (1990). New research on real emotion. [Review of K. Scherer (1988), *Facets of Emotion*]. Contemporary Psychology, *35*, 262.

Mauro, R. (1990). Understanding L.O.V.E. (Left Out Variables Error): A technique for evaluating the effects of omitted variables. Psychological Bulletin, *108*, 314-329.

- Mauro, R. (1992). Tipping the scales towards death: The biasing effects of death qualification. In Suedfeld, P. & Tetlock, P. (Eds.) Psychology and Social Policy. pp 243-254, Hemisphere Press: New York.
- Mauro, R., Sato, K., & Tucker, J. (1992). The role of appraisal in human emotions: A cross-cultural study. Journal of Personality & Social Psychology, *62*, 301-317.
- Mauro, R. (1992). Affective dynamics: Opponent processes and excitation transfer. In Clark, M. (Ed.) Review of Personality & Social Psychology. pp 150-174, Sage: Newbury Park, CA.
- Mauro, R. & Kubovy, M. (1992). Caricature and face recognition. Memory & Cognition, *20*, 433-440.
- Rothbart, M. & Mauro, R. (1995). Social categories and decision making. In Messick, D., & Tenbrunsel, A. (Eds). Psychological Aspects of Business Ethics. Sage: Newbury Park, CA.
- Ellsworth, P. & Mauro, R (1998). Psychology & Law. In Gilbert, D., Fiske, S., & Lindzey, G. (Eds.) Handbook of Social Psychology, 4th Ed. McGraw-Hill: New York.
- Mauro, R. & Barshi, I. (1999). Using an internet-based decision research system in aviation research. Proceedings of the 10<sup>th</sup> International Symposium on Aviation Psychology, Ohio State University.
- Mauro, R. & Barshi, I. (1999). Effect of Emotion On Memory for communication in Simulated Flight and Analog Tasks. Proceedings of the 10<sup>th</sup> International Symposium on Aviation Psychology, Ohio State University.
- Mauro, R., Barshi, I, & Pederson, S. (2001). Affect, Experience, & Aeronautical Decision-making. Proceedings of the 11<sup>th</sup> International Symposium on Aviation Psychology, Ohio State University.
- NASA Glenn Research Center (Mauro, R., Van Zante, J., Burke, K., Bond, T.) (2002). A Pilot's Guide to In-Flight Icing. NASA Glenn Research Center, CD-ROM.
- Mauro, R. & Barshi, I. (2003). Training Smart: Using principles of cognitive science in aeronautical education and training. Proceedings of the American Institute of Aeronautics & Astronautics, Reno, NV.
- Mauro, R. & Barshi, I. (2003). Cognitive science and aviation training: Foundations for effective learning and operational application. Proceedings of the World Aviation Congress. Montreal, Canada.
- NASA Glenn Research Center (Mauro, R., Van Zante, J., Burke, K., Bond, T.) (2004). A Pilot's Guide to In-Flight Icing. NASA Glenn Research Center, Web Site.
- NASA Glenn Research Center (Mauro, R., Van Zante, J., Burke, K., Bond, T.) (2005). A Pilot's Guide to Ground De-Icing. NASA Glenn Research Center, Web Site.
- Mauro, R. & Barshi, I. (2006). Evaluating Computer Based Training for In Flight Icing. . Proceedings of the American Institute of Aeronautics & Astronautics, Reno, NV.

