

James L. Szalma, Ph.D.

Department of Psychology
University of Central Florida
Psychology Building (99)
Suite 320, Room 351
4111 Pictor Lane
Orlando, FL 32816-1390

Tel: 407-823-0920
Fax: 407-823-5862
e-mail: James.Szalma@ucf.edu
Performance Research Laboratory
Website: <http://psychology.cos.ucf.edu/perl/>

Current Appointment

08/2020-present. Professor and Director, Human Factors and Cognitive Psychology Ph.D. Program, Psychology Department, University of Central Florida.

Current Research Interests

- The interactive effects of task and person characteristics (individual differences) on human performance, workload, and stress associated with signal detection tasks
- The role of motivation and social context in human performance and human-technology interaction
- Applications of signal detection theory to threat detection tasks in the contexts of monitoring with or without the automated aids

Education

Ph.D. Human Factors/Experimental Psychology, The University of Cincinnati, 1999.
Title: *Sensory and temporal determinants of workload and stress in sustained attention*
Dissertation Committee Chair: Joel S. Warm, Ph.D.

M.A., The University of Cincinnati, Department of Psychology, 1997.
Title: *Intraclass and interclass transfer in training for vigilance*
Thesis Committee Chair: Joel S. Warm, Ph.D.

B.S., University of Michigan, Chemistry, 1990.

Occupational Experience

08/2017-08/2020. Associate Professor and Director, Human Factors and Cognitive Psychology Ph.D. Program, Psychology Department, University of Central Florida.

08/2015-08/2017. Associate Professor and Associate Director, Human Factors and Cognitive Psychology Ph.D. Program, Psychology Department, University of Central Florida.

08/2012-08/2015. Associate Professor, Psychology Department, University of Central Florida.

08/2006-08/2012. Assistant Professor, Psychology Department, University of Central Florida.

02/2002-08/2006 Research Associate, Institute for Simulation and Training, University of Central Florida.

08/1999-01/2002 Assistant Professor, Psychology Department, State University of New York at Farmingdale.

Fall quarter, 1998, Winter and Spring quarters, 1999. Statistical Consultant, Institute for Data Sciences, University of Cincinnati. Responsible for consulting with graduate students in the University community who require assistance with statistical analyses, research design, and/or data management issues associated with their research.

05/1991-11/1995 Research Associate, The Procter & Gamble Company. Responsible for the synthesis of new chemical entities for biological evaluation.

06/1990-5/1991 Research Assistant, Department of Medicinal Chemistry, The University of Michigan. Conducted a detailed kinetic study of enzyme inhibition by a novel compound.

09/1990-12/1990 Instrument Trainer, Department of Chemistry, The University of Michigan. Responsible for training and assisting students in a freshman organic chemistry laboratory course in the use of instrumentation. This involved demonstrations as well as one on one interaction with the students.

Publications and Presentations

Note: Underlined author names were students or post-doctoral researchers.

Peer Reviewed Journals

- ⁵⁹Hancock, P.A., Kessler, T.T., Kaplan, A.D., Brill, J.C., & **Szalma, J.L.** (in press). Evolving trust in robots: Specification through sequential and comparative meta-analysis. *Human Factors*.
- ⁵⁸Matthews, G., Hancock, P.A., Lin, J., Panganiban, A.R., Reinerman-Jones, L.E., **Szalma, J.L.**, & Wohleber, R.W. (in press). Evolution and revolution: Personality research for the coming world of robots, artificial intelligence, and autonomous systems. *Personality and Individual Differences*.
- ⁵⁷Hancock, P.A., Kaplan, A., Cruit, J., Hancock, G., MacArthur, K., & **Szalma, J.** (in press). A meta-analysis of flow effects and the perception of time. *Acta Psychologica*.
- ⁵⁶Hancock, P.A., Kaplan, A.D., MacArthur, K.R., & **Szalma, J.L.** (2020). How effective are warnings: A meta-analysis. *Safety Science*, 130, 104876.
<https://doi.org/10.1016/j.ssci.2020.104876>
- ⁵⁵Lin, J., Matthews, G., Wohleber, R., Funke, G., Calhoun, G., Ruff, H., & **Szalma, J.** (2020). Overload and automation-dependence in a multi-UAS simulation: Task demand and individual difference factors. *Journal of Experimental Psychology: Applied*, 26(2), 218-235.
- ⁵⁴Reinerman, L., Mercado, J., **Szalma, J.L.**, & Hancock, P.A. (2020). Understanding

- individualistic response patterns when assessing expert operators on nuclear power plant control tasks. *Ergonomics*, 63(4), 440-460.
- 53Neigel, A.R., Claypoole, V.L., Smith, S.L., Waldfofle, G.E., Fraulini, N.W., Hancock, G.M., Helton, W.S., & Szalma, J.L. (2020). Engaging the human operator: A review of the theoretical support for the vigilance decrement and a discussion of practical applications. *Theoretical Issues in Ergonomics Science*, 21(2), 239-258.
- 52Neigel, A.R., Claypoole, V.L., & Szalma, J.L. (2019). Effects of motivation in overload and underload vigilance task scenarios. *Acta Psychologica*, 197, 106-114.
- 51Neigel, A.R., Dever, D.A., Claypoole, V.L., & Szalma, J.L. (2019). Task engagement and the vigilance decrement revisited: Expanding upon the work of Joel S. Warm using a semantic vigilance paradigm. *Human Factors*, 61(3), 462-473.
- 50Claypoole, V.L., Neigel, A.R., Waldfofle, G.E., & Szalma, J.L. (2019). Evaluative social presence can improve vigilance performance, but vigilance is still hard work and is stressful. *JEP: Human Perception and Performance*, 45(5), 616-627.
- 49Neigel, A.R., Claypoole, V.L., Waldfofle, G.E., Fraulini, N.W., & Szalma, J.L. (2019). Where is my mind? Examining mind-wandering and vigilance performance. *Experimental Brain Research*, 237, 557-571.
- 48Wohleber, R.W., Matthews, G., Lin, J., Szalma, J.L., Calhoun, G.L., Funke, G.J., Chiu, C.Y.P., & Ruff, H.A. (2019). Vigilance and automation dependence in operation of multiple unmanned aerial systems (UAS): A simulation study. *Human Factors*, 61(3), 488-505.
- 47Claypoole, V.L., Dever, D.A., Denues, K.L., & Szalma, J.L. (2019). The effects of event rate on a cognitive vigilance task. *Human Factors*, 61(3), 440-450.
- 46Claypoole, V.L., & Szalma, J.L. (2019). Electronic performance monitoring and sustained attention: Social facilitation for modern applications. *Computers in Human Behavior*, 94, 25-34.
- 45Thropp, J.E., Oron-Gilad, T., Szalma, J.L., & Hancock, P.A. (2018). Calibrating adaptable automation to individuals. *IEEE Transactions on Human-Machine Systems*, 48(6) 691-701.
- 44Claypoole, V.L., & Szalma, J.L. (2018). Facilitating sustained attention: Is mere presence sufficient? *American Journal of Psychology*, 131(4), 417-428.
- 43Claypoole, V.L., & Szalma, J.L. (2018). Independent Co-Actors May Improve Performance and Lower Workload: Viewing Vigilance under Social Facilitation. *Human Factors*, 60(6), 822-832.
- 42Claypoole, V.L., Neigel, A.R., Fraulini, N.W., Hancock, G.M., & Szalma, J.L. (2018). Can vigilance tasks be administered online? A replication and discussion. *Journal of Experimental Psychology: Human Perception and Performance*, 44(9), 1348-1355.
- 41Neigel, A.R., Claypoole, V.L., Hancock, G.M., Fraulini, N.W., & Szalma, J.L. (2018). Ceci n'est pas un walrus: Lexical processing in vigilance performance. *Experimental Brain Research*, 236, 867-879.
- 40Szalma, J.L., Daly, T.N., Teo, G.W.L., Hancock, G.M., & Hancock, P.A. (2018). Training for vigilance on the move: A video game-based paradigm for sustained attention. *Ergonomics*, 61(4), 482-505.
- 39Teo, G., Reinerman-Jones, L., Matthews, G., Szalma, J., Jentsch, F., & Hancock, P.A. (2018). Enhancing the effectiveness of human-robot teaming with a closed-loop system. *Applied Ergonomics*, 67, 91-103.

- 38Claypoole, V.L., & Szalma, J.L. (2017). Examining social facilitation in vigilance: A hit and a miss. *Ergonomics*, *60*(11), 1485-1499. DOI: 10.1080/00140139.2017.1308563
- 37Reinerman, L., Barber, D.J., Szalma, J.L., & Hancock, P.A. (2017). Human interaction with robotic systems: Performance and workload evaluations. *Ergonomics*, *60*(10), 1351-1368.
- 36Fraulini, N.W., Hancock, G.M., Neigel, A.R., Claypoole, V.L., & Szalma, J.L. (2017). A critical examination of the research and theoretical underpinnings discussed in Thomson, Besner, and Smilek (2016). *Psychological Review*, *124*(4), 525-531.
- 35Neigel, A.R., Behairy, S., & Szalma, J.L. (2017). Need for cognition and motivation differentially contribute the student performance. *Journal of Cognitive Education and Psychology*, *16*(2), 144-156.
- 34Hancock, P.A., Baldwin, C., Warm, J.S., & Szalma, J.L. (2017). Between two worlds: Discourse on the vigilant and sustained contributions of Raja Parasuraman. *Human Factors*, *59*(1), 28-34.
- 33Dewar, A.R., Bull, T.P., Malvey, D.M., & Szalma, J.L. (2017). Developing a measure of engagement with telehealth systems: The mHealth technology Engagement Index. *Journal of Telemedicine and Telecare*, *23*(2), 248-255.
- 32Bull, T.P., Dewar, A.R., Malvey, D.M., & Szalma, J.L. (2016). Considerations for the telehealth systems of tomorrow: An analysis of student perceptions of telehealth technologies. *JMIR: Medical Education*, *2*(2), e11.
- 31Lackey, S., Salcedo, J., Szalma, J.L., & Hancock, P.A. (2016). The stress and workload of virtual reality training: The effects of presence, immersion, and flow. *Ergonomics*, *59*, 1060-1072.
- 30Hancock, P.A., Volante, W.G., & Szalma, J.L. (2016). Defeating the vigilance decrement. *IIE Transactions on Occupational Ergonomics and Human Factors*, *4*, 151-163.
- 29Schaefer, K.E., Chen, J.Y.C., Szalma, J.L., & Hancock, P.A. (2016). A meta-analysis of factors influencing the development of trust in automation: Implications for understanding autonomy in future systems. *Human Factors*, *58*, 377-400.
- 28Hancock, G.M., Schmidt-Daly, T.N., Fanfarelli, J., Wolfe, J.L., & Szalma J.L. (2016). E-reader technology: Killing or kindling the reading experience? *Ergonomics in Design*, *24*, 25-30.
- 27Lakhmani, S., Oppold, P., Rupp, M.A., Szalma, J.L., & Hancock, P.A. (2016). Heterogeneous knowledge distribution in MMO player behavior: Using domain knowledge to distinguish membership in a community of practice. *Computers in Human Behavior*, *55*, 455-467.
- 26Szalma, J.L. (2014). On the application of motivation theory to human factors/ ergonomics: Motivational design principles for human-technology interaction. *Human Factors*, *56*, 1453-1471.
- 25Szalma, J.L., Schmidt, T.N., Teo, G.W.L., & Hancock, P.A. (2014). Vigilance on the move: Video game-based measurement of sustained attention. *Ergonomics*, *57*, 1315-1336. [Note. Editor Nominated Paper (1 of 10) for the 2015 Liberty Mutual Research Institute for Safety and the UK Chartered Institute for Ergonomics and Human Factors (CIEHF), Annual Liberty Mutual Award.]
- 24Taylor, G.S., Reinerman-Jones, L.E., Szalma, J.L., Mouloua, M., & Hancock, P.A. (2013). What to automate: Addressing the multidimensionality of cognitive resources through system design. *Journal of Cognitive Engineering and Decision Making*, *7*, 311-329.

- ²³**Szalma, J.L.**, & Hancock, P.A. (2013). A signal improvement to signal detection analysis: Fuzzy SDT on the ROCs. *Journal of Experimental Psychology: Human Perception and Performance*, *39*, 1741-1762.
- ²²**Sellers, B.**, Fiore, S.M., & **Szalma, J.L.** (2013). Developing a scale of environmental efficacy. *The International Journal of Sustainability Policy and Practice*, *8*, 169-195.
- ²¹**Szalma, J.L.**, & Hancock, P.A. (2012). What's all the noise? Differentiating dimensions of acoustic stress and the limits to meta-analysis—Reply to Smith (2012). *Psychological Bulletin*, *138*, 1269-1273.
- ²⁰**Szalma, J.L.**, & Teo, G.W.L. (2012). Spatial and temporal task characteristics as stress: A test of the dynamic adaptability theory of stress, workload, and performance. *Acta Psychologica*, *139*, 471-485.

Prior to Promotion to Associate Professor (Prior to Fall 2012)

- ¹⁹**Szalma, J.L.** (2011). Workload and stress in vigilance: The impact of display format and task type. *American Journal of Psychology*, *124*, 441-454.
- ¹⁸**Szalma, J.L.**, & Hancock, P.A. (2011). Noise effects on human performance: A meta-analytic synthesis. *Psychological Bulletin*, *137*, 682-707.
- ¹⁷**Szalma, J.L.**, & Taylor, G.S. (2011). Individual differences in response to automation: The big five factors of personality. *Journal of Experimental Psychology: Applied*, *17*, 71-96.
- ¹⁶**Szalma, J.L.** (2009). Individual differences in performance, workload, and stress in sustained attention: Optimism and pessimism. *Personality and Individual Differences*, *47*, 444-451.
- ¹⁵**Szalma, J.L.** (2009). Individual differences in human-technology interaction: Incorporating variation in human characteristics into human factors research and design. *Theoretical Issues in Ergonomics Science*, *10*, 381-397.
- ¹⁴Oron-Gilad, T., **Szalma, J.L.**, Stafford, S.C., & Hancock, P.A. (2008). The workload and performance relationship in the real world: A study of police officers in a field shooting exercise. *International Journal of Occupational Safety and Ergonomics*, *14*, 119-131.
- ¹³Conway, G., **Szalma, J.L.**, & Hancock, P.A. (2007). A quantitative meta-analytic examination of whole-body vibration effects on human performance. *Ergonomics*, *50*, 228-245.
- ¹²Hancock, P.A., Mouloua, M., Gilson, R., **Szalma, J.**, & Oron-Gilad, T. (2007). Provocation: Is the UAV control ratio the right question? *Ergonomics in Design*, *15*, 7, 30-31
- ¹¹Hancock, P.A., Ross, J.M., & **Szalma, J.L.** (2007). A meta-analysis of performance response under thermal stressors. *Human Factors*, *49*, 851-877.
- ¹⁰**Szalma, J.L.**, Hancock, P.A., Dember, W.N., & Warm, J.S. (2006). Training for vigilance: The effect of KR format and dispositional optimism and pessimism on performance and stress. *British Journal of Psychology*, *97*, 115-135.
- ⁹**Szalma, J.L.**, Hancock, P.A., Warm, J.S., Dember, W.N., & Parsons, K.S. (2006). Training for vigilance: Using predictive power to evaluate feedback effectiveness, *Human Factors*, *48*, 682-692.
- ⁸Oron-Gilad, T., **Szalma, J.L.**, Stafford, S.C., & Hancock, P.A. (2005). Police officers seat belt use while on duty. *Transportation Research: Part F*, *8*, 1-18.
- ⁷**Szalma, J.L.**, Warm, J.S., Matthews, G., Dember, W.N., Weiler, E.M., Meier, A., & Eggemeier, F.T. (2004) Effects of sensory modality and task duration on performance, workload, and stress in sustained attention. *Human Factors*, *46*, 219-233.

- ⁶Hancock, P.A., & **Szalma, J.L.** (2004). On the relevance of qualitative methods for ergonomics. *Theoretical Issues in Ergonomics Science*, 5, 499-506.
- ⁵Hancock, P.A., & **Szalma, J.L.** (2003). The future of neuroergonomics. *Theoretical Issues in Ergonomics Science*, 4, 238-249.
- ⁴Hancock, P.A., & **Szalma, J.L.** (2003). Operator stress and display design. *Ergonomics in Design*, 11, 13-18.
- ³Hancock, P.A., & **Szalma, J.L.** (2003). Vigilance and the price of freedom. *Gateway: Human Systems Information Analysis Center*, 13, pp. 5, 20. Available on-line at <http://iac.dtic.mil/hsiac>
- ²Grier, R.R., Warm, J.S., Dember, W.N., Matthews, G., Galinsky, T.L., **Szalma, J.L.**, & Parasuraman, R. (2003). The vigilance decrement reflects limitations in effortful attention, not mindlessness. *Human Factors*, 45, 349-359.
- ¹Nikolaides, N., Bogdan, S.E., & **Szalma, J.L.** (2002). Preparation of 8-alkyl 7-(2-Imidazolinylamino) Quinolines via palladium mediated alkylations. *Synthetic Communications*, 32, 2027-2033.

Guest Editor

- ³Hancock, P.A., & **Szalma, J.L.** (2019). Sustained attention to science: A tribute to the life and scholarship of Joel Warm. *Human Factors*, 61(3), 365-373.
- ²Hancock, P.A., Baldwin, C.L., Warm, J.S., & **Szalma, J.L.** (2017). Special issue in remembrance of Professor Raja Parasuraman. *Human Factors*, 59(1), 28-34.

Prior to Promotion to Associate Professor (Prior to Fall 2012)

- ¹**Szalma, J.L.** (2009). Guest Editorial: Individual differences: Incorporating human variation into human factors/ergonomics research and practice. *Theoretical Issues in Ergonomics Science*, 10, 377-379.

Books

- ²Hoffman, R.R., Hancock, P.A., Scerbo, M.W., Parasuraman, R., & **Szalma, J.L.** (2015) (Eds.). *The Cambridge handbook of applied perception research, volumes 1 and 2*. Cambridge: Cambridge University Press.

Prior to Promotion to Associate Professor (Prior to Fall 2012)

- ¹Hancock, P.A., & **Szalma, J.L.** (2008)(Eds.), *Performance under stress*. Aldershot, Hampshire, UK: Ashgate.

Book Chapters

- ²⁰**Szalma, J.L.** (in press). Basic needs, goals, and motivation. In: P.J. Corr and G. Matthews (Eds.), *The Cambridge University handbook of personality*.
- ¹⁹**Szalma, J.L.**, & Claypoole, V.L. (2020). Vigilance and workload in automated systems:

- Patterns of association, dissociation, and insensitivities. In: M. Mouloua and P.A. Hancock (Eds.), *Human performance in automated and autonomous systems: Current theory and methods*, (pp. 85-102). Boca Raton, FL.: CRC Press.
- 18 **Szalma, J.L.** (2017). Stress and performance in EMS. In: J.R. Keebler, E.H. Lazzara, and P. Misasi (Eds.), *The human factors & ergonomics of prehospital medicine* (pp. 53-70). Boca Raton, FL: CRC Press.
- 17 Bohil, C.J., **Szalma, J.L.**, & Hancock, P.A. (2015). Psychophysical methods and signal detection: Recent advances in theory. In: R.R. Hoffman, P.A. Hancock, M.W. Scerbo, R. Parasuraman and J.L. Szalma (Eds.), *The Cambridge handbook of applied perception research, vol. 1* (pp. 22-38). Cambridge: Cambridge University Press.
- 16 **Szalma, J.L.**, & Matthews, G. (2015). Motivation and emotion in sustained attention. In: R.R. Hoffman, P.A. Hancock, M.W. Scerbo, R. Parasuraman and J.L. Szalma (Eds.), *The Cambridge handbook of applied perception research, vol. 1* (pp. 218-240). Cambridge: Cambridge University Press.
- 15 Hoffman, R. R., Hancock, P. A., Scerbo, M. W., **Szalma, J. L.**, & Parasuraman, R. (2015). Applied perception research: An introduction to this handbook. In: R.R. Hoffman, P.A. Hancock, M.W. Scerbo, R. Parasuraman, & J.L. Szalma (Eds.), *The Cambridge handbook of applied perception research, vol. 1* (pp. 3–5). Cambridge: Cambridge University Press.
- 14 Matthews, G., **Szalma, J.L.**, Panganiban, A.R., Neubauer, C., & Warm, J.S. (2013). Profiling task stress with the Dundee Stress State Questionnaire. In: L. Cavalcanti and S. Azevedo (Eds.), *Psychology of stress: New research* (pp. 49-91). Hauppauge, NY: Nova Publishers.
- 13 **Szalma, J.L.** (2012). Individual differences in stress, fatigue, and performance. In: G. Matthews, P.A. Desmond, C. Neubauer, and P.A. Hancock (Eds.), *The handbook of operator fatigue* (pp. 75-90). Aldershot, Hampshire, UK: Ashgate.

Prior to Promotion to Associate Professor (Prior to Fall 2012)

- 12 **Szalma, J.L.**, Hancock, G.M., & Hancock, P.A. (2012). Task loading and stress in human computer interaction: Theoretical frameworks and mitigation strategies. In: J.A. Jacko (Ed.), *The human-computer interaction handbook: Fundamentals, evolving technologies, and emerging applications, 3rd edition* (pp. 55-75). New York: CRC Press Taylor & Francis Group.
- 11 Hancock, P.A., & **Szalma, J.L.** (2008). Stress and performance. In: P.A. Hancock and J.L. Szalma (Eds.), *Performance under stress* (pp. 1-18). Aldershot, Hampshire, UK: Ashgate.
- 10 **Szalma, J.L.** (2008). Individual differences in stress reaction. In: P.A. Hancock and J.L. Szalma (Eds.), *Performance under stress* (pp. 323-357). Aldershot, Hampshire, UK: Ashgate.
- 9 **Szalma, J.L.**, & Hancock, P.A. (2008). Task loading and stress in human-computer interaction: Theoretical frameworks and mitigation strategies. In: J.A. Jacko and A. Sears (Eds.), *The human-computer interaction handbook: Fundamentals, evolving technologies, and emerging applications, 2nd ed.* (pp. 115-132). New York: Erlbaum Taylor & Francis Group.
- 8 Hancock, P.A., Oron-Gilad, T., & **Szalma, J.L.** (2007). Elaborations of the multiple-resource

- theory of attention. In: A. Kramer, D. Wiegmann, and A. Kirlik (Eds.), *Attention: From theory to practice* (pp. 45-56). Oxford: Oxford University Press.
- ⁷Hancock, P.A., & Szalma, J.L. (2007). Stress and neuroergonomics. In: R. Parasuraman and M. Rizzo (Eds.), *Neuroergonomics: The brain at work*. (pp. 195-206). Oxford: Oxford University Press.
- ⁶Hancock, P.A., Szalma, J.L., & Oron-Gilad, T. (2005). Time, emotion, and the limits to human information processing. In: D.K. McBride and D. Schmorrow (Eds.), *Quantifying Human Information Processing* (pp. 157-175). Lanham, MD: Lexington Books.
- ⁵Hancock, P.A., Szalma, J.L., & Oron-Gilad, T. (2005). Time, emotion, and the dynamics of information processing in individuals and the organizations they form. In: P. Carayon, M. Robertson, E. Kleiner, and P.L.T. Hoonakker (Eds.), *Human Factors in Organizational Design and Management VIII* (575-580). IEA Press: Santa Monica, CA.
- ⁴Oron-Gilad, T., Szalma, J.L., Thropp, J.E., & Hancock, P.A. (2005). Incorporating individual differences into the adaptive automation paradigm. In: P. Carayon, M. Robertson, E. Kleiner, and P.L.T. Hoonakker (Eds.), *Human Factors in Organizational Design and Management VIII*. (pp. 581- 586), IEA Press: Santa Monica, CA.
- ³Szalma, J.L., & Hancock, P.A. (2005). Individual differences in information processing. In: D.K. McBride and D. Schmorrow (Eds.), *Quantifying Human Information Processing* (pp. 177-193). Lanham, MD: Lexington Books.
- ²Szalma, J.L., Oron-Gilad, T., & Hancock, P.A. (2005). Individual differences in workload, stress, and coping in police officers engaged in shooting tasks. In: P. Carayon, M. Robertson, E. Kleiner, and P.L.T. Hoonakker (Eds.), *Human Factors in Organizational Design and Management VIII*. (pp. 587-592), IEA Press: Santa Monica, CA.
- ¹Szalma, J.L., Miller, L.C., Hitchcock, E.M., Warm, J.S., & Dember, W.N. (1998). Intraclass and interclass transfer of training for vigilance. In M.W. Scerbo and M. Mouloua (Eds.), *Automation technology and human performance: Current research and trends*. (pp. 183-187). Mahwah, NJ: Erlbaum

Conference Proceedings (Peer Reviewed)

- ⁷⁶Garibaldi, A.E., Waldfogle, G.E., & Szalma, J.L. (in press). Exploring sex differences in the role of social support on vigilance tasks. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting* (Extended Abstract)
- ⁷⁵Neigel, A.R., Dhanani, L.Y., Waldfogle, G.E., Claypoole, V.L., & Szalma, J.L. (in press). A systematic review of the semantic vigilance literature. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*.
- ⁷⁴Waldfogle, G.E., Garibaldi, A.E., Castellanos, I., & Szalma, J.L. (in press). The role of choice and rest break length in a vigilance task. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting* (Extended Abstract)
- ⁷³Uszak, N., & Szalma, J.L. (in press). Pre-task training for vigilance using a video game-based simulation task. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting* (Extended Abstract)
- ⁷²Waldfogle, G.E., Hagerty-Koller, M.R., Lane, L.R., Garibaldi, A.E., & Szalma, J.L. (2019). Exploring sex differences in vigilance performance with knowledge of results. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*, 63, 1321-1325.

- 71 Claypoole, V.L., Waldfogle, G.E., Neigel, A.R., & Szalma, J.L. (2018). Exploring the effects of extraversion on social facilitation and vigilance task performance. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*, 62, 1216–1220.
- 70 Neigel, A.R., Claypoole, V.L., Dever, D.A., Fraulini, N.W., Hancock, G.M., & Szalma, J.L. (2018). Sex differences in the stress and workload of lexical vigilance. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*, 62, 752–756.
- 69 Neigel, A.R., Dever, D.A., Claypoole, V.L., Fraulini, N.W., Hancock, G.M., & Szalma, J.L. (2018). Sex differences in lexical vigilance performance. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*, 62, 731–735.
- 68 Uszak, N., & Szalma, J. (2018). Aspirations and motivations for Facebook use through SEM Modeling. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*, 62, 1226–1227.
- 67 Claypoole, V.L., Dever, D., Denues, K., & Szalma, J.L. (2017). Utilizing event rate as a manipulation of task difficulty in vigilance. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*, 61, 1859–1860.
- 66 Claypoole, V.L., Neigel, A.R., & Szalma, J.L. (2017). Perceptions of supervisors and performance: A thematic analysis. *Proceedings of the Human Factors and Ergonomics Society*, 61, 1740–1744.
- 65 Fraulini, N.W., Fistel, A.L., Perez, M.A., Perez, T.L., & Szalma, J.L. (2017). Examining the effects of a novel training paradigm for vigilance on mental workload and stress. *Proceedings of Human Factors and Ergonomics Society*, 61, 1504–1508.
- 64 Fraulini, N.W., Perez, M.A., Perez, T.L., Fistel, A.L., & Szalma, J.L. (2017). A preliminary study examining novel training paradigms for vigilance. *Proceedings of Human Factors and Ergonomics Society*, 61, 1509–1513.
- 63 Neigel, A.R., Bailey, S.K.T., Szalma, J.L., & Sims, V.K. (2017). Age, sex, and STEM education influence spatial processing performance. *Proceedings of Human Factors and Ergonomics Society*, 61, 1224–1228.
- 62 Neigel, A.R., Claypoole, V.L., Waldorf, K.M., Dever, D.A., & Szalma, J.L. (2017). Motivational correlates of vigilance task engagement. *Proceedings of Human Factors and Ergonomics Society*, 61, 1524–1528.
- 61 Neigel, A.R., Miao, Y., Montagna, N., Chirino, C.A., & Szalma, J.L. (2017). Individual differences in achievement motivation are related to vigilance performance. *Proceedings of Human Factors and Ergonomics Society*, 61, 1298–1302.
- 60 Teo, G., Reinerman-Jones, L., Matthews, G., Szalma, J., Jentsch, F., Hudson, I., & Hancock, P. A. (2017). Selecting workload and stress measures for performance prediction. *Proceedings of Human Factors and Ergonomics Society*, 61, 2042–2046.
- 59 Daly, T., Murphy, J., Anglin, K., Szalma, J., Acree, M., Landsberg, C., & Bowens, L. (2017). Moving vigilance out of the laboratory: Dynamic scenarios for UAS operator vigilance training. In: D.D. Schmorow and C.M. Fidopiastis (Eds.), *Augmented cognition: Enhancing cognition and behavior in complex human environments. 11th International Conference, AC 2017 Held as part of HCI International 2017, Proceedings, Part II*, 20–35.
- 58 Claypoole, V.L., Dewar, A.R., Fraulini, N.W., & Szalma, J.L. (2016). Effects of social facilitation on perceived workload, subjective stress, and vigilance-related anxiety. *Proceedings of the Human Factors and Ergonomics Society*, 60, 1168–1172.
- 57 Dewar, A.R., Bull, T.P., Sproat, J.M., Reyes, N.P., Malvey, D.M., & Szalma, J.L. (2016).

- Testing the reliability of a measure of motivation to engage with telehealth technology. *Proceedings of the Human Factors and Ergonomics Society*, 60, 1113-1117.
- 56 Dewar, A.R., Denues, K.L., & Szalma, J.L. (2016). Motivation is important in game-based memory recall. *Proceedings of the Human Factors and Ergonomics Society*, 60, 1139-1143.
- 55 Dewar, A.R., Fraulini, N.W., Claypoole, V.L., & Szalma, J.L. (2016). Performance in vigilance tasks is related to both state and contextual motivation. *Proceedings of the Human Factors and Ergonomics Society*, 60, 1144-1148.
- 54 Fraulini, N.W., Claypoole, V.L., Dewar, A.R., & Szalma, J.L. (2016). Examining measures of mental workload across cognitive- and sensory-based vigilance tasks. *Proceedings of the Human Factors and Ergonomics Society*, 60, 1167. (Extended Abstract)
- 53 Teo, G., Reinerman-Jones, L.E., Matthews, G., & Szalma, J.L. (2015). Comparison of measures used to assess the workload of monitoring an unmanned system in a simulation mission. *Procedia Manufacturing*, 3, 1006-1013 (*Proceedings of the 6th International Conference on Applied Human Factors and Ergonomics and the Affiliated Conferences*, Las Vegas, NV).
- 52 Claypoole, V.L., & Szalma, J.L. (2015). Social norms and cognitive performance: A look at the vigilance decrement in the presence of supervisors. *Proceedings of the Human Factors and Ergonomics Society*, 59, 1012-1016.
- 51 Dewar, A. R., Kapalo, K. A., Rupp, M. A., & Szalma, J. L. (2015). Using self-determination theory to examine differences in motivation and engagement in video gamers. *Proceedings of the Human Factors and Ergonomics Society*, 59, 882–886.
- 50 Isard, J.L., & Szalma, J.L. (2015). The effect of perceived choice on performance, workload, and stress. *Proceedings of the Human Factors and Ergonomics Society*, 59, 1037-1041.
- 49 Kapalo, K.A., Dewar, A.R., Rupp, M.A., & Szalma, J.L. (2015). Individual differences in video gaming: Defining hardcore video gamers. *Proceedings of the Human Factors and Ergonomics Society*, 59, 878-881.
- 48 Leis, R., Reinerman-Jones, L., Mercado, J., Szalma, J., & Hancock, P. (2015). Workload change over time for nuclear power plant operation tasks. *Proceedings of the Human Factors and Ergonomics Society*, 59, 105–109.
- 47 Teo, G., Schmidt, T., Szalma, J., Hancock, G., & Hancock, P. (2014). The effects of individual differences on vigilance training and performance in a dynamic vigilance task. *Proceedings of the Human Factors and Ergonomics Society*, 58, 964-968.
- 46 O'Connell, M., & Szalma, J.L. (2013). ROC-Estimator software and ROC analysis. *Proceedings of the Human Factors and Ergonomics Society*, 57, 1432-1434.
- 45 Schmidt, T.N., Teo, G.W.L., Hancock, G.M., Amicarella, Z., Szalma, J.L., & Hancock, P.A. (2013). Action video game players and vigilance performance. *Proceedings of the Human Factors and Ergonomics Society*, 57, 1450-1454.
- 44 Teo, G.W.L., Schmidt, T.N., Szalma, J.L., Hancock, G.M., & Hancock, P.A. (2013). The Effects of feedback in vigilance training on performance, workload, stress and coping. *Proceedings of the Human Factors and Ergonomics Society*, 57, 1119-1123.
- 43 Schmidt, T.N., Teo, G.W.L., Szalma, J.L., Hancock, G.M., & Hancock, P.A. (2012). The effect of video game play on performance in a vigilance task. *Proceedings of the Human Factors and Ergonomics Society*, 56, 1544-1547
- 42 Szalma, J.L., & Teo, G.W.L. (2012). The joint effect of task characteristics and extraversion

- on the performance, workload, and stress of signal detection. *Proceedings of the Human Factors and Ergonomics Society*, 56, 1054-1058.
- 41Teo, G.W.L., Schmidt, T.N., Szalma, J.L., Hancock, G.M., & Hancock, P.A. (2012). The effect of knowledge of results for training vigilance in a video game-based environment. *Proceedings of the Human Factors and Ergonomics Society*, 56, 1421-1425.
- 40Teo, G.W.L., Szalma, J.L., Schmidt, T.N., Hancock, G.M., & Hancock, P.A. (2012). Evaluating vigilance in a dynamic environment: Methodological issues and proposals. *Proceedings of Human Factors and Ergonomics Society*, 56, 1586-1590.
-
- Prior to Promotion to Associate Professor (Prior to Fall 2012)**
- 39Szalma, J.L., & O'Connell, M. (2011). Fuzzy signal detection theory: A Monte Carlo investigation. *Proceedings of the Human Factors and Ergonomics Society*, 55, 1366-1369.
- 38Szalma, J.L., Teo, G., Hancock, P.A., & Murphy, J.S. (2011). Knowledge of results and diagnostic power: Implications for vigilance training to support improvised explosive device detection. *Proceedings of the Human Factors and Ergonomics Society*, 55, 1548-1551.
- 37Teo, G., & Szalma, J.L. (2011). The effects of task type and source complexity on vigilance performance, workload, and stress. *Proceedings of the Human Factors and Ergonomics Society*, 55, 1180-1184.
- 36Oleson, K.E., Yordon, R.E., Szalma, J.L., & Hancock, P.A. (2011). The evolution of meta-analytic trends: Comparisons across data collection intervals through a specific case context. *Proceedings of the Human Factors and Ergonomics Society*, 55, 1380-1384.
- 35Teo, G., Szalma, J.L., & Schmidt, T. (2011). Predicting performance, subjective states, and coping style in a vigilance task: The role of individual differences. *Proceedings of the Human Factors and Ergonomics Society*, 55, 1467-1471.
- 34Szalma, J.L., & Hancock, P.A. (2010). A meta-analytic review of the effects of noise on performance: Moderating effects of task and noise characteristics. *Proceedings of the Human Factors and Ergonomics Society*, 54, 1660-1664.
- 33Szalma, J.L., & Teo, G.W.L. (2010). The joint effect of task characteristics and neuroticism on the performance, workload, and stress of signal detection. *Proceedings of the Human Factors and Ergonomics Society*, 54, 1052-1056.
- 32Teo, G.W.L., & Szalma, J.L. (2010). The effect of spatial and temporal task characteristics on performance, workload, and stress. *Proceedings of the Human Factors and Ergonomics Society*, 54, 1699-1703.
- 31Taylor, G.S., & Szalma, J.L. (2009). The effects of the adaptability and reliability of automation on performance, stress, and workload. *Proceedings of the Human Factors and Ergonomics Society*, 53, 160-164.
- 30Warm, J.S., Finomore, V., Shaw, T.H., Funke, M.E., Hausen, M.J., Matthews, G., Taylor, P., Vidulich, M.A., Repperger, D.W., Szalma, J.L., & Hancock, P.A. (2009). Effects training with knowledge of results on diagnosticity in vigilance performance. *Proceedings of the Human Factors and Ergonomics Society*, 53, 1066-1070.
- 29Ross, J.M., Szalma, J.L., Hancock, P.A., Barnett, J.S., & Taylor, G. (2008). The effect of

- automation reliability on user automation trust and reliance in a search-and-rescue scenario. *Proceedings of the Human Factors and Ergonomics Society*, 52, 1340-1344.
- 28 **Szalma, J.L.**, Hancock, P.A., & Quinn, S. (2008). A meta-analysis of the effect of time pressure on human performance. *Proceedings of the Human Factors and Ergonomics Society*, 52, 1513-1516.
- 27 **Szalma, J.L.**, Thropp, J.E., & Hancock, P.A. (2008). Combining spatial and temporal task demands: Effects on performance, workload, and stress. *Proceedings of the Human Factors and Ergonomics Society*, 52, 1238-1242.
- 26 **Ross, J.M.**, **Szalma, J.L.**, & Hancock, P.A. (2007). Empirical examination of trust in automation across multiple agents in a search and rescue operation. *Proceedings of the Human Factors and Ergonomics Society*, 51, 1501-1505.
- 25 **Conway, G.**, **Szalma, J.L.**, **Saxton, B.**, & Hancock, P.A. (2006). The effects of whole-body vibration on human performance: A meta-analytic examination. *Proceedings of the Human Factors and Ergonomics Society*, 50, 1741-1745.
- 24 **Ross, J.M.**, **Szalma, J.L.**, & Hancock, P.A. (2006). A meta-analysis of performance under thermal stress. *Proceedings of the Human Factors and Ergonomics Society*, 50, 1736-1740.
- 23 **Szalma, J.L.**, & Hancock, P.A. (2006). Performance, workload, and stress in vigilance: The power of choice. *Proceedings of the Human Factors and Ergonomics Society*, 50, 1609-1613.
- 22 **Szalma, J.L.**, **Oron-Gilad, T.**, **Saxton, B.**, & Hancock, P.A. (2006). Application of fuzzy signal detection theory to the discrimination of morphed tank images. *Proceedings of the Human Factors and Ergonomics Society*, 50, 1716-1720.
- 21 **Delos Santos, K.**, **Stafford, S.**, **Szalma, J.**, **Oron-Gilad, T.**, Hancock, P. (2005). Evaluation of threat by police officers: Initial findings. *Proceedings of the Human Factors and Ergonomics Society*, 49, 846-849.
- 20 **Burke, K.**, **Szalma, J.**, **Oron-Gilad, T.**, **Duley, A.**, & Hancock, P.A. (2005). Testing the efficiency and effectiveness of soldier performance under increasing task demand. *Proceedings of the Human Factors and Ergonomics Society*, 49, 2119-2123.
- 19 **Greenwood-Ericksen, A.**, **Oron-Gilad, T.**, **Szalma, J.L.**, **Stafford, S.**, & Hancock, P.A. (2004). Workload and performance: A field evaluation in a police shooting range. *Proceedings of the Human Factors and Ergonomics Society*, 48, 1953-1957.
- 18 **Murphy, L.**, **Szalma, J.L.**, & Hancock, P.A. (2004). Comparison of fuzzy signal detection and traditional signal detection theory: Analysis of duration discrimination of brief light flashes. *Proceedings of the Human Factors and Ergonomics Society*, 48, 2494-2498.
- 17 **Ross, J.M.**, **Szalma, J.L.**, & Hancock, P.A. (2004). The impact of dispositional optimism and pessimism on stress as a function of psychophysical task characteristics. *Proceedings of the Human Factors and Ergonomics Society*, 48, 1233-1237.
- 16 **Ross, J.M.**, **Szalma, J.L.**, & Hancock, P.A. (2004). Efficacy of transfer in simulation-based training: Implications for stress exposure training. *Proceedings of the Second Swedish-American Workshop on Modeling and Simulation*, USA, 145-150.
- 15 **Stafford, S.C.**, **Oron-Gilad, T.**, **Szalma, J.L.**, & Hancock, P.A. (2004). Individual differences related to shooting performance in a police night-training shooting exercise. *Proceedings of the Human Factors and Ergonomics Society*, 48, 1131-1135.
- 14 **Thropp, J.E.**, **Szalma, J.L.**, & Hancock, P.A. (2004). Performance operating characteristics for

- spatial and temporal discriminations: Common or separate capacities? *Proceedings of the Human Factors and Ergonomics Society*, 48, 1880-1884.
- ¹³Ganey, H.C.N., Szalma, J.L., Hancock, P.A., Mouloua, M., Connolly, A., Dalton, J., & Davis, E. (2003). The role of choice and individual differences in the mitigation of noise and task stressors in vigilance. *Proceedings of the Human Factors and Ergonomics Society*, 47, 1078-1081.
- ¹²Murphy, L., Szalma, J.L., & Hancock, P.A. (2003). Comparison of fuzzy signal detection and traditional signal detection theory: Approaches to performance measurement. *Proceedings of the Human Factors and Ergonomics Society*, 47, 1967-1971.
- ¹¹Ross, J.M., Szalma, J.L., Thropp, J.E., & Hancock, P.A. (2003). Performance, workload, and stress correlates of temporal and spatial task demands. *Proceedings of the Human Factors and Ergonomics Society*, 47, 1712-1716.
- ¹⁰Stafford, S.C., Szalma, J.L., Hancock, P.A., & Mouloua, M. (2003). Application of fuzzy signal detection theory to vigilance: The effect of criterion shifts. *Proceedings of the Human Factors and Ergonomics Society*, 47, 1678-1682.
- ⁹Thropp, J.E., Szalma, J.L., Ross, J.M., & Hancock, P.A. (2003). Individual differences in dispositional pessimism, stress, and coping as a function of task type. *Proceedings of the Human Factors and Ergonomics Society*, 47, 1073-1077.
- ⁸Ward, P., Hancock, P.A., Ganey, H.C.N., & Szalma, J.L. (2003). Naturalistic driving: User and task analysis. *Proceedings of the 2nd International Symposium on Human Factors in Driver Assessment, Training, and Vehicle Design*, 70-72.
- ⁷Hancock, P.A., Ganey, H.C.N., & Szalma, J.L. (2002). Performance under stress: A re-evaluation of a foundational law of psychology. *Proceedings of the 23rd Army Science Conference*, Orlando FL.
- ⁶Hancock, P.A., Szalma, J.L., & Weaver (2002). The distortion of perceptual space-time under stress. *Proceedings of the 23rd Army Science Conference*, Orlando FL.
- ⁵Hancock, P.A., Ward, P., Szalma, J.L., Stafford, S., & Ganey, H.C.N. (2002). Stress and human information processing: A descriptive framework presented in a novel manner. *Proceedings of the 23rd Army Science Conference*, Orlando FL.
- ⁴Szalma, J.L. (2002). Workload and stress of configural displays in vigilance tasks. *Proceedings of the Human Factors and Ergonomics Society*, 46, 1536-1540.
- ³Szalma, J.L. (2002). Individual differences in the stress and workload of sustained attention. *Proceedings of the Human Factors and Ergonomics Society*, 46, 1002-1006.
- ²Szalma, J.L., Parsons, K.S., Warm, J.S., & Dember, W.N. (2000). Continuous vs. partial knowledge of results in training for vigilance. *Proceedings of the XIVth Triennial Congress of the International Ergonomics Association and the Human Factors Society*, 44, (pp. 3-386 – 3-389).
- ¹Szalma, J.L., Warm, J.S., Matthews, G., Dember, W.N., Weiler, E.M., Meier, A., & Eggemeier, F.T. (1999) Sensory determinants of workload and stress in sustained attention. *Proceedings of the Human Factors Society*, 43, 1289-1293.

Technical Reports

- ⁹Schaefer, K.E., Billings, D.R., Szalma, J.L., Adams, J.K., Sanders, T.L., Chen, J.Y.C., &

Hancock, P.A. (2013). *A Meta-Analysis of Factors Influencing the Development of Trust in Automation: Implications for Human-Robot Interaction* (Report No. ARL-TR-6984). Aberdeen Proving Ground, Maryland: Army Research Laboratory.

Prior to Promotion to Associate Professor (Prior to Fall 2012)

- ⁸Szalma, J.L., Teo, G., & Schmidt, T. (2011). *Individual differences in sustained attention: Identifying operators with superior vigilance*. Unpublished Report to Air Force Research Laboratory. Wright-Patterson AFB: Performance Research Laboratory, UCF.
- ⁷Duley, A.R., Flynn, J., Abich, J., Drabik, H., Szalma, J.L., & Hancock, P.A. (2007). *Collaborative Technologies and their effect on operator workload in BMC2 domains*. Technical Report AFRL-HE-WP-TR-2007-0054. Orlando, FL, June.
[<http://handle.dtic.mil/100.2/ADA470708>]
- ⁶Szalma, J.L., & Hancock, P.A. (2008). *The Department of Defense's assessment for cross cultural proficiency training related to emerging languages*. Unpublished Report to DEOMI. Patrick AFB: The Behavioral Consultant Group.
- ⁵Hancock, P.A., Szalma, J.L., & van Driel, M. (2007). *A review of literatures*. Defense Equal Opportunity Management Institute Internal Report CCC-07-1. Orlando, FL, winter.
- ⁴Hancock, P.A., Szalma, J.L., & van Driel, M. (2007). *An initial framework for enhancing cultural competency*. Defense Equal Opportunity Management Institute Internal Report CCC-07-2. Orlando, FL, winter.
- ³Hancock, P.A., Conway, G., & Szalma, J.L. (2006). *A Meta-Analysis of Noise Effects on Operator Performance for IMPRINT*. Technical Report DAAD-19-01-C-0065, UCF-MIT ARL-06-01. Orlando, FL, June.
- ²Hancock, P.A., Conway, G., & Szalma, J.L. (2005). *The incorporation of comprehensive vibration effects into IMPRINT*. Technical report DAAD-19-01-C-0065, UCF-MIT-ARL 05-02. Orlando, FL, April.
- ¹Hancock, P.A., Ross, J.M., Oron-Gilad, T., & Szalma, J.L. (2005). *The Incorporation of Comprehensive Thermal Stress Effects into IMPRINT*. Technical Report DAAD-19-01-C-0065, UCF-MIT-ARL-05-01. Orlando, FL, April.

Non-Peer Reviewed Publications

- ¹Hoffman, R.R., Boles, D.B., Szalma, J.L., & Hancock, P.A. (2018). Joel S. Warm (1933-2017). *American Journal of Psychology*, 131(2), 227-229.

Presentations and Symposia (Peer Reviewed)

- ⁵⁴Dewar, A.R., Michaelis, J.R., Sproat, J.M., Rupp, M.A., & Szalma, J.L. (2014, April). *A prospective study of older adults' attitudes towards telepsychogeriatric systems*. Poster presented at the Annual Human Factors and Applied Psychology Conference, Daytona, FL.
- ⁵³Dewar, A.R., Bailey, S.K.T., Byrd, D.L., Sims, V.K., & Szalma, J.L. (2014, April). *Testing modality and differences in spatial ability performance*. Poster presented at the Annual Human Factors and Applied Psychology Conference, Daytona, FL.
- ⁵²Hancock, G.M., & Szalma, J.L. (2014, April). *Battle of the books: Attitudes and preferences*

- regarding the use of e-reader technology versus traditional books. Poster presented at the Annual Human Factors and Applied Psychology Conference, Daytona, FL.
- 51 Hancock, G.M., & Szalma, J.L. (2014, April). *Investigation of static versus dynamic stimulus presentation in vigilance performance*. Poster presented at the Annual Human Factors and Applied Psychology Conference, Daytona, FL. ***Winner for the Excellence in Graduate Presentation Prize**
- 50 Fraulini, N.W., & Szalma, J.L. (2013, April). *A proposed experiment examining the role of knowledge of result in a video game environment*. Poster presented at the Human Factors & Applied Psychology Conference in Daytona, FL.
- 49 Hughes, A.M., Mouloua, M., Hancock, P.A., & Szalma, J.L. (2013, October). *What doesn't kill you makes you stronger? A study of appraisal and performance in trauma*. Poster presented at the Annual Meeting of the Human Factors and Ergonomics Society, San Diego, CA.
- 48 Schmidt, T.N., Teo, G.W.L., Szalma, J.L., Hancock, G.M., & Hancock, P.A. (2013, October). *The effect of knowledge of results for training vigilance in a video game-based environment*. Poster presented at the Annual Meeting of the Human Factors and Ergonomics Society, San Diego, CA.
- 47 Hughes, A.M., Mouloua, M., Hancock, P.A., & Szalma, J.L. (2013, October). *What doesn't kill you makes you stronger? A study of appraisal and performance in trauma*. Poster presented at the 2013 Annual Meeting of the Human Factors and Ergonomics Society, San Diego, CA.

Prior to Promotion to Associate Professor (Prior to Fall 2012)

- 46 Szalma, J.L. (2012, August). *Individual differences research and application in human factors*. Paper presented at the 2012 American Psychological Association Annual Convention, Orlando, FL.
- 45 Schmidt, T.N., Teo, G.W.L., Hancock, G.M., Szalma, J.L., & Hancock, P.A. (2012, August). *IED detection under alerted conditions in a videogame based environment using a two-alternative forced choice task*. Paper presented at the 2012 American Psychological Association Annual Convention, Orlando, FL.
- 44 Schmidt, T.N., Teo, G.W.L., Hancock, G.M., Szalma, J.L., & Hancock, P.A. (2012, August). *Event rate through a dynamic videogame environment in a vigilance task*. Paper presented at the 2012 American Psychological Association Annual Convention, Orlando, FL.
- 43 Teo, G.W.L., Hancock, G.M., Schmidt, T.N., Szalma, J.L., & Hancock, P.A. (2012, August). *The effects of knowledge of results on vigilance training*. Paper presented at the 2012 American Psychological Association Annual Convention, Orlando, FL.
- 42 Szalma, J.L., Hancock, G.M., Schmidt, T.N., Teo, G.W.L., & Hancock, P.A. (2012, May). *Sustained attention can be trained using a video game-based task*. Poster presented at the Association for Psychological Science Annual Convention, Chicago, IL.
- 41 Jacobson, C., Oleson, K.E., Szalma, J.L., & Hancock, P.A. (2011, April). *Examining the effects of optimism while under stress*. Paper presented at the 2011 Student Conference on Human Factors and Applied Psychology, Daytona, FL.
- 40 Szalma, J.L., & Hancock, P.A. (2010, October). *Individual differences in response to*

- automation as a function of dispositional trust*. Paper presented at the annual meeting of the Human Factors and Ergonomics Society European Chapter: Human Centered Automation, Berlin, Germany.
- 39 **Szalma, J.L.**, Teo, G.W.L., & Hancock, P.A. (2010, October). *Knowledge of results and diagnostic power: Implications for vigilance training to support improvised explosive device detection using automated aids*. Poster presented at the annual meeting of the Human Factors and Ergonomics Society European Chapter: Human Centered Automation, Berlin, Germany.
- 38 **Szalma, J.L.**, & Teo, G.W.L. (2010, August). *Cognitive performance under stress: A test of the maximal adaptability model of Hancock and Warm (1989)*. Paper presented at the 2010 American Psychological Association Annual Convention, San Diego, CA.
- 37 **Szalma, J.L.**, & Taylor, G. (2009, July). *Individual differences in stress and workload response to adaptive automation*. Paper presented at the 14th Biennial Meeting of the International Society for the Study of Individual Differences, Evanston, IL.
- 36 **Szalma, J.L.**, Hancock, P.A., & McDonald, D.P. (2009, February). *Attitude of military personnel to the challenge of culture: Initial findings*. Conference Proceedings of the 7th Biennial Equal Opportunity, Diversity and Culture Research Symposium, DEOMI, Patrick AFB, Cocoa Beach, FL.
- 35 **Van Driel, M.**, McDonald, D. Crepeau, L.J., Parks, K., Marcum, R., McGuire, W.G. **Szalma, J.L.**, & Hancock, P.A. (2008). *Cultural competencies for global collaboration*. In: Conference Proceedings of the XIXth International Congress of the International Association for Cross-Cultural Psychology, Bremen, Germany, July.
- 34 **Scott, L.**, Slover, H., **Szalma, J.**, & Janowsky, A. (2008, March). *Self-esteem, Emotional Stroop, and recall: 'Neutral' word bias*. Poster presented at the 54th annual meeting of the Southeastern Psychological Association, Charlotte, NC.
- 33 **Szalma, J.L.** (2007, October). *The psychometric approach to individual differences: Implications for human factors research and practice*. Paper presented at the 2007 Annual Meeting of the Human Factors and Ergonomics Society, Baltimore, MD.
- 32 Hancock, P.A., **Szalma, J.L.**, Koltko-Rivera, M., & Vincenzi, D. (2006, October). *Application of fuzzy signal detection theory to threat detection in extreme environments*. Paper presented at the Society for Human Performance in Extreme Environments, San Francisco, CA.
- 31 **Ross, L.**, **Conway, G.**, **Szalma, J.L.**, **Saxton, B.**, **Braczyk, A.**, & Hancock, P.A. (2006, October). *A meta-analysis of periodic noise stress on human performance*. Paper presented at the Society for Human Performance in Extreme Environments, San Francisco, CA.
- 30 **Thropp, J.**, Oron-Gilad, T., **Szalma, J.L.**, & Hancock, P.A. (2006, October). *Low and high levels of attentional control in adaptive automation*. Paper presented at the 50th Annual Meeting of the Human Factors and Ergonomics Society, San Francisco, CA.
- 29 **Szalma, J.L.**, & Hancock, P.A. (2006, November). *Fuzzy signal detection theory: Tests of assumptions and comparison to traditional analyses*. Poster presented at the 47th annual meeting of the Psychonomic Society, Houston, TX.
- 28 **Szalma, J.L.**, & Hancock, P.A. (2006, November). *Fuzzy signal detection theory and human performance: A review of empirical evidence for model validity*. Paper presented at the annual meeting of the Human Factors and Ergonomics Society European Chapter: Human Factors Issues in Complex System Performance, Sheffield, UK.

- 27**Szalma, J.L.**, & Hancock, P.A. (2006, November). *Understanding performance, workload, and stress: An individual differences perspective*. Poster presented at the annual meeting of the Human Factors and Ergonomics Society European Chapter: Human Factors Issues in Complex System Performance, Sheffield, UK.
- 26**Szalma, J.L.** (2005, September). *Application of theories of motivation and emotion to Hedonomics*. In: T. Oron-Gilad (Chair) and P.A. Hancock (Co-Chair). *The role of Hedonomics in the future of industry, service, and product design*. Symposium panel conducted at the 49th annual meeting of the Human Factors and Ergonomics Society, Orlando, FL.
- 25Thropp, L., **Szalma, J.**, & Hancock, P. (2005, September). *Comparison of spatial and temporal discrimination performance across various difficulty levels*. Poster presented at the 49th annual meeting of the Human Factors and Ergonomics Society, Orlando, FL.
- 24Thropp, L.E., Oron-Gilad, T., **Szalma, J.L.**, & Hancock, P.A. (2005, August). *Incorporating individual differences into the adaptive automation paradigm*. Paper presented at the 2005 American Psychological Association Annual Convention, Washington, D.C.
- 23Hancock, P.A., & **Szalma, J.L.** (2005, August). *Marriage of mind and machine: Advanced human-machine interaction*. Paper presented at the 2005 American Psychological Association Annual Convention, Washington, D.C.
- 22Ross, J.M., **Szalma, J.L.**, & Hancock, P.A. (2005, March). *Meta-analytic review of the effects of temperature on performance*. Paper presented at the 2005 American Psychological Association Division 21/19 & Human Factors and Ergonomics Society Potomac Chapter Annual Symposium on Applied Experimental Research, George Mason University, Fairfax, VA.
- 21Morgan, J.F., Oron-Gilad, T., Hancock, P.A., & **Szalma, J.L.** (2005, March). *Perception of morphed objects: Generating psychophysical functions for the evolution of a shape*. Paper presented at the 2005 American Psychological Association Division 21/19 & Human Factors and Ergonomics Society Potomac Chapter Annual Symposium on Applied Experimental Research, George Mason University, Fairfax, VA.
- 20Stafford, S.C., Oron-Gilad, T., **Szalma, J.L.**, Delos Santos, K., & Hancock, P.A. (2004, November). *Attitude toward seatbelt usage among police officers*, ICTTP, Nottingham England, 2004.
- 19Szalma, J.L., Ross, J.M., & Hancock, P.A. (2004, July). *The influence of Dispositional Optimism and Pessimism on Task Engagement for Spatial and Temporal Discrimination*. Paper presented at the 2004 American Psychological Association Annual Convention, Honolulu, Hawaii.
- 18**Szalma, J.L.**, & Hancock, P.A. (2004, July). *Alternatives to Grouping Individuals in the Analysis of Individual Differences Data: Applications to Dispositional Pessimism*. Poster presented at the 2004 American Psychological Association Annual Convention, Honolulu, Hawaii.
- 17**Szalma, J.L.**, Stafford, S.C., Oron-Gilad, T., Delos Santos, K., & Hancock, P.A. (2004, July). *Attitudes of Police Officers Toward Seat Belt Use While on Duty*. Paper presented at the 2004 American Psychological Association Annual Convention, Honolulu, Hawaii.
- 16Ross, J.M., **Szalma, J.L.**, & Hancock, P.A. (2004, March). *Effects of Spatial/Temporal Task Demands on False Alarms*. Poster presented at the 2004 American Psychological Association Division 21/19 Mid-Year Symposium, Engineering and Military Psychology: Improving Lives and Enhancing National Security. Ft. Belvoir, VA.

- 15 Stafford, S.C., Oron-Gilad, T., **Szalma, J.L.**, Delos Santos, K., & Hancock, P.A. (2004, March). *Improving Seatbelts for Police and Military Personnel*. Paper presented at the 2004 American Psychological Association Division 21/19 Mid-Year Symposium, Engineering and Military Psychology: Improving Lives and Enhancing National Security. Ft. Belvoir, VA.
- 14 Thropp, J.E., **Szalma, J.L.**, Ross, J.M., & Hancock, P.A. (2004, March). *Impact of Extraversion on Performance and Workload in Target Detection*. Paper presented at the 2004 American Psychological Association Division 21/19 Mid-Year Symposium, Engineering and Military Psychology: Improving Lives and Enhancing National Security. Ft. Belvoir, VA.
- 13 Ward, P., **Szalma, J.L.**, & Hancock, P.A. (2003, October). *The stress and performance relationship and the effect of performance moderators*. Poster presented at the 47th Annual Meeting of the Human Factors and Ergonomics Society, Denver, CO.
- 12 Ward, P., Hancock, P.A., Ganey, H.C.N., Mouloua, M., & **Szalma, J.L.** (2003, August). *The task of modeling driver performance*. Paper presented at the Congress of the International Ergonomics Association, Seoul, South Korea.
- 11 Hancock, P.A., Ganey, H.C.N., & **Szalma, J.L.** (2003, August). *Stress and performance: Contrasting different descriptive relationships*. Paper presented at the Congress of the International Ergonomics Association, Seoul, South Korea.
- 10 **Szalma, J.L.**, & Hancock, P.A. (2003, May). *Fuzzy signal detection theory: Capturing the uncertainty in natural decision making*. Poster presented at the 6th International Conference on Natural Decision Making, Pensacola, FL.
- 9 **Szalma, J.L.**, Hancock, P.A., Weaver, J.L., Mouloua, M., & Stafford, S.C. (2003, March). *Applications of fuzzy signal detection theory to law enforcement*. Paper presented at the 49th annual meeting of the Southeastern Psychological Association, New Orleans, LA.
- 8 Ross, J.M., **Szalma, J.L.**, Thropp, J., & Hancock, P.A. (2003, March). *Performance, workload, and stress with temporal and spatial task demands*. Poster presented at the Mid-Year Symposium of Division 21: Applied Experimental and Engineering Psychology, Division 19: Military Psychology of the American Psychological Association and the Potomac Chapter of the Human Factors and Ergonomics Society: Contemporary and Emerging Issues in Human Factors, Engineering and Military Psychology, Ft. Belvoir, VA.
- 7 Murphy, L.L., **Szalma, J.L.**, Hancock, P.A., & Stafford, S.C. (2003, March). *Comparison of methods of analyses from fuzzy and traditional signal detection theory*. Poster presented at the Mid-Year Symposium of Division 21: Applied Experimental and Engineering Psychology, Division 19: Military Psychology of the American Psychological Association and the Potomac Chapter of the Human Factors and Ergonomics Society: Contemporary and Emerging Issues in Human Factors, Engineering and Military Psychology, Ft. Belvoir, VA.
- 6 **Szalma, J.L.**, Ward, P., & Hancock, P.A. (2003, March). *Application of fuzzy signal detection theory to the evaluation of performance under stress*. Paper presented at the Mid-Year Symposium of Division 21: Applied Experimental and Engineering Psychology, Division 19: Military Psychology of the American Psychological Association and the Potomac Chapter of the Human Factors and Ergonomics Society: Contemporary and Emerging Issues in Human Factors, Engineering and Military Psychology, Ft. Belvoir, VA.

- ⁵Ward, P., **Szalma, J.L.**, & Hancock, P.A. (2003). *Predicting performance under stressful Conditions: A theoretical and empirical approach*. Paper presented at the Mid-Year Symposium of Division 21: Applied Experimental and Engineering Psychology, Division 19: Military Psychology of the American Psychological Association and the Potomac Chapter of the Human Factors and Ergonomics Society: Contemporary and Emerging Issues in Human Factors, Engineering and Military Psychology, Ft. Belvoir, VA.
- ⁴Hancock, P.A., **Szalma, J.L.**, Mouloua, M., & Stafford, S. (2002, October). *Defeating terrorism using human factors/ergonomics*. Poster presented at the 46th annual meeting of the Human Factors and Ergonomics Society, Baltimore, MD.
- ³**Szalma, J.L.**, Hancock, P.A., Mouloua, M., & Parasuraman, R. (2002). *Applications of fuzzy signal detection theory to responses to terrorism*. Poster presented at the 46th annual meeting of the Human Factors and Ergonomics Society, Baltimore, MD.
- ²Grier, R.R., **Szalma, J.L.**, Warm, J.S., Dember, W.N., Galinsky, T.L., & Parasuraman, R. (1999, April). *Vigilance: Mindlessness or Mindfulness?* Paper presented at the 91st annual meeting of the Southern Society for Philosophy and Psychology, Louisville, KY.
- ¹Meyers, W.R., Gerety, C.A., **Szalma, J.L.**, Dember, W.N., & Elmore, A.L. (1998). *Jean-Marie Le Pen, Vladimir Zhirinovsky, and the world press*. Paper presented at the 21st Annual Scientific meeting of the International Society of Political Psychology, Montreal, Canada, July, 1998.

Presentations and Symposia (Invited)

- ²³**Szalma, J.L.** (2018, June). *Transportation security: A sustained (attention) problem*. Panel Presentation, CREATE-TSA Symposium: Accelerating Action for Transportation Security, Georgetown University, Washington, D.C.
- ²²**Szalma, J.L.** (2014, July). *Risk of inadequate design of human and automation/robotic integration & risk of inadequate human-computer interaction*. Panel Presentation, Second Meeting of the Committee to Review NASA's Evidence Reports on Human Health Risks, Institute of Medicine of the National Academies of Science
- ²¹**Szalma, J.L.** (2013, September). *Video game-based training for vigilance*. UCF AEHF Program Colloquium Presentation.
- ²⁰Andre, A.D., Parasuraman, R., Rantanen, E.M., **Szalma, J.L.**, & Durso, F.T. (2012, October). *Past president's forum—Our future HF/E professors and researchers: Is anyone in the pipeline?* Discussion Panel presented at the 2012 Annual Meeting of the Human Factors and Ergonomics Society, Boston, MA.

Prior to Promotion to Associate Professor (Prior to Fall 2012)

- ¹⁹**Szalma, J.L.**, Duley, A., Flynn, J., & Hancock, P.A. (2007, May). *Collaborative technologies and their effect on operator workload in BMC₂ domains*. Paper presented at the 2007 International Symposium on Collaborative Technologies and Systems, Orlando, Florida.
- ¹⁸Hancock, P.A., **Szalma, J.L.**, Ross, K.G., & Merlo, J.L. (2007, January). *Detecting danger in uncertain circumstances: Applying fuzzy signal detection theory to understanding cultural cues*. Paper presented at the 6th Biennial Equal Opportunity/Equal Employment

- Opportunity Research Symposium, Defense Equal Opportunity Management Institute, Patrick Air Force Base, Florida.
- ¹⁷**Szalma, J.L.**, Oron-Gilad, T., & Hancock, P.A. (2005, May). *Stress, workload, and the detection of threat*. Paper presented at the ARO Workshop-Symposium on Bugging Bugs and Brains: Communication and Applications from Cellular Internals to Mental Contents, Cashiers, NC.
- ¹⁶**Szalma, J.L.**, Oron-Gilad, T., & Hancock, P.A. (2004, September). Examination of attentional mechanism underlying stress and performance. In C.S. Burke (Chair) and P.A. Hancock (Co-chair), *Stress effects on soldier performance*. Symposium panel discussion conducted at the 48th Annual Meeting of the Human Factors and Ergonomics Society, New Orleans, LA.
- ¹⁵**Szalma, J.L.** (2004, July). *Fuzzy signal detection theory and human performance assessment*. Paper presented at the invited Workshop on Modeling Stress Effects for Performance Predictions, Orlando, FL.
- ¹⁴Oron-Gilad, T., **Szalma, J.L.**, & Hancock, P.A. (2004, July). *Scalable operator control units (OCU's) for future force warrior (FFW) operations*. Paper presented at the invited Workshop on Modeling Stress Effects for Performance Predictions, Orlando, FL.
- ¹³**Szalma, J.L.**, Stafford, S.C., Oron-Gilad, T., Murphy, L.L., & Hancock, P.A. (2004, April). *Fuzzy signal detection theory: Basic and applied research*. Paper presented at the International Conference on Human Performance, Orlando, FL.
- ¹²**Szalma, J.L.**, Ross, J.M., Thropp, J.E., & Hancock, P.A. (2004, April). *Distortion of spatial and temporal perception under stress*. Paper presented at the International Conference on Human Performance, Orlando, FL.
- ¹¹Hancock, P.A., **Szalma, J.L.**, Oron-Gilad, T., Mouloua, M., Gilson, R.D., & the MURI-OPUS Group. (2004, April). *Operator performance under stress: A multiple university research initiative*. Paper presented at the International Conference on Human Performance, Orlando, FL.
- ¹⁰Oron-Gilad, T., **Szalma, J.L.**, & Hancock, P.A. (2004, April). *Stress and performance in virtual environments*. Paper presented at the ARO Workshop-Symposium on Sensing and Processing by Neuronal and Microbial Communities, Cashiers, NC.
- ⁹**Szalma, J.L.**, Oron-Gilad, T., & Hancock, P.A. (2004, April). *Examination of attentional mechanism underlying stress and performance*. Paper presented at the ARO Workshop Symposium on Sensing and Processing by Neuronal and Microbial Communities, Cashiers, NC.
- ⁸**Szalma, J.L.** & Hancock, P.A. (2004, March). Expertise and performance under stress. In S. Fiore (Chair), *From the Perceptual to the Organizational: How can the science of expertise better inform the practice of human performance?* Symposium panel discussion conducted at the Human Performance, Situation Awareness, and automation Conference, Daytona Beach, FL.
- ⁷**Szalma, J.L.** (2003, October). Analysis of individual differences data: Alternatives to ANOVA. In W. Karwowski (Chair) and H.M. Cuevas (Co-chair), *Considering the importance of individual differences in human factors research: No longer simply confounding noise*. Symposium panel discussion conducted at the 47th annual meeting of the Human Factors and Ergonomics Society, Denver, CO.
- ⁶**Szalma, J.L.**, Ward, P., & Hancock, P.A. (2003, April). *Fuzzy signal detection theory: Initial*

- evidence for a novel approach to evaluation of decision-making under uncertainty.* Paper presented at the U.S. Army Research Office Workshop, Seeing Both the Scene and Unseen: Human Sight and Microscopic Studies. Cashiers, North Carolina.
- ⁵**Szalma, J.L.**, Hancock, P.A., & Weaver, J.L. (2003, April). Development of a theory of stress and attentional narrowing. In G. Matthews (Chair) and J.L. Szalma (Co-chair), *Developing the cognitive theory of stress and performance*. Symposium conducted at the 95th annual meeting of the Southern Society for Philosophy and Psychology, Atlanta, GA.
- ⁴Ward, P., **Szalma, J.L.**, & Hancock, P.A. (2003, April). *Adaptive experts and automaticity: Explanations of failing under pressure*. Paper presented at the U.S. Army Research Office Workshop, Seeing Both the Scene and Unseen: Human Sight and Microscopic Studies. Cashiers, North Carolina.
- ³Ward, P., **Szalma, J.L.**, & Hancock, P.A. (2003, April). Expertise: A long term adaptation to stress? In: G. Matthews (Chair) and J.L. Szalma (Co-chair), *Developing the cognitive theory of stress and performance*. Symposium conducted at the 95th annual meeting of the Southern Society for Philosophy and Psychology, Atlanta, GA.
- ²Hancock, P.A., **Szalma, J.L.**, & Mouloua, M. (2003, March). Applications of psychology to homeland security. In: J.L. Szalma (Chair), *Applications of psychology to homeland defense*. Symposium conducted at the 49th annual meeting of the Southeastern Psychological Association, New Orleans, LA.
- ¹**Szalma, J.L.**, Hancock, P.A., & Mouloua, M. (2003, March). Application of Fuzzy Signal Detection Theory to Homeland Defense. In: J.L. Szalma (Chair), *Applications of psychology to homeland defense*. Symposium conducted at the 49th annual meeting of the Southeastern Psychological Association, New Orleans, LA.

Presentations (Non-Peer Reviewed)

- ¹Isard, J.L., & **Szalma, J.L.** (2013, April). *The effect of perceived choice on motivation and sustained attention*. Poster presented at the Showcase of Undergraduate Research Excellence, University of Central Florida, Orlando, Florida.

Newsletter Articles

- ²Hancock, P.A., & **Szalma, J.L.** (2017). On the passing of Joel S. Warm. *HFES Bulletin*, August 15th. Available at <http://www.hfes.org/web/HFESBulletin/August2017Bulletin.html#JoelWarm>

Prior to Promotion to Associate Professor (Prior to Fall 2012)

- ¹**Szalma, J.L.** (2007). Neural, genetic, cognitive, and psychometric approaches to individual differences. *HFES Bulletin*, 50, 4.

White Papers

- ³Hancock, P.A., **Szalma, J.L.**, & Weaver, J.L. (2002). *The distortion of perceptual space-time*

under stress. Unpublished white paper, MIT² Laboratory, University of Central Florida. Available at www.mit.ucf.edu

²**Szalma, J.L.**, & Hancock, P.A. (2002). *On mental resources and performance under stress*. Unpublished white paper, MIT² Laboratory, University of Central Florida. Available at www.mit.ucf.edu

¹Ward, P., **Szalma, J.L.**, & Hancock, P.A. (2003). *Stress, human information processing, and performance mediators: Application of a descriptive framework to current modeling tools*. Unpublished white paper, MIT² Laboratory, University of Central Florida. Available at www.mit.ucf.edu

Symposia and Presentation Sessions Chaired

³*Honoring the Contributions and Career of Joel S. Warm* (Chair). 61st Annual Meeting of the Human Factors and Ergonomics Society, October 2017.

Prior to Promotion to Associate Professor (Prior to Fall 2012)

²*Developing the Cognitive Theory of Stress and Performance* (Co-chair). 95th annual meeting of the Southern Society for Philosophy and Psychology, April, 2003.

¹*Applications of Psychology to Homeland Defense*. 49th annual meeting of the Southeastern Psychological Association, March, 2003.

Manuscripts Submitted or in Preparation

Claypoole, V.L., & **Szalma, J.L.** *Social facilitation and cognitive performance: A review and alternate theoretical approach*. Manuscript in preparation.

Claypoole, V.L., Neigel, A.R., Waldfohle, G.E., Fraulini, N.W., **Szalma, J.L.**, & Hancock, P.A. Profiling the workload associated with cognitive vigilance tasks. Manuscript revision submitted to *Ergonomics*.

Szalma, J.L. *Stress and human performance: A theoretical integration*. Manuscript in preparation.

Szalma, J.L., & Isard, J.L. *Vigilance on the move: The effect of perceived choice on performance, workload, and stress*. Manuscript in preparation.

Szalma, J.L., & Teo, G.W.L. *Interactive effects of affective traits and task characteristics in sustained attention*. Manuscript in preparation.

Teo, G.W.L., **Szalma, J.L.**, Schmidt, T.N., & Hancock, P.A. *Training for vigilance on the move: The effects of feedback type*. Manuscript in preparation.

Grants

University of Central Florida

- 1) Principal Investigator, *Training for Vigilance Using a Video Game-Based Task: Distinguishing Structural from Energetic Task Components*, \$308,332.00. Funding Agency: Army Research Institute. Period of Performance: June 19, 2017-June 18, 2020.

Main Goal: The purpose for the proposed work is to programmatically examine the structural and energetic factors of sustained attention that may be affected by KR training, and to further investigate these issues in the context of a new vigilance task paradigm that emerged from the previous ARI-funded development of a video game-based vigilance task. The goals are to improve our understanding of how KR training improves performance and to use this knowledge to identify modifications to the training module that would improve its effectiveness.

- 2) Principal Investigator, *Training for Vigilance in a Videogame-based Environment: The Effectiveness of Knowledge of Results and Diagnosticity of Feedback on Performance, Workload, and Stress*, \$398,472.00. Funding Agency: Army Research Institute. Period of Performance: March, 2011-March 2013.

Main Goal: To develop a training module for sustained attention based on vigilance theory and research. The project involved creating signal detection scenarios in the Virtual Battlefield Space (VBS2) software using stimuli with features similar to those of critical signals as distracters. The research resulted in the creation of VBS2 module that trains soldiers to improve their vigilance skills.

- 3) Principal Investigator, *Individual Differences in Sustained Attention: Identifying Operators with Superior Vigilance*, \$31,718.00. Funding Agency: Ball Aerospace, Inc., on behalf of the Air Force Research Laboratory. Agency Contract Number: Period of Performance: 03/8/2010-12/31/2010

Main Goal: To identify the operator characteristics associated with superior vigilance performance and resistance to the negative effects of workload and stress. Note that with respect to person characteristics, much of individual differences research in vigilance (and in cognitive performance generally) have examined traits in isolation, and have rarely examined them together. Hence, a goal for the proposed research will be to identify relevant *trait profiles* via regression and structural equation modeling for predicting vigilance performance. In addition, this project extends the analysis of vigilance performance to include measures of diagnostic power and how variations in task and person characteristics influence the diagnostic power of observers.

- 4) Principal Investigator, *Adaptive Automation in Human-Agent Teams: The Effects of Role Change, Task Demand, & Operator Characteristics*, \$74,765. Funding Agency: U.S. Army Research Laboratory. Agency Contract Number: W911NF0620041. Period of Performance: 8/1/2006 – 8/31/2007.

Main Goal: To investigate the interactive effects of adaptive automation, changes in task demand, system reliability, and individual differences in operator characteristics on human performance in human agent systems. Specifically, this project investigated how the characteristics of the non-human agent (a simulated UGV with adaptive automation) and the characteristics of the human (affective traits) jointly affect operator performance, workload, and stress as well as the level of trust by the operator of the non-human agent.

- 5) Co-Principal Investigator, *A Multimodal Approach to Unmanned Vehicle Operations in Dynamic Environments*, \$101,140. Funding Agency: U.S. Army Research Laboratory (Co-PI with R. Gilson and P.A. Hancock; credit split: 33%; College/Department indirect split: 100% [33% per co-PI]). Agency Contract Number W911NF0620041. Period of Performance: 8/1/2006 – 8/31/2007.

Main Goals: 1) Expand our current tactile language to be useful to operators of UV's and UGVs in ever changing, uncertain, and hostile environments. 2) Develop a system (language) of tactile signals which allow a human operator to attain a sense of presence of the UV while operating said UV. 3) Develop a system of UV feedback to the human soldier while the soldier directs a UV that he or she does not necessarily control.

- 6) Principal Investigator, *Empirical Examination of Trust in Automation Across Multiple Agents in a Search and Rescue Operation*, \$49,430. Funding Agency: U.S. Army Research Laboratory. Agency Contract Number: W911NF0620041. Period of Performance: 8/1/2006 – 8/31/2007.

Main Goal: To investigate human-agent interaction in the context of UGV tasks. Specifically, this project investigated how unreliable automation affected operators' performance and trust in the system, and how these errors impact subsequent utilization of the automation (i.e., their trust of the automation).

- 7) Co-Principal Investigator, *Scalable Interfaces*, \$74,991. Funding Agency: Micro Analysis and Design/Army Research Laboratory. (Co-PI with P.A. Hancock). Credit: 40% (\$29,996.40). Agency Contract Number: 800506610/0066. Period of Performance: 03/29/2006 – 01/24/2007.

Main Goal: This work relates directly to the human robot interaction work being pursued by the Advanced Decision Architecture of the Collaborative Technology Alliance. The project is investigating scalable interfaces for mounted and dismounted robotic interaction and teaming for Future Combat Systems and in particular their effect on Soldier decision making.

- 8) Co-Principal Investigator, *Collaborative Technologies and their Effect on Operator and Team Workload in BMC₂ Domains: A Multi-Modal Approach*, \$99,921. Funding Agency: U.S. Air Force Research Laboratory. (Co-PI with P.A. Hancock and A. Duley). Agency Contract Number FA865005C6651. Period of Performance: 8/31/2005 – 08/30/2006.

Main Goal: To understand operator and team workload/performance issues in Battle Management Command and Control (BMC₂) domains.

- 9) Co-Principal Investigator, *Incorporating Human Behavior and Constraints into Unit of Action Simulations*, \$97,295. Funding Agency: Micro Analysis and Design/Army Research Laboratory. (Co-PI with P.A. Hancock). Agency Contract Number: 800505410/TO #54. Period of Performance: 06/30/2005 – 04/30/2006.

Main Goal: Add new components to soldier-centered tools and to demonstrate their utility on a range of case studies, and to assess the effects of time pressure on human performance using meta-analytic techniques.

- 10) Co-Principal Investigator, *Output Analysis, Maintenance, and Stressor Enhancements for IMPRINT*, \$49,049.00. Funding Agency: Micro Analysis and Design/Army Research Laboratory. (Co-PI with P.A. Hancock and T. Oron-Gilad) Agency Account number: 800504110. Period of Performance: 09/28/2004 – 04/26/2005.

Main Goal: Develop methods for analyzing and assessing human performance simulations using IMPRINT Standard and IMPRINT Pro, and investigate the effect of environmental stressors on human performance using meta-analytic techniques. The result will be development of specifications for output analysis enhancements to IMPRINT with emphasis on maintenance modeling.

- 11) Co-Principal Investigator, *Individual Differences in Human Information Processing Capabilities: Sensitivity to Variations in Workload, Stress, and Fatigue*, \$118,996.00. Funding Agency: US Department of Interior/DARPA (Co-PI with P.A. Hancock and T. Oron-Gilad). Agency Contract Number: NBCHI030012. Period of Performance: 04/23/2004 – 10/31/2004.

Main Goal: To examine the individual differences in trait and state and how these mediate the link between stress, fatigue, and workload, and the performance of tasks requiring different forms of information processing capabilities.

SUNY Farmingdale

- 1) Principal Investigator, *SUNY Farmingdale Technology Grant*. January, 2000. Awarded \$40,000 for the acquisition of equipment to build a psychology laboratory.

Teaching

Courses Taught: Graduate

University of Central Florida

Advanced Research Methods II (PSY 7218C) Spring Semester 2016; 2017; 2018; 2019; 2020 (online as of 03/16/2020 due to Covid-19 pandemic)

Human Factors 1 (EXP 5256) Fall Semesters 2006 – 2012; 2014-2019

Personality Theories (PPE 5055) Spring 2011/Fall 2013/Spring 2015

Professional Issues (PSY 7939) Summer 2005

Team taught a second semester graduate course in Human Factors (EXP 6257). Spring Semesters 2003 - 2006

Directed Research (EXP 6918)
Independent Research (EXP 6908)
Dissertation Research (PSY 7980)

University of Cincinnati

Graduate Teaching Assistant for the first year course in statistics for graduate students. Responsibilities included consultation with graduate students during office hours, holding review sessions, and teaching the computer portion of the class (applications of SAS to data analysis), and serving as substitute lecturer as needed.

Courses Taught: Undergraduate

University of Central Florida

General Psychology (PSY 2012) Summer B, 2009, 2010, 2011, 2013, 2017

Honors Developmental Psychology (DEP 2004H) Fall 2006

Honors General Psychology (PSY 2012H) Fall/Spring Semesters for academic years 2007-2008 to 2009-2010; Spring 2011; Fall/Spring 2011-2012 to 2013-2014; Fall Semesters 2014-2019

Motivation (EXP 3304) Spring 2007 – 2010; Spring 2012 – 2017; Summer, 2008; Online: Summer 2016 – 2018; Summer B 2020

Personality Theory and Research (PPE 3003) Summer A 2013; Online: Summer B 2014; 2019; Summer A 2020

Research Methods in Psychology (PSY 3213C) Summer C, 2015

Statistical Methods in Psychology (PSY 3204C) Summer C, 2014; 2015; 2016

Directed Research/Directed Independent Research (PSY 4912)

Honors Undergraduate Directed Readings I (PSY 4903H)

Honors Undergraduate Directed Readings II (PSY 4904H)

Honors Undergraduate Thesis Research (PSY 4970H)

SUNY Farmingdale

Introduction to Psychology

Introduction to Human Factors. The human factors course was taught in both the traditional classroom and as an on-line course via the SUNY Learning Network.

University of Cincinnati

Motivation and Emotion
Sensation and Perception

Graduate Teaching Assistant: Research Methods. Taught a laboratory section of an undergraduate research methods course.

Supervision of Student Researchers

Ph.D. Student Dissertation Committee Chair/Co-Chair

¹Jennifer Ross (Fall 2003- Spring 2008; Co-chair): Title: *Moderators of trust and reliance across multiple decision aids* Completed Spring Semester, 2008.

²Grant Taylor (Fall 2006- Spring 2012; Chair). Title: *Comparing types of adaptive automation within a multi-tasking environment*. Completed Spring Semester, 2012.

³Maureen O'Connell (Fall 2007-Fall 2015; Chair). Title: *Integration of Multidimensional Signal Detection Theory with Fuzzy Signal Detection Theory*. Completed Fall Semester, 2015.

⁴Grace W. Teo (Fall 2008-Fall 2015; Chair). Title: *Enhancing the effectiveness of human-robot teaming with a closed-loop system*. Completed Fall Semester, 2015.

⁵Sidra Van De Car (Fall 2008-Fall 2015; Chair). Title: *Detecting threats from constituent parts: A fuzzy signal detection theory analysis of individual differences*. Completed Fall Semester, 2015.

⁶Alexis R. Neigel (Fall 2013-Spring 2017; Chair). Title: *Beyond compliance: Examining the role of motivation in vigilance performance*. Completed Spring Semester, 2017.

⁷Gabriella M. Hancock (Fall 2011-Spring 2017; Chair). Title: *An exploration of the feasibility of functional near-infrared spectroscopy as a neurofeedback cueing system for the mitigation of the vigilance decrement*. Completed Spring Semester, 2017.

⁸Nicholas W. Fraulini (Fall 2012-Fall 2017; Chair). Title: *Examining energetic and structural components of knowledge of results using a vigilance paradigm*. Completed Fall Semester, 2017.

⁹Victoria L. Claypoole (Fall 2013-Spring 2018; Chair). Title: *Understanding human performance and social presence: An analysis of vigilance and social facilitation*. Completed Spring Semester, 2018.

¹⁰Jeremy R. Flynn (Modeling & Simulation Program; Summer 2012-Summer 2018; Chair). A *psychophysical approach to standardizing texture compression for virtual environments*. Completed Summer Semester, 2018.

Current Ph.D. Students

Allison Garibaldi (Fall 2018-present)

Nicolas Uszak (Fall 2016-present)

Grace Waldfogle (Fall 2017-present)

Ph.D. Dissertation Committees

¹Kelly Burke (graduated May, 2006; committee member; Chair: Peter A. Hancock, Ph.D.). Title: *Decision Making Accuracy and Shooting Performance: Effects of Time Pressure and Prior Task Loading*. Completed Spring Semester, 2008.

²Jennifer Thropp (graduated May, 2006; committee member; Chair: Peter A. Hancock, Ph.D.) Title: *Individual Preferences Using Automation*. Completed Spring Semester, 2006.

³Justin Morgan (graduated May, 2008; committee member; Chair: Peter A. Hancock, Ph.D.). Title: *Hysteresis Effects in Driving*. Completed Spring Semester, 2008.

⁴Razia Nayeem (graduated May, 2008; committee member; Chair: Peter A. Hancock, Ph.D.). Title: *Investigating the Effects of Tactile Stress on a Military Tourniquet Application Task*. Completed Spring Semester, 2008.

⁵Peter Terrence (graduated May, 2008; committee member; Chair: Richard D. Gilson, Ph.D.). Title: *Tactile Working Memory and Multimodal Loading*. Completed Spring Semester, 2008.

⁶Katherine Del Giudice (graduated December, 2010; committee member; Chair: Peter A. Hancock, Ph.D.). Title: *Trust on the Web: The Impact of Social Consensus on Information Credibility*. Completed Fall Semester, 2010.

⁷Steven Gunter (graduated December, 2010; committee member; Chair: Barbara A. Fritzsche, Ph.D.). Title: *How do Situational Judgments Tests and Situational Interviews Compare? An Examination of Construct and Criterion Validity*. Completed Fall Semester, 2010.

⁸Michael Curtis (graduated May, 2011; committee member; Chair: Florian Jentsch, Ph.D.). Title: *Validation of Discrimination Training Task Using a Model of Category Learning*. Completed Spring Semester, 2011.

⁹Anne Sinatra (graduated May, 2012; committee member; Chair: Valerie K. Sims, Ph.D.). Title: *The Cocktail party effect applies to fictional characters: The impact of expertise and stimulus degradation on performance in a dichotic listening task*. Completed Spring Semester, 2012.

¹⁰Julian Abich (graduated August 2013; committee member; Chair: Lauren E. Reinerman-Jones, Ph.D.). Title: *Comprehensive workload measurement: Subjective, performance, & physiological*. Completed Summer Semester, 2013.

¹¹David Schuster (graduated August, 2013; committee member; Chair: Florian Jentsch, Ph.D.). Title:

The effects of diagnostic aiding on situation awareness under robot unreliability. Completed Summer Semester, 2013.

¹²Joseph E. Mercado (graduated May, 2014, committee member; Chair: Peter A. Hancock, Ph.D.; Co-Chair: Lauren E. Reinerman-Jones, Ph.D.). Title: *Investigating the Universality of Workload Measures across the Military and Nuclear Domains.* Completed Spring Semester 2014.

¹³Luiz Xavier (graduated May 2014; committee member; Chair: Barbara A. Fritzsche, Ph.D.). Title: *Plugging up the leaky STEM pipeline with a stereotype threat mentoring intervention.* Completed Spring Semester 2014.

¹⁴Thomas Alicia (graduated May 2015; committee member, Chair: Mustapha Mouloua, Ph.D.). Title: *The Bridging Technique: Crossing Over the Modality Switching Effect.* Completed Spring Semester, 2015.

¹⁵Audrey W. Fok (graduated December, 2015, committee member; Chair: Mustapha Mouloua, Ph.D.). Title: *Configural displays: The effects of salience on multi-level data extraction.* Completed Fall Semester, 2015.

¹⁶Ben Sawyer (graduated December, 2015; committee member; Chair: Peter A. Hancock, Ph.D.) Title: *A Framework for Evaluating Multitasking-based Distraction in Diverse Contexts* Completed Summer Semester, 2015.

¹⁷Mitchell Tindall (graduated Fall 2015; committee member; Chair: Kimberly Smith-Jentsch, Ph.D.). Title: *Who is the best judge of personality: Investigating the role of relationship depth and observational breadth on the accuracy of third-party ratings.* Completed Fall Semester 2015.

¹⁸Timothy White (graduated Summer, 2016; committee member; Chair: Peter A. Hancock, Ph.D.). Title: *The Effects of Tactile Displays on the Perception of Target Distance.* Completed Summer Semester 2016.

¹⁹Ryan Wohleber (graduated Spring 2016; committee member; Chair: Gerald Matthews, Ph.D.). Title: *The impact of automation reliability and fatigue on reliance.* Completed Spring Semester 2016.

²⁰Julia Wright (graduated Summer, 2016; committee member; Chair: Peter A. Hancock, Ph.D.). Title: *Transparency in human-agent teaming and its effect on complacent behavior.* Completed Summer Semester 2016.

²¹Tracy L. Sanders (graduated Fall, 2016; committee member; Chair: Peter A. Hancock, Ph.D.). Title: *Individual differences in trust towards robotic assistants.* Completed Fall Semester, 2016.

²²Martin S. Goodwin (graduated Spring 2017, committee member; Chair: Lauren E. Reinerman-Jones, Ph.D.). Title: *A training effectiveness evaluation of UH-60A/L simulated environments: An interdisciplinary approach.* Completed Spring Semester, 2017.

²³Alyssa Hess (graduated Spring 2017, committee member; Chair: Mark B. Neider, Ph.D.). Title: *Gamification of visual search in real world scenes.* Completed Spring Semester, 2017.

²⁴Jinchao Lin (graduated Spring 2017, committee member; Chair: Gerald Matthews, Ph.D.). Title: *The Impact of Automation and Stress on Human Performance in UAV Operation*. Completed Spring Semester, 2017.

²⁵Michael A. Rupp (graduated Summer 2017; committee member; Chair: Janan Al-Awar Smither, Ph.D.). Title: *The role of aging and fitness in goal directed kinematics*. Completed Summer Semester, 2017.

²⁶Ada Mishler (graduated Fall 2017, committee member; Chair: Mark B. Neider, Ph.D.). Title: *Do multiple conditions elicit the visual redundant signals effect in simple response times?* Completed Fall Semester 2017.

²⁷Shayn Davidson (graduated Spring 2018; committee member; Chair: Christina Frederick, Ph.D.). Title: *A multi-dimensional model of enjoyment: The development and validation of a universal enjoyment scale (UES)*. Completed Spring Semester 2018. Note. This student is in the Human Factors Ph.D. program in the Department of Human Factors at Embry-Riddle Aeronautical University.

²⁸Jennifer F. Louie (graduated Spring 2018; committee member; Chair: Mustapha Mouloua, Ph.D.). Title: *Working memory capacity and executive attention as predictors of distracted driving*. Completed Spring Semester 2018.

²⁹Joanna E. Lewis (graduated Spring 2018, committee member; Chair: Mark B. Neider, Ph.D.). Title: *Oculomotor mechanisms underlying attentional costs in distracted visual search*. Completed Spring Semester 2018.

³⁰Andrew J. Wismer (graduated Spring 2018; committee member; Chair: Corey Bohil, Ph.D.). Title: *Categorical change: Exploring the effects of concept drift in human perceptual category learning*. Completed Spring Semester 2018.

³¹Audrey Hill-Zlatkin (graduated Fall 2018; committee member; Chair: Corey J. Bohil, Ph.D.). Title: *Subjective measures of implicit categorization learning*. Completed Fall Semester, 2018.

³²Bradford L. Schroeder (graduated Fall 2018; committee member; Chair: Valerie K. Sims, Ph.D.). Title: *Eye movements and spatial ability: Influences on thinking during analogical problem solving*. Completed November 2018.

³³Dawn Sarno (Fall 2018; committee member; Chair: Mark B. Neider, Ph.D.). Title: *Does one bad phish spoil the whole e-mail load? Exploring phishing susceptibility task factors and potential interventions*. Proposal successfully defended April 2019. Completed March 2020.

³⁴William Volante (Fall 2019; committee member; Chair: Peter A. Hancock, Ph.D.). Title: *The effects of social conformity in human-robot interaction*. Completed March 2020.

³⁵Theresa Kessler (Summer 2018; committee member; Chair: Peter A. Hancock, Ph.D.). Title: *Neurophysiological correlates of trust in robots*. Proposal successfully defended September 2018.

Completed May 2020.

Current Ph.D. Dissertation Committees

Kylie Fernandez (Spring 2020; committee member; Chair: Dr. Nichole Lighthall, Ph.D.). Title: *Dissociable temporal and performance effects of two stress pathways on economic decision making*. Proposal Successfully defended April, 2020.

James Ferraro (Spring 2020; committee member; Chair: Mustapha Mouloua, Ph.D.). Title: *Empirical examination of unmanned systems operator performance, stress, and workload: The role of non-ability traits and individual differences*. Proposal successfully defended April 2020.

M.S. Students

1Jennifer Isard (MS I/O) (Fall 2013-Spring 2015) Graduated Spring 2015.

2Tarah Schmidt (MS Modeling & Simulation) (Spring 2012-Fall 2013) Graduated Fall 2013.

Student Awards

Allison Garibaldi: Delores A. Auzenne Fellowship, for minority graduate students, 2020

Alexis Neigel: UCF 30 Under 30 Award, 2020

Gabriella Hancock: American Psychology Association Division 21 (Applied Experimental and Engineering Psychology) Briggs Dissertation Award, 2019

Victoria Claypoole: UCF 30 Under 30 Award, 2019

Victoria Claypoole: UCF Graduate Dean's Dissertation Completion Fellowship, 2018

Victoria Claypoole: UCF Excellence in Graduate Student Teaching Award, 2017

Victoria Claypoole: Best Student Paper Award, Individual Differences in Performance Technical Group of the Human Factors and Ergonomics Society, 2018. Paper: *Exploring the effects of extraversion on social facilitation and vigilance task performance*

Nicholas Fraulini: Naval Research Enterprise Internship Program (NREIP), 2017

Gabriella Hancock: Lead Scholars Academy's Inspire Program's Outstanding Student Leader for Women's History Month, 2016

Gabriella Hancock: American Psychological Association of Graduate Students Teaching Excellence in Psychological Science Award, 2015

Gabriella Hancock: HFES Student Member with Honors, 2015

Gabriella Hancock: Embry-Riddle Human Factors and Applied Psychology Student Conference Excellence in Psychological Science Award, 2014

Alexis Neigel: UCF Graduate Dean's Dissertation Completion Fellowship, 2017

Alexis Neigel: Naval Research Enterprise Internship Program (NREIP), 2015

Grant Taylor: HFES Student Member with Honors Award, 2011

Grace Teo: NHTSA ESV Student Design Contest Finalist, 2011 (with Ben Sawyer)

Graduate students supervised: Independent Study

¹Razia Nayeem (summer, 2007) In this project the effect of response and stimulus set size on performance on a temporal discrimination was investigated. The purpose for this research was to test the validity of fuzzy signal detection theory and to compare that model to the traditional signal detection model.

²Stephanie Quinn (summer, 2007) The project was completion of a meta-analytic study of the effect of time pressure on human performance.

Undergraduate Honors Theses, 2007-present

³Gabriella Hancock (summer 2011), UCF Summer Mentoring Fellowship Program. The project involved a quantitative review of the research literature on training for sustained attention, as well as data collection for a transfer of training study using a video game to train vigilance.

⁴Paul Oppold (Fall 2013- Fall 2015) The project involved developing a measure to assess motivation for Massively Multi-Player Online (MMO) game play and lexical knowledge of the MMO domain.

⁵Neal Blaher (Fall 2015-Spring 2019). The project is a meta-analytic review of the relationship of individual differences in person characteristics on performance of sustained attention tasks.

⁶Kylie Fernandez (Fall 2019). Served as her advisor while her advisor was on parental leave. During the semester she drafted her dissertation proposal. Working Title: *Dissociable temporal and performance effects of two stress pathways.*

Undergraduate Honors Thesis Chair

¹Lindzee Bailey (2008) Title: *The Effect of Choice on Performance of Vigilance Tasks.* Thesis completed Spring Semester 2008.

²Garrett Grainger (2009) Title: *Effect of Social Exclusion and Cognitive Ability on Workplace Deviance.* Thesis completed Summer Semester 2009.

³Tyler Bull (2015). Title: *Anticipated Telehealth Usage in Older and Younger Adults*. Thesis completed Spring 2015.

⁴Daryn Dever (2017). Title: *A study of Semantic Processing Performance*. Thesis completed Fall 2017.

Undergraduate Honors Thesis Committee Member

¹Ashley M. Hughes (2010) Title: *Trauma as a Predictive factor for Performance under Stress*. Thesis completed Summer Semester 2010.

²Theresa Kessler (2013). Title: *Social networking and users: The interaction of personality and Facebook updates*. Thesis completed Fall Semester 2013.

³Keith MacArthur (2014). Title: *Deindividuation of Drivers: Is everyone else a bad driver?* Thesis completed Fall semester 2014.

⁴Jessica L. Ellermets (2015). Title: *The effects of auditory stimuli on stress levels of adult patients in the critical care setting*. Thesis completed Summer 2015.

LEAD Scholar

Rosaura Ramos (Fall 2002 – Spring 2003)

McNair Scholar

David Tademy (Spring 2008-Summer 2008)
RAMP Scholar

Danae Higginbotham (Fall 2007-Spring 2008)

Other Undergraduate Students Supervised

Kendal Allen (Spring 2019 – present)
Amy Alvarado (Summer 2018 – present)
Nikki Anne Ballelos (Spring 2019 – present)
Eunice Baltodano (2015-2017)
Jaclyn Baron (Spring 2004- Spring 2005)
Saif Behairy (2015-2016)
Sean Bowser (Fall 2014- Spring 2017)
Christopher Brooks (Summer 2018 – Summer 2019)
Deja Brown (Fall 2017 – Fall 2018)
Tyler Bull (Fall 2013- Spring 2015)
Darian Byrd (Fall 2012- Spring 2015)
Kelly Carpenter (Spring 2015- Spring 2016)

Grace Morton (Spring 2019 – present)
Catherine Neubauer (Fall 2007- Spring 2008)
Gail Parsons (Fall 2009- Fall 2010)
Monica Perez (2015-2017)
Teresa Perez (2016-2018)
Sierra Pickett (2016-2018)
Caroline Pittman (Fall 2016-Summer 2018)
Mallory Renfro (Spring 2007- Fall 2007)
Natalie Reyes (Fall 2012- Fall 2016)
Arianna Rich (2016-2017)
Elizabeth Risi (Summer 2018 – Spring 2019)
Sabrina Rodriguez (Fall 2012- Spring 2015)
Abigail Rose (Fall 2017 – Fall 2018)

Zenobia Carver (Summer 2007- Spring 2008)	Emily Ross (Spring 2015- present)
Cristina Chirino (2015-2017)	James Ross (Fall 2014- Fall 2017)
Eric Clayburn (2016-2017)	Bonnie Saxton (Summer 2005- Spring 2006)
Stephanie Colombo (Spring 2005- Spring 2006)	Tarah Schmidt (Fall 2010- Fall 2011)
James Craig (2016-2017)	Rick (Andy) Schoppe (Fall 2018 – Fall 2019)
Nicole Crossland (2014-2016)	Jennifer Scott (Spring 2007- Fall 2009)
Nicole (Nikki) Crossland (Fall 2013- present)	Hilary Slover (Summer 2007- Spring 2008)
Jonathan (Jon) Curtis (Fall 2013- Fall 2014)	Jessica Sproat (Fall 2013- Spring 2014)
Kody Denues (Spring 2014- Fall 2017)	Jacob Stephens (Spring 2019 – present)
Daryn Dever (2016-2018)	Crishtine Sundar (Fall 2018 – Summer 2019)
Alexa Fistel (Fall 2015 – Spring 2017)	Bret Swartz (2014-2016)
Trevor Gamble (Spring 2019 – present)	Michelle Tepednip (2016-2017)
Michaela Hagerty-Koller (Fall 2017 – Fall 2019)	Joslyn Tracey (Fall 2013- Spring 2015)
Drew Hampton (Fall 2007- Spring 2010)	Lorenzo Valdez (2015-2016)
Brianna Hurta (Fall 2017 – Fall 2018)	Barbara Vehabovic (2016-2017)
Jennifer Isard (Spring 2012- Spring 2013)	Johanna Rose Villadarez (Spring 2019 – present)
Lindsey Lane (Fall 2017 – Fall 2019)	Kristen Waldorf (2016-2017)
Barbara Lyerly (2016-2018)	Angelica (Angel) Whiteley (Fall 2013- Spring 2015)
Keith MacArthur (Fall 2011- Spring 2016)	Harry Wolfe (Summer 2018 – Fall 2019)
Yu Miao (Fall 2015 – Spring 2018)	Emily Woolhiser (Spring 2019 – present)
Nicole Montagna (2015-2018)	Agneiszka (Agnes) Zyzdryn (Fall 2005 – Fall 2006)
Jennifer Moore (Spring 2004- Spring 2005)	

Graduate Students Supervised, 2002-2006

Cleve Mortimer, Jennifer Ross, Jennifer Thropp, H.C. Neil Ganey, Razia Nayeem, Shawn Stafford, Kelly Burke, Lauren Murphy, Sidra Van De Car, Karen Delos Santos, Tim Smoker

First-Year Project Manuscript Evaluation (Reader)

James Ferraro (Fall 2017)

Elisabeth Slifkin (Fall 2019)

Second-Year Project Manuscript Evaluation (Reader)

James Ferraro (Fall 2018)

Michael Miuccio (Fall 2019)

Elisabeth Slifkin (Fall 2019)

Post-Doctoral Supervision

Aaron Duley, Ph.D. (2005-2007)

Gareth Conway, Ph.D. (2005-2007)

Honors and Awards

President, Division of Applied Experimental and Engineering Psychology (21) of the American Psychological Association, August 2020-August 2021.

Fellow, Division of Applied Experimental and Engineering Psychology (21) of the American Psychological Association (August 2019).

Fellow, Human Factors and Ergonomics Society (August 2019).

President-Elect, Division of Applied Experimental and Engineering Psychology (21) of the American Psychological Association, August 2019-August 2020.

University of Central Florida Research Incentive Award (RIA), recognizing excellence in research at UCF; \$5,000 increase to base salary. Spring 2018

University of Central Florida College of Sciences Award for Excellence in Professional Service, March 2014.

Psychology Award for Outstanding Graduate Thesis, Cincinnati Psychological Association and Cincinnati Academy of Professional Psychology, April, 2000.

University of Cincinnati Graduate Summer Research Fellowship. Summer, 1998.

Professional Affiliations

- 1) Member, American Psychological Association
 - a. Fellow (August 2019), APA Division 21 (Applied Experimental and Engineering Psychology)
 - b. Member, APA Division 5 (Testing and Measurement)
- 2) Fellow (August 2019), Human Factors and Ergonomics Society
 - a. Member, Individual Differences in Performance Technical Group of the Human Factors and Ergonomics Society
 - b. Member, Perception & Performance Technical Group of the Human Factors and Ergonomics Society
 - c. Member, Education Technical Group of the Human Factors and Ergonomics Society
 - d. Member, Cognitive Engineering and Decision Making Technical Group of the Human Factors and Ergonomics Society
- 3) Member, Association for Psychological Science

Professional Service

External Service

President, Division of Applied Experimental and Engineering Psychology (21) of the American Psychological Association, August 2020-August 2021.

President-Elect of APA Division 21 (Applied Experimental and Engineering Psychology) 2019-2020

Editorial Board Member for *Human Factors* (January 2014-present)

Technical Program Chair (2006-2012; 2014-2018) Individual Differences in Performance Technical Group of the Human Factors and Ergonomics Society

Member, NASA/NSBRI *Crew Health NRA*: BMED Proposal Review Panel (March 2015)

Editorial Board Member (Consulting Editor) for the *Journal of Experimental Psychology: Applied*. (January 2013-December 2017)

Proposal Reviewer, National Science Foundation CAREER Program (October, 2014)

Panel Speaker, *Second Meeting of the Committee to Review NASA's Evidence Reports on Human Health Risks*, Institute of Medicine of the National Academies of Science (July, 17th, 2014)

Member, NASA/NSBRI *Crew Health NRA: Teamwork, Behavior, and Sleep* Proposal Review Panel (March 2014)

Session Chair (2013) Individual Differences in Performance Technical Group of the Human Factors and Ergonomics Society

Elected Member-at-Large of APA Division 21 (Applied Experimental and Engineering Psychology) Executive Committee 2011-2012.

Member, Conference Committee: The 10th International Conference on Naturalistic Decision Making (NDM), 2011.

Program Chair (2010) Division 21 (Applied Experimental and Engineering Psychology) APA Annual Convention

Newsletter Editor (2003-2006) for the Individual Differences in Performance Technical Group of the Human Factors and Ergonomics Society.

Chair (2002-2003) of the Perception and Performance Technical Group of the Human Factors and Ergonomics Society.

Member, Annual Meeting Program Advisory Committee, Human Factors and Ergonomics Society. (2005-2007).

Invited Participant, Second Annual Cognitive Dominance Workshop (R.H. Scales, Facilitator), U.S. Military Academy, July 11-12, 2006

Invited Participant, IMPRINT Developer's Workshop (John Lockett, Chair), Arlington, VA, December 6-7, 2005

Invited Participant, National Academy of Sciences Workshop on Scalable Interfaces for Air and Ground Military Robots (P.A. Hancock, Chair), November 11-12, 2004

Ad Hoc Reviewer

Served as Peer Reviewer for the following journals: *Acta Psychologica*, *American Journal of Psychology*; *Applied Cognitive Psychology*; *Applied Ergonomics*; *Consciousness and Cognition*; *Educational Psychology*; *Ergonomics*; *Experimental Brain Research*; *Human Factors*; *Journal of Cognitive Engineering and Decision Making*; *Journal of Cognitive Psychology*; *Journal of Experimental Psychology: Applied*; *Neuro Image*; *Noise and Health*; *Personality and Individual Differences*; *Psychology of Music*; *Psychological Research*; *Simulation in Healthcare*; *Stress, Anxiety, and Coping*; *Theoretical Issues in Ergonomics Science*.

Reviewer for the Perception and Performance Technical Group, and the Individual Differences in Performance Technical Group annual meeting programs of the Human Factors and Ergonomics Society (2002-2005).

Reviewer for the CEDM TG annual meeting program, 2004-2005.

Reviewer of a chapter for the *APA Handbook of Human Systems Integration*

Reviewer for a chapter for *Human Performance in Automated and Autonomous Systems: Current Theory and Methods*

External Evaluator for Promotion & Tenure

Evan Palmer, Ph.D., Department of Psychology, Wichita State University (2013)

Mark Pfaff, Ph.D., School of Informatics and Computing, Indiana University-Purdue University Indianapolis (2013)

Consulting

Test Before You Hire/Anchor Research, 1999-2001. Statistical Analysis and Data Management

Internal Service (UCF)

(August 2017 -present) Director, Human Factors and Cognitive Psychology Ph.D. Program

(August 2017 – present) Member, Psychology Department Chair's Advisory Committee

(June 2020 – present) Member, Psychology Department Diversity and Inclusion Task Force

(November 2017) Keynote Speaker for Psi Chi Induction Ceremony Fall 2017, for the Psi Chi Chapter of the University of Central Florida

(2017) Member, Faculty Panel on applying to graduate programs in psychology, 4th Annual Undergraduate Psychology Conference (Sponsored by the Psychological Society); UCF, April 8th.

(2017-present) Member, College of Sciences Technology Advisory Committee

(August 2015 – August 2017) Associate Director, Human Factors and Cognitive Psychology Ph.D. Program

(2015-present) Assessment Coordinator Applied Experimental/Human Factors Ph.D. Program

(2015) Member, Research Committee for the In-House Grant Selection, College of Sciences.

(2014-2015) Member, two Applied Experimental/Human Factors Search Committees, one of which was for a Neuroscience Cluster Hire. Candidates were hired for each position.

(2006-present) Member, Applied Experimental/Human Factors Graduate Committee.

(2011-present) Chair of Psychology Department Website Committee

(2014-present) Faculty Advisor to the UCF Human Factors and Ergonomics Society Student Chapter.

(2013-2014) Member, Instructor/Lecturer Promotion Committee

(2014) UCF Divisional Review Committee Member: Assessment reviewer for the UCF Modeling and Simulation Ph.D. and M.S. graduate programs.

(2013) Recently Tenured Faculty Panel for College of Sciences mentoring program for new tenure track assistant professors.

(2010-2011) Member, Applied Experimental/Human Factors Search Committees: One for a junior rank position (i.e., assistant professor) and the second an open-rank search. In each case I was the only untenured member of the committee.

(2007-2011) Psychology Department Website coordinator for the Applied Experimental/Human Factors Program

(2007; 2009-2011) Served on College of Sciences Awards Committee to select candidates for the Awards for Excellence in Undergraduate Teaching, in Professional Service, and in Undergraduate Mentoring.

(2007-2008) Served as a reviewer for the *UCF Undergraduate Research Journal*

(Spring 2008, 2009, 2010, 2011) Participated in the Research Open House sponsored by Psi Chi.

(2007-2009) Participated in the Summer Research Academy Research Showcase Program, Office of Undergraduate Studies. This involved providing undergraduates interested in research at UCF a tour of my laboratory and presentation of a poster describing a portion of my research.

(2007) Member, Search Committee for Instructor/Undergraduate Advising Co-coordinator position. Outcome: Successful hire of preferred candidate (Ms. Karen Cox).

(2007) Member, Search Committee for Instructor Position. Outcome: Successful hire of preferred candidate (Dr. Daniel McConnell).

(2006-2016) Co-coordinated the revision and distribution of the AEHF Graduate Student Handbook.