

James A. Grand, Ph.D.

Curriculum Vita

3147A Biology/Psychology Building
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Education

- Ph.D. **Organizational Psychology**
(2012) Michigan State University, East Lansing MI
Advisor: Dr. Ann Marie Ryan
- M.A. **Organizational Psychology**
(2008) Michigan State University, East Lansing MI
Advisor: Dr. Ann Marie Ryan
- B.A. **Psychology** (Summa Cum Laude, Minor: Business Administration)
(2006) Auburn University, Auburn AL

Professional Experience

- University of Maryland** (College Park, MD)
Department of Psychology
Associate Professor 8/2021 to present
Assistant Professor 8/2014 to 8/2021
- The University of Akron** (Akron, OH)
College of Health Professions & Department of Psychology
Visiting Assistant Professor/Senior Lecturer 10/2012 to 8/2013
- Human Resources Research Organization** (Alexandria, VA)
Research Associate 5/2009 to 8/2009
Personnel Selection & Development

Repositories for Research Materials, Products, & Open Access Publications

Open Science Framework: <https://osf.io/vcwg6/>
GitHub: <https://github.com/grandjam>
Personal website: <https://www.james-grand.com/publication>

Refereed Journal Publications (Annotated)

† Denotes student co-author at time of publication

Grand, J.A., Braun, M.T., & Kuljanin, G. (in press). Hello world! Building computational models to represent social and organizational theory. *Organizational Research Methods*.

Type: Methodological, Educational, Computational

Data source: N/A

Robust science participation: All code, supplemental files, and accepted version of manuscript available at <https://osf.io/69fpz/>

Multidisciplinary: No

Authorship role: Developed idea, primary writer for all drafts/revisions, reviewed/edited model code

Contribution: Provides introduction, resources, and guidance on writing/coding computational models to develop theory in the social and organizational sciences. Material is directed towards beginning learners and includes content on how to “think” about phenomenon from a computational process perspective, techniques for specifying the rationale of theory using computational models, and how to translate ideas from a theory into executable model code. Supplemental materials provide instruction on intermediate coding techniques and an online interactive application for learning coding in R (https://grandjam.shinyapps.io/Building_Comp_Models_in_R/).

Kuljanin, G., Braun, M.T., **Grand, J.A.,** Olenick, J., Chao, G.T., & Kozlowski, S.W.J. (in press). Advancing leadership and organizational science with computational process theories. *The Leadership Quarterly*.

Type: Methodological, Educational, Computational

Data source: N/A

Robust science participation: None

Multidisciplinary: No

Authorship role: Contributed to idea development, provided original content for multiple sections, contributed figures/visuals, reviewed/edited/revised all drafts

Contribution: Proposes a typology for describing theory development and the significance of computational process theory (theory that formally explicates how a phenomenon of interest is proposed to occur). Provides an actionable guide and set of principles for developing computational process theory, demonstrates applying this procedure to an example phenomenon from organizational leadership, and describes the key advantages and long-term benefits of developing computational process theory for advancing the organizational sciences.

McFarlane, A., Broliar, S., Rosenman, E.D., †Strauss, J.A., **Grand, J.A.,** & Fernandez, R. (2024). Qualitative study of emergency medicine residents’ perspectives of trauma leadership development. *Western Journal of Emergency Medicine*, 25, 122-128.

Type: Empirical (primary source data)

Data source: Qualitative, Field/non-student sample (n = 10 residents)

Robust science participation: None

Multidisciplinary: Yes

Authorship role: Contributed to interpretation of interview data and coding themes, provided guidance on literature review, contributed to editing/revising all drafts

Contribution: Explored experiences of leadership and leadership development across a sample of emergency medicine residents using semi-structured interviews analyzed using qualitative content analysis. Residents discussed three themes related to their experiences as and/or becoming leaders in the profession: (1) sources of leadership development, (2) challenges with simultaneously assuming a dual leader-learner role, and (3) contextual factors that impact their ability to assume leadership roles.

Banks, G.C. Knapp, D.J., Lin, L., +Sanders, C.S., & **Grand, J.A.** (2022). Ethical decision-making in the 21st century: A useful framework for industrial-organizational psychologists. *Industrial and Organizational Psychology: Perspectives on Science and Practice*, 15, 220-235.

Type: Position/educational paper

Data source: N/A

Robust science participation: [Open access publication](#)

Multidisciplinary: No

Authorship role: Contributed to development of paper idea, wrote small portion of introduction/literature review, contributed to editing/revising all drafts

Contribution: Reviewed and presented heuristic/framework for ethical decision-making geared towards IO psychologists. Presented five “case studies” across IO research, practice, and educational context that applied ethical decision-making framework to generate discourse among IO professionals on the role of ethics in IO psychology.

Fernandez, R., Rosenman, E.D., Plaza-Verduin, M., & **Grand, J.A.** (2022). Developing adaptive performance: A conceptual model to guide simulation-based training design. *AEM Education & Training*, 6, e10762.

Type: Review, Translational

Data source: N/A

Robust science participation: N/A

Multidisciplinary: Yes

Authorship role: Contributed to development of paper idea, developed conceptual model, conducted and synthesized relevant literature, co-developed training principles, contributed to editing/revising all drafts

Contribution: Presented an original conceptual model of team adaptive performance and described its application and relevance for medical teams. Synthesized broader psychological literature on training system design principles and developing adaptive

capacities into nine practical guidelines/recommendations that can be implemented in emergency medicine education and training.

Braun, M.T., Kuljanin, G., **Grand, J.A.**, Kozlowski, S.W.J., & Chao, G.T. (2022). The power of process theories to better understand and detect consequences of organizational interventions. *Industrial and Organizational Psychology: Perspectives on Science and Practice*, 15, 99-104.

Type: Commentary

Data source: N/A

Robust science participation: N/A

Multidisciplinary: No

Authorship role: Co-conceptualized commentary position, provided source material, edited drafts

Contribution: Described difference between theory and research that focuses on covariance among factors/constructs versus dynamic processes/mechanisms. Discussed the utility of process theories and computational modeling for helping organizational researchers and practitioners better specify the impact of organizational interventions.

Brown, D.K., Graor, C., Chiu, S.-H., Kidd, L., & **Grand, J.A.** (2021). The effect of a geriatric simulation-enhanced interprofessional education on health profession students. *Clinical Simulation in Nursing*, 61, 33-41.

Type: Empirical (primary source data)

Data source: Correlational/program evaluation ($n = 291$ health professions students)

Robust science participation: None

Multidisciplinary: Yes

Authorship role: Developed/validated primary outcome measure, reviewed/edited drafts

Contribution: Developed a simulation-based training and education program targeting interprofessional skills and collaboration among students specializing in various healthcare professions (nursing, nutrition/dietetics, social work, speech-language pathology) in a geriatric care context. Analyses of pre- and post-training data revealed that although perceptions of readiness for interprofessional learning did not change, perceptions of the challenges associated with interprofessional collaboration significantly decreased ($d = .61$).

Rosenman E.D, †Misco, A., †Olenick, J., Broliar, S., Chipman, A.K., Vrablik, M.C., Chao, G.T., Kozlowski, S.W.J., **Grand, J.A.**, Fernandez, R. (2021). Does team leader gender matter? A Bayesian reconciliation of leadership and patient care during trauma resuscitations. *Journal of the American College of Emergency Physicians Open*, 2, e12348.

Type: Empirical (secondary source data)

Data source: Archival ([Fernandez, Rosenman et al., 2020](#); $n = 60$ residents, $k = 120$ observations)

Robust science participation: Open access publication

Multidisciplinary: Yes

Authorship role: Conducted analysis, edited and wrote portions of original and revised drafts

Contribution: Assessed team leadership effectiveness and patient care in emergency department trauma teams by male vs. female physicians during actual trauma resuscitations using video-recorded observations of leader behavior. Bayesian analyses were used to assess the plausibility of male-advantaged, female-advantaged, or null differences. Contrary to existing research, findings revealed no support for differences in trauma resuscitation team leadership or clinical care findings based on leader gender.

Grand, J.A. (2020). A general response process theory for situational judgment tests. *Journal of Applied Psychology*, 105, 819-862.

Type: Computational, Empirical (primary source data)

Data source: Experiment/eye-tracking ($n = 125$ students \times 36 items = 4500 observations)

Robust science participation: Data, analyses, and computational model available at

<https://osf.io/uwdfm>

Multidisciplinary: No

Authorship role: Everything

Contribution: Psychological theory of judgment and decision-making describing how individuals respond to situational judgment tests. Theory translated into computational model, computational model translated into online web application to facilitate communication (<https://grandjam.shinyapps.io/sirj>). Presented model verification and validation evidence using existing empirical effects and new response time data. Utilized machine learning (supervised neural network) and hierarchical Bayesian survival analyses for model validation and testing.

Fernandez, R., Rosenman, E.D., †Olenick, J., †Misco, A., Broliar, S., Chipman, A.K., Vrablik, M.C., Kalynych, C., Arbabi, S., Nichol, G., **Grand, J.A.**, Kozlowski, S.W.J., & Chao, G.T. (2020). Simulation-based team leadership training improves team leadership during actual trauma resuscitations: A randomized controlled trial. *Critical Care Medicine*, 48, 73-82.

Type: Empirical (primary source data)

Data source: Field/non-student sample ($n = 79$ medical residents, $k = 360$ trauma resuscitations)

Robust science participation: Study registered at ClinicalTrials.gov ([NCT03155490](#))

Multidisciplinary: Yes

Authorship role: Assisted with development of leadership measures, study design, and behavioral coding scheme; assisted with data cleaning, management, and analyses

Contribution: Assessed effectiveness of simulation-based leadership training on team

leadership and patient care during actual trauma resuscitations using a single-blind randomized design. Controlling for pre-training performance, results demonstrated that trained leaders exhibited more desirable leadership behaviors than control leaders and that improved team leadership was positively related to patient care.

†Samuelson, H.L., †Levine, B.R., †Barth, S.E., Wessel, J.L., & **Grand, J.A.** (2019). Exploring women's leadership labyrinth: Effects of hiring and developmental opportunities on gender stratification. *Leadership Quarterly*, 30, A10314.

Type: Computational

Data source: N/A

Robust science participation: All computational model and simulation code available at https://github.com/grandjam/SamuelsonEtAl_GenderStratModel

Multidisciplinary: No

Authorship role: Conceptualized problem, model, and simulation; supervised model development and construction; reviewed, edited, and contributed to writing of original and revised drafts; supervised student writing; created/manage GitHub repository and model replication materials

Contribution: Developed computational model and simulation to examine effects of hiring rates and provision of developmental opportunities on female representation in senior organizational leadership. Results demonstrate that differential entry rates of male-female employees contributes strongly to gender stratification and that effects are exaggerated by male-female differences in quality of developmental opportunities.

Dougherty, M.R., Slevc, L.R., & **Grand, J.A.** (2019). Making research evaluation more transparent: Aligning research philosophy, departmental values, and reporting. *Perspectives on Psychological Science*, 14, 361-375.

Type: Position paper

Data source: N/A

Robust science participation: Materials and examples publicly available at <https://osf.io/cnb82>; preprint publicly available at <https://psyarxiv.com/48/qux>

Multidisciplinary: No

Authorship role: Conceptualized problem, contributed to writing original draft, revised drafts

Contribution: Proposed methods for improving transparency of scholarship reporting through use of annotated CV, research philosophy statements, and multi-attribute utility evaluation

Rosenman, E.D., Bullard, M., Jones, K., Welsh, L., Broliar, S.M., †Levine, B.R., **Grand, J.A.**, & Fernandez, R. (2019). Development and empirical testing of a novel team leadership assessment measure: A pilot study using simulated and live patient encounters. *AEM Education and Training*, 3, 163-171.

Type: Empirical (primary and secondary source data), Measurement

Data source: Field/non-student sample, archival (k = 4 medical experts rating n = 30 video-recorded resuscitations [20 simulated, 10 actual patient care] collected in previous research)

Robust science participation: Final measure (no data) available at <https://bit.ly/2ZbKGmF>.

Multidisciplinary: Yes

Authorship role: Data analysis, measurement development

Contribution: Developed and provided validation evidence for a leadership assessment measure for use in emergency medicine resuscitation teams. Results demonstrated adequate psychometric properties for using measure in simulated conditions, but measure exhibited deficiencies when applied to actual acute care conditions

Grand, J.A., Rogelberg, S.G., Banks, G., Landis, R.S., & Tonidandel, S. (2018). From outcome to process focus: Fostering a more robust psychological science through registered reports and results-blind reviewing. *Perspectives on Psychological Science*, 13, 448-456.

Type: Review, Position paper

Data source: N/A

Robust science participation: N/A

Multidisciplinary: No

Authorship role: Conceptualized problem, primary author for original draft and revisions

Contribution: Reviewed and provided balanced perspective on efficacy of alternative publication mechanisms for promoting robust science

Grand, J.A., Rogelberg, S.G., Allen, T.D., Landis, R.S., Reynolds, D., Scott, J.C., Tonidandel, S., & Truxillo, D.M. (2018). A systems-based approach to fostering robust science in Industrial-Organizational psychology [Focal article]. *Industrial and Organizational Psychology: Perspectives on Science and Practice*, 11, 4-42.

Type: Position paper

Data source: N/A

Robust science participation: N/A

Multidisciplinary: No

Authorship role: Conceptualized problem, wrote original draft, revised drafts

Contribution: Provides a definition for robust science, identifies multiple stakeholders responsible for facilitating robust science, and provides concrete recommendations

Rosenman, E.D., Fernandez, R., Wong, A., Cassara, M., Cooper, D., Kou, M., Laack, T., Motola, I., Parsons, J., †Levine, B.R., & **Grand, J.A.** (2018). Changing systems through effective teams: A role for simulation. *Academic Emergency Medicine*, 25, 128-143.

* **Senior author listed last**

Type: Review, Translational

Data source: N/A

Robust science participation: N/A

Multidisciplinary: Yes

Authorship role: Conceptualized problem, wrote original drafts for multiple sections of paper, revised drafts, supervised student writing

Contribution: Reviewed relevant literature and provided an agenda for studying and improving team outcomes in emergency medicine

Rosenman, E., †Dixon, A., †Webb, J., Broliar, S., †Golden, S., Jones, K., Shah, S., **Grand, J.A.**, Kozlowski, S.W.J., Chao, G.T., & Fernandez, R. (2018). A simulation-based approach to measuring team situational awareness in emergency medicine: A multicenter observational study. *Academic Emergency Medicine*, 25, 196-204.

** Senior author listed last*

Type: Empirical (primary source data)

Data source: Field/non-student sample (n = 123 individuals nested in k = 41 3-person teams)

Robust science participation: None

Multidisciplinary: Yes

Authorship role: Co-developed conceptual framework, edited drafts

Contribution: Use of self-report and behavioral measures for assessing situational awareness and its relation to team performance/patient care in emergency medicine teams

Branzetti, J., Adedipe, A.A., Gittinger, M., Rosenman, E.D., Broliar, S., Chipman, A., **Grand, J.A.**, & Fernandez, R. (2017). Randomized control trial to assess the effect of a Just-in-Time training on procedural performance: A proof of concept study to address procedural skill decay. *BMJ Quality & Safety*, 26, 881-891.

** Senior author listed last*

Type: Empirical (primary source data)

Data source: Experiment, Field/non-student sample (n = 26 individuals)

Robust science participation: None

Multidisciplinary: Yes

Authorship role: Analyzed results

Contribution: Developed and conducted preliminary validation of a training tool/technique for improving performance during a high-risk medical procedure (pacemaker placement). Training demonstrated substantial positive effect on overall performance and patient safety

†Samuelson, H., †Fernandez, J., & **Grand, J.A.** (2017). "Life doesn't happen at the between-person level," or a cautionary note on generating scientific inferences through meta-

analyses [Commentary]. *Industrial and Organizational Psychology: Perspectives on Science and Practice*, 10, 459-464.

Type: Commentary

Data source: N/A

Robust science participation: N/A

Multidisciplinary: No

Authorship role: Conceptualized problem, developed outline, wrote paper sections, edited drafts, supervised student writing

Contribution: Described limitations of meta-analytic procedures for advancing scientific inferences, emphasized need for more process-level research in organizational sciences

Gittinger, M., Broliar, S.M, **Grand, J.A.**, Nichol, G., & Fernandez, R. (2017). Using simulation as an investigational methodology to explore the impact of technology on team communication and patient management: A pilot evaluation of the effect of an automated compression device. *Simulation in Healthcare*, 12, 139-147.

* *Senior author listed last*

Type: Empirical (primary source data)

Data source: Experiment, Field/non-student sample (n = 48 individuals in 12 4-person teams)

Robust science participation: None

Multidisciplinary: Yes

Authorship role: Assisted with development of methodology, analyzed results, wrote analysis/results section, edited drafts

Contribution: Evaluated impact of using an automated chest compression device during cardiac resuscitation on team communication and performance. Results revealed that device significantly changed frequency, patterns, and type of communication behaviors within team in ways that might not be beneficial for patient care

Ryan, A.M., Reeder, M., Golubovich, J., **Grand, J.A.**, Inceoglu, I., Bartram, D., Derous, E., Nikolaou, I., & Yao, X. (2017). Cultural values and testing practices: Is the world flat? *Applied Psychology: An International Review*, 66, 434-467.

Type: Empirical (primary source data)

Data source: Survey, Field/non-student sample, Cross-cultural/-nation (n = 1153 individuals in 23 countries)

Robust science participation: None

Multidisciplinary: No

Authorship role: Assisted with development of methodology, collected survey data, edited drafts

Contribution: Updated previous research on differential use and value of different testing practices across countries/cultures. Acquired previously unexamined data on used of online testing/selection practices.

Fernandez, R., Shah, S., Rosenman, E., Kozlowski, S.W.J., Parker, S.H., & **Grand, J.A.** (2017). Developing team cognition: A role for simulation. *Simulation in Healthcare, 12*, 96-103.
*** Senior author listed last**

Type: Review, Translational

Data source: N/A

Robust science participation: N/A

Multidisciplinary: Yes

Authorship role: Conceptualized problem, wrote original draft, revised drafts

Contribution: Described concepts related to team cognition for medical researchers and educators. Provided resources for developing measures and feedback instruments for improving team cognition in medical teams using simulation-based training

Russell, T., Sparks, T., Campbell, J., Handy, K., Ramsberger, P., & **Grand, J.A.** (2017). Situating ethical behavior in the nomological network of job performance. *Journal of Business and Psychology, 32*, 253-271.

Type: Review, Theory development, Methodological, Empirical (primary source data)

Data source: Survey, Field/non-student sample (measure construction/verification – Sample 1: n = 21 subject matter experts; Sample 2: n = 14 subject matter experts)

Robust science participation: None

Multidisciplinary: No

Authorship role: Literature review, conceptualized problem, data collection, edited drafts

Contribution: Developed and validated taxonomy of ethical job behavior to complement and integrate with existing taxonomies of job performance.

Grand, J.A. (2017). Brain drain? An examination of stereotype threat effects on knowledge acquisition and organizational effectiveness. *Journal of Applied Psychology, 102*, 115-150.

Type: Empirical (primary source data), Computational

Data source: Experiment, Longitudinal/repeated measures (n = 198 individuals, 21 trials across 3 days)

Robust science participation: Data, analyses, and computational model available at <https://osf.io/twf97/>

Multidisciplinary: No

Authorship role: Everything

Contribution: Longitudinal examination of stereotype threat effects on short-term knowledge acquisition and performance. Original computational model demonstrating impact of stereotype threat on organizational human capital. All analyses conducted using Bayesian parameter estimation

Grand, J.A., Braun, M.T., Kuljanin, G., Kozlowski, S.W.J., & Chao, G.T. (2016). The dynamics of team cognition: A process-oriented theory of knowledge emergence in teams [Monograph]. *Journal of Applied Psychology*, 101, 1353-1385.

*** Distinguished as Monograph by senior editorial board at Journal of Applied Psychology**

Type: Empirical (primary source data), Computational

Data source: Experiment, Longitudinal/repeated measures (n = 789 individuals in 263 3-person teams)

Robust science participation: Computational model available at <https://bit.ly/2GaU6tH>

Multidisciplinary: No

Authorship role: Co-conceptualized problem, co-analyzed model and empirical results, wrote original draft, revised drafts

Contribution: First computational theory of emergent process in JAP. Demonstrated effects of learning and communication patterns on team knowledge emergence. Validated efficacy of computational theory and generative principles for enhancing team cognition using experimental data and original training materials.

Kozlowski, S.W.J., Chao, G.T., **Grand, J.A.,** Braun, M.T., & Kuljanin, G. (2016). Capturing the multilevel dynamics of emergence: Computational modeling, simulation, and virtual experimentation. *Organizational Psychology Review*, 6, 3-33.

Type: Theory development, Review, Methodological

Data source: N/A

Robust science participation: N/A

Multidisciplinary: No

Authorship role: Co-conceptualized problem, wrote original draft for multiple paper sections, revised drafts

Contribution: Described methodological approach for using computational modeling as theory-building tool and experimental platform for studying emergent processes

Fernandez, R., & **Grand, J.A.** (2015). Leveraging social science-healthcare collaborations to improve teamwork and patient safety. *Current Problems in Pediatric and Adolescent Health Care*, 45, 370-377

*** Senior author listed last**

Type: Translational, Review

Data source: N/A

Robust science participation: N/A

Multidisciplinary: Yes

Authorship role: Conceptualized problem, wrote original draft, edited revisions

Contribution: Described how to facilitate collaborations between healthcare researchers/educators and social scientists and unique expertise that both parties provide for improving medical teamwork and patient care

Golubovich, J., **Grand, J.A.**, Ryan, A.M., & Schmitt, N. (2014). An examination of common sensitivity review practices in test development. *International Journal of Selection and Assessment*, 22, 1-11.

Type: Empirical (primary source data)

Data source: Field/non-student sample (n = 49 professional test reviewers)

Robust science participation: None

Multidisciplinary: No

Authorship role: Conceptualized problem, developed survey items, assisted with analysis, co-wrote original draft and revisions

Contribution: Summarized descriptive data on sensitivity review practices involved in hiring and educational testing contexts. Revealed lack of training and guidance on best practices for conducting sensitivity reviews and demonstrated the implications of this variability on professional ratings of item sensitivity

Fernandez, R., Pearce, M., **Grand, J.A.**, Rench, T.A., Jones, K.A., Chao, G.T., & Kozlowski, S.W.J. (2013). Evaluation of a computer-based educational intervention to improve medical teamwork and performance during simulated patient resuscitations. *Critical Care Medicine*, 41, 2551-2562.

*** Recognized in Best Publications of 2013 for education research in emergency medicine (Farrell, Kuhn, et al. (2014). Critical appraisal of emergency medicine education research: The best publications of 2013. Academic Emergency Medicine, 21, 1274-1283.)**

*** Senior author listed last**

Kozlowski, S.W.J., Chao, G.T., **Grand, J.A.**, Braun, M.T., & Kuljanin, G. (2013). Advancing multilevel research design: Capturing the dynamics of emergence. *Organizational Research Methods*, 16, 581-615.

*** Recipient of 2016 Emerald Group Publishing Citations of Excellence Award for papers published in 2013**

*** Recipient of 2015 SIOP William A. Owens Scholarly Achievement Award for Best Publication in the field of I/O Psychology in 2013-2014**

*** Recipient of 2014 SAGE ORM Best Paper Award (Academy of Management)**

Grand, J.A., Golubovich, J., Ryan, A.M., & Schmitt, N. (2013). The detection and influence of problematic item content in ability tests: An examination of sensitivity review practices for personnel selection test development. *Organizational Behavior and Human Decision Processes*, 121, 158-173.

Grand, J.A., Pearce, M., Rench, T., Fernandez, R., Chao, G.T., & Kozlowski, S.W.J. (2013). Going DEEP: Guidelines for building simulation-based team assessments. *BMJ Quality & Safety*, 22, 436-448.

*** Senior author listed last**

Grand, J.A., Lloyd, J.W., Ilgen, D.R., Abood, S., & Sonea, I.M. (2013). A measure of and predictors for veterinarian trust developed with veterinary students in a simulated

companion animal practice. *Journal of the American Veterinary Medical Association*, 242, 322-334.

Grand, J.A., Ryan, A.M., Schmitt, N., & Hmurovic, J. (2011). How far does stereotype threat reach? The potential detriment of face validity in cognitive ability testing. *Human Performance*, 24(1), 1-28.

Refereed Book Chapters

†Denotes student co-author at time of publication

†Samuelson, H.L., †Lee, J., Wessel, J.L., & **Grand, J.A.** (in press). Computational modeling in organizational diversity and inclusion. In J.B. Vancouver, M. Wang, & J. Weinhardt (Eds.), *Computational modeling for industrial-organizational psychologists*.

†Strauss, J.A., & **Grand, J.A.** (2022). Applying systems science to advance research on team phenomena. In B. Murray, J. Dulebohn, & D. Stone (Eds.), *Managing team centrality in modern organizations* (pp. 17-52). IAP.

* *Equal authorship*

†Strauss, J., & **Grand, J.A.** (2020). Promoting robust and reliable big data research in psychology. In S.E. Woo, L. Tay, & R. Proctor (Eds.), *Big data in psychological research*. (pp. 373-392). Washington, DC: American Psychological Association.

Kozlowski, S.W.J., **Grand, J.A.**, Baard, S., & Pearce, M. (2015). Teams, teamwork, and team effectiveness: Implications for human systems integration. In D. Boehm-Davis, F. Durso, & J. Lee (Eds.), *The handbook of human systems integration*. (pp. 555-571). Washington, DC: American Psychological Association.

Ryan, A.M., Inceoglu, I., Bartram, D., Golubovich, J., **Grand, J.A.**, Reeder, M., Derous, E., Nikolaou, I., & Yao, X. (2015). Trends in testing: Highlights of a global survey. In I. Nikolaou and J. Oostrom (Eds.), *Employee recruitment, selection, and assessment: Contemporary issues for theory and practice*. (pp. 136-153). New York, NY: Psychology Press.

Grand, J.A., & Kozlowski, S.W.J. (2013). Eight basic principles for adaptability training in synthetic learning environments. In C. Best, G. Galanis, J. Kerry, & R. Sottolare (Eds.), *Fundamental issues in defense training and simulation*. (pp. 97-114). Aldershot, UK: Ashgate.

Leong, F.T.L., & **Grand, J.A.** (2008). Career and work implications of the Model Minority Myth and other stereotypes for Asian Americans. In G. Li & L. Wang (Eds.), *Model Minority Myths revisited: An interdisciplinary approach to demystifying Asian American education experiences*. (pp. 91-115) Charlotte, NC: Information Age Publishing.

Manuscripts & Chapters in Progress

† Denotes student co-author at time of publication

Rosenman, E.D., **Grand, J.A.**, & Fernandez, R. (1st revision). Validity evidence of a novel resuscitation team leadership assessment measure for use in actual trauma resuscitations. *Teaching and Learning in Medicine*.

Research Contracts & Grants

Current

U.S. Army Research Institute for the Behavioral and Social Sciences 1/2022 to 1/2027

Adaptation dynamics in team systems: A multilevel, process-oriented, computational modeling paradigm

Award Requested: \$1,362,799 (Award at UMD = \$384,720)

Role: Co-Principal Investigator

Co-PI: Steve W.J. Kozlowski, Georgia T. Chao, Michael T. Braun, Goran Kuljanin

Completed

Defense Medical Research and Development Program (JPC-1) 1/2019 to 8/2021

Translating military simulation-based trauma team research into outcomes:

LEADIng effective resuscitations

Total Award: \$1,799,929 (Award at UMD = \$202,899)

Role: Co-Principal Investigator

Co-PI: Rosemarie Fernandez

U.S. Army Research Institute for the Behavioral and Social Sciences 1/2018 to 1/2021

Assessing negative leader behavior: Information processing explanation for ideal point IRT responses

Total Award: \$67,901

Role: Co-Principal Investigator

Co-PI: Paul Hanges

U.S. Army Research Institute for the Behavioral and Social Sciences 5/2014 to 12/2020

A computational modeling approach to organizational effectiveness:

Mapping the effects of leadership, group structure, and environmental shocks

Total Award: \$1,734,579

Role: Co-Investigator

PI: Steve W.J. Kozlowski, Georgia T. Chao

Defense Medical Research and Development Program (JPC-1) 9/2015 to 4/2019

Development of an integrated team training design and assessment architecture to support adaptability in healthcare teams

Total Award: \$1,149,975 (Award at UMD = \$225,635)

Role: Co-Principal Investigator
Co-PI: Rosemarie Fernandez

Physio-Control, Inc. 1/2013 to 12/2014

Preliminary design of a pilot study to evaluate the impact of an automated chest compression device on critical teamwork behaviors and clinical care

Total Award: \$50,000

Role: Consultant
PI: Rosemarie Fernandez

University of Washington Patient Safety Innovations Program 1/2013 to 12/2014

Development of a training intervention to decrease procedure-related errors

Total Award: \$50,000

Role: Consultant
PI: Rosemarie Fernandez

Agency for Healthcare Research and Quality 6/2011 to 6/2014

Improving patient safety through simulation research

Total Award: \$1,050,000

Role: Research Assistant & Consultant
PI: Rosemarie Fernandez, Steve W.J. Kozlowski

U.S. Office of Naval Research 1/2009 to 9/2013

Team knowledge: Origins, emergence, and measurement

Total Award: \$1,365,614

Role: Research Assistant
PI: Steve W.J. Kozlowski, Georgia T. Chao

SIOP Foundation Small Grant Award 4/2011 to 7/2012

Cross-cultural comparison of testing practices

Total Award: \$6,700

Role: Co-Investigator
PI: Ann Marie Ryan

Not Awarded

National Science Foundation (Science of Organizations) 1/2020

Team knowledge-building and sense-making in unpredictable and uncertain environments

Award Requested: \$389,584

Role: Principal Investigator

U.S. Army Research Institute for the Behavioral and Social Sciences 9/2017

System robustness and adaptation: A multilevel, process-oriented, computational modeling approach

Award Requested: \$824,516 (Award at UMD = \$230,013)

Role: Co-Principal Investigator

Co-PI: Steve W.J. Kozlowski, Georgia T. Chao, Michael Braun, Goran Kuljanin

Defense Medical Research and Development Program (JPC-1)

5/2016

Swift team coherence (SWIFTCO): A model and training curriculum for developing high performing teams

Award Requested: \$1,200,000 (Award at UMD: \$225,000)

Role: Co-Investigator

PI: Rosemarie Fernandez, Sarah Henrickson-Parker

Office of Naval Research (Young Investigator Program)

11/2015

Improving information acquisition, distribution, and integration for effective decision-making in distributed expertise teams

Award REQUESTED: \$450,000 (Award at UMD = \$190,000)

Role: Principal Investigator

Co-PI: Michael T. Braun

Honors & Awards

University of Maryland Department of Psychology Outstanding Faculty Research Mentor (2019)

Journal of Applied Psychology Monograph (2016)

Emerald Group Publishing Citations of Excellence Award (2016)

SIOP William A. Owens Scholarly Achievement Award for Best I/O Publication (2015)

SAGE Organizational Research Methods Best Paper Award (Academy of Management) (2014)

Michigan State University I/O Department Fellowship (2006)

Invited Presentations & Colloquia

Grand, J.A. (February, 2021). *Whither theory in a big data world?* Invited presentation at Rice University workshop on Workforce Science in the Big Data Era: Improving Measurement, Modeling, and Meaning, Houston, TX.

Grand, J.A. (October, 2019). *You know I'm all about that Bayes: A (relatively) gentle introduction to Bayesian statistics.* Invited presentation for University of Maryland SDOS program brown bag series, College Park, MD.

Grand, J.A. (September, 2019). *Want to become IO psyc's next top model(er)? Foundations & principles of computational modeling for organizational researchers.* Invited presentation for George Mason University IO Psychology program brown bag series, Fairfax, VA.

Grand, J.A. (December, 2018). *Want to become IO psyc's next top model(er)? Foundations & principles of computational modeling for organizational researchers.* Invited

presentation for George Washington University IO Psychology program research discussion series, Washington, DC.

Grand, J.A. (September, 2018). *Want to become IO psyc's next top model(er)? Foundations & principles of computational modeling for organizational researchers*. Invited presentation for University of Georgia IO Psychology program brown bag series, Athens, GA.

Grand, J.A. (April, 2018). *Context and recommendations for robust science in SIOP*. Invited Executive Board symposium presented at the 33rd annual meeting of the Society for Industrial and Organizational Psychology, Chicago, IL.

Grand, J.A. (March, 2018). *Think big, act small: Efforts to foster robust science*. Invited presentation at the University of Florida Warrington College of Business Workshop for Promoting Robust and Reliable Research Practice in the Science of Organizations, Gainesville, FL.

Grand, J.A. (November, 2017). *Principles for robust science*. Invited presentation at Consortium for the Advancement of Research Methods and Analysis (CARMA) Conference Australia, Adelaide, Australia.

Rosenman, E.D., & **