- NASA Glenn Research Center (Mauro, R., Van Zante, J., Burke, K., Bond, T.) (2006). A Pilot's Guide to Ground De-Icing. (Expanded program) NASA Glenn Research Center, Web Site.
- Mauro, R. & Barshi, I. (2007). Effective Computer Based Training in Aviation. Proceedings of the 13<sup>th</sup> International Symposium on Aviation Psychology, Ohio State University.
- Mauro, R., Sheppler, C., & Barshi, I. (2007). Individual Differences in Aeronautical Decision Making. Proceedings of the 13<sup>th</sup> International Symposium on Aviation Psychology, Ohio State University.
- Mauro, R. & Barshi, I. (2008). Human oriented procedure design for the Next Generation Air Transportation System. Human Factors and the Next Generation Air Transportation System: The Future of Aviation, Arlington, Texas.
- Funk, K., Mauro, R., & Birdseye, H. (2008). Identifying and Addressing Human Factors Issues of ADS-B and Cockpit Displays of Traffic Information. Human Factors and the Next Generation Air Transportation System: The Future of Aviation, Arlington, Texas.
- Mauro, R. & Barshi, I. (2009). Risk Assessment in Aviation. Proceedings of the 14<sup>th</sup> International Symposium on Aviation Psychology, Wright State University.
- Funk, K., Mauro, R., & Barshi, I. (2009). NextGen Flight Deck Human Factors Issues. Proceedings of the 14<sup>th</sup> International Symposium on Aviation Psychology, Wright State University
- Dieckmann, N. F., Mauro, R., & Slovic, P. (2010). The effects of presenting imprecise probabilities in intelligence forecasts. Risk Analysis, 30, 987-1001.
- Mauro, R. (2011). Plans for Future Pilot Icing Training Materials: Developing New Techniques and Educational Design Methods for Pilot Icing Training Materials. Report Federal Aviation Administration Cooperative Agreement 09-G-019.
- Mauro, R. (2011). Cold Hard Facts: What Pilots Know about Aircraft Icing and How They Learned It. Proceedings of the 16<sup>th</sup> International Symposium on Aviation Psychology, Wright State University.
- Martin, L., Schmidt, L., Okeefe, W., Barshi, I., & Mauro, R. (2012). Houston, We Have a Problem Solving Model for Training. Journal of Organizational Psychology, 12, 57-68.
- Connors, M., Mauro, R., & Statler, I. (2012). The National Aviation Operational Monitoring Service: Results of a survey of air-carrier pilots. NASA TP-2012-206013.
- Mauro, R., Degani, A., Loukopoulos, L., & Barshi, I. (2012). The operational context of procedures and checklists in commercial aviation. Proceedings of the 56th Annual Meeting of the Human Factors and Ergonomics Society (pp. 758-762). Boston, MA: Human Factors Society.
- Connors, M., Mauro, R., & Statler, I. (2013). The National Aviation Operational Monitoring Service: Development of a Survey Methodology. Proceedings of the 17<sup>th</sup> International Symposium on Aviation Psychology, Wright State University.

- Connors, M., Mauro, R., & Statler, I. (2014). Measuring Safety-Related Trends in the National Airspace System: Description and Validation of a Survey Methodology. International Journal of Aviation Psychology, *24*, 265-286.
- Dickert, S., Vastfjall, D., Mauro, R., & Slovic, P. (2014) The Feeling of Risk: Implications for Risk Perception and Communication. In Cho, H., Reimer, T., & McComas, K. A. (Eds.). The SAGE Handbook of Risk Communication. Thousand Oaks, CA: Sage.
- Sherry, L. & Mauro, R. (2014). Controlled flight into aerodynamic stall: Functional complexity failures and automation surprises. Proceedings of the Integrated Communication, Navigation, & Surveillance Conference, Herndon, VA. [Best Paper]
- Sherry, L. & Mauro, R. (2015). Controlled flight into Stall (CFIS): Functional Complexity Failures and Automation Surprises. Proceedings of the 18th International Symposium on Aviation Psychology. Dayton, Ohio.
- Trippe, J. & Mauro, R. (2015). Understanding Automation Surprise: Analysis of ASRS Reports. Proceedings of the 18th International Symposium on Aviation Psychology, Dayton, Ohio.
- Barshi, I., Mauro, R., Degani, A. & Loukopoulou, L. (2016). Designing Flightdeck Procedures. NASA/TM-2016-219421.
- Trippe, J. & Mauro, R. (2017). Automation Surprise in Commercial Aviation. In Vidulich, M., Tsang, P., & Flach, J. (Eds.) Advances in Aviation Psychology. Ashgate, Farnham, UK.
- Mauro, R. (in press). Perception of Aviation Safety. In Raue, M., Streicher, B., Lermer, E., & Prozsalt, F. (Eds). Perceived Safety, Springer, London UK.
- Sherry, L, Mauro, R., & Trippe J. (in press). Design of a Primary Flight Display (PFD) to Avoid Controlled Flight into Stall. Journal of Guidance, Control, and Dynamics (AIAA).

## **PAPERS & PRESENTATIONS**

- Mauro, R. (1981). Effects of the complexity and extremity of social prototypes on perceptions of individual category members. Master's Thesis, Yale University.
- Mauro, R. (1984). Affective dynamics in mood swings and mixed emotions. Doctoral Dissertation, Stanford University.
- Mauro, R. (1985). Knowledge or Numerology: Applying social science in a legal context. Invited address, Oregon Psychological Association meeting, Otter Crest, OR, May 1985.
- Mauro, R. (1986). Opponent Processes in Human Affective Dynamics. Invited address, Western Psychological Association meeting, Seattle, WA, May 1986.
- Mauro, R. (1988). Hypnosis and eyewitness identification. Invited address, Oregon Criminal Defense Lawyers Association, Eugene, OR, May, 1988.

- Mauro, R. (1994). An evaluation of the drug courier profile and its use in interdiction searches. Report, Institute of Cognitive and Decision Sciences, University of Oregon, Eugene, OR & Oregon State Police, Salem, OR.
- Rothbart, M. & Mauro, R. (1994). Social categories and decision making: How much differentiation do we need. Paper presented at the Conference on Behavioral Research & Business Ethics, Northwestern University.
- Johnstone, R. & Mauro, R. (1997). Perceptions of Justice: An examination of the effects of type of expert on procedural justice judgments. Paper presented at the American Psychological Association conference.
- Johnston, R., Mauro, R., & Johns, M. (1998). Effects of trial experience on procedural justice judgments. Paper presented at the American Psychological Association conference, August 15, 1998, San Francisco.
- Mauro, R. (1998). Profiles and prejudice: The case of the drug courier profile. Paper presented at the American Psychological Association Convention, August 17, 1998, San Francisco.
- Mauro, R. & Barshi, I. (1998). Affect and Aeronautical Decision-making. Paper presented at NASA-Ames workshop, August 14, 1998.
- Mauro, R. & Barshi, I. (1999). Using an internet-based decision research system in evaluation research. Paper presented at the International Aviation Training Symposium, Oklahoma City, September 29, 1999.
- Mauro, R. & Bruininks, P. (1999). Using an internet-based decision research system in decision research. Paper presented at the Annual Meeting of the Society for Judgment & Decision Making, Los Angeles, November 21, 1999.
- Mauro, R. (2000). Aeronautical Decision-making Research. Paper presented at the Revolution in General Aviation conference, Corvallis, OR, June 14-16, 2000.
- Peters, E. & Mauro, R. (2000). Feeling our way through a complex world Individual differences, physiology, and choice. Paper presented at the Annual Meeting of the Society for Judgment & Decision Making, New Orleans, LA.
- Bell, B. & Mauro, R. (2000). Training in Judgment and Aeronautical Decision Making. Paper presented at the Digital Avionics Systems Conference, Philadelphia, PA, October 13-16, 2000.
- Mauro, R. & Barshi, I. (2000). Aircrew Decision Training and Evaluation using the Internet. Paper presented at the Digital Avionics Systems Conference, Philadelphia, PA, October 13-16, 2000.
- Barshi, I. & Mauro, R. (2001). Cold Cognition: Training Icing Decisions. Paper presented at the 11<sup>th</sup> International Symposium on Aviation Psychology, Ohio State University, March 5-8, 2001.
- Mauro, R. & Barshi, I. (2001). Aviation Training using the Internet & CD-ROM. Paper presented at the International Aviation Training Symposium, Oklahoma City, August 28, 2001.

- Mauro, R. & Barshi, I. (2005). Emotion-specific effects of stress on navigation tasks. Paper presented at the 13th International Symposium on Aviation Psychology, Oklahoma City, OK April 18-21, 2005.
- Mauro, R. & Barshi, I. (2005). Using risk management in emergency procedure design. Paper presented at the 13th International Symposium on Aviation Psychology, Oklahoma City, OK April 18-21, 2005.
- Barshi, I., Degani, A., Loukopoulos, L. & Mauro, D. (2006). Understanding Human Error: Implications for the Design of Equipment, Procedures, and Training. International Association of Applied Psychology. Invited symposium. July 22–26, Athens, Greece.
- Barshi, I., Degani, A., Loukopoulos, L. & Mauro, D. (2007). Between the lab and the field: Analytical methodologies in the study of human capabilities for the sake of reducing human error. Symposium presented at the 14th International Symposium of Aviation Psychology. April 22–25, Dayton, OH.
- Barshi, I., Degani, A., Loukopoulos, L. & Mauro, D. (2008). Cockpit procedures, automation, and risk assessment. Workshop presented to Southwest Airlines. San Antonio, TX, April 14-15 2008.
- Mauro, R., Funk, K., & Barshi, I. (2009). Human Factors Issues in the NextGen Flight Deck. Report to the National Aeronautics & Space Administration SLDAST Program, 2009.
- Barshi, I. & Mauro, R. (2009). Solving Problems In Complex Environments (SPICE). International Space Station (ISS) Space Flight Resource Management (SFRM) Technical Interchange Meeting (TIM): March 24-27, 2009. Unpublished Manuscript. NASA Ames Research Center.
- Mauro, R. & Funk, K. (2011). Investigating Cognitive Challenges of Using ADS-B: When Seeing Shouldn't Be Believing. Presentation 16<sup>th</sup> International Symposium on Aviation Psychology, Wright State University.
- Barshi, I., Degani, A., Loukopoulos, L., & Mauro, R. (2011). Operational Procedures: Designed to be Used by Humans. Symposium presented at the 16<sup>th</sup> International Symposium of Aviation Psychology, Wright State University.
- Barshi, I., Degani, A., Loukopoulos, L., & Mauro, R. (2011). Principles of Procedures. Workshop presented to Delta Airlines.
- Rocklin, R., Mauro, R., De Muniz, P., Schuman, D. (2013). Selecting Appellate Judges: Views from the Bench and the Academy. Symposium presented at the American Psychology Law Society conference, Portland, OR.
- Barshi, I., Degani, A., Loukopoulos, L., & Mauro, R. (2013) Automation Philosophy, Policy, Procedures, & Practices. Symposium presented at the 17<sup>th</sup> International Symposium of Aviation Psychology, Wright State University.
- Sherry, L. & Mauro, R. (2014). Limits of Automation: Functional Complexity Failures and Operator Intervention. Presentation at Loss of Control Inflight Symposium, International Civil Aviation Organization, Montreal, Canada, May 20-22, 2014.

Mauro, R. & Sherry, L. (2016). Cognitive Support for Aviation Operations in Complex Environments. Aviation Operations Workshop. NASA Ames Research Center, Moffitt Field, CA.

Mauro, R. (2016). Affect and Aeronautical Decision Making. Keynote Address. European Association of Aviation Psychology, Lisbon, Portugal.

### **Unpublished Manuscripts**

Mauro, R., Alansky, J., & Wetter, D. Feeling without Thinking: A chronometric investigation of the relation between emotion and cognition. Unpublished manuscript.

Mauro, R. & Gross, S. Deciding on death: The effects of victim and defendant's race on capital sentencing decisions. Unpublished manuscript.

Mayer, J., Mauro, R. & Trebino, J. The safety of hypnotic mood inductions. Unpublished manuscript.

Mauro, R., & Aho, K. Discriminating between Medial Frontalis and Corrugator activity in emotional expressions using surface electromyography. Unpublished manuscript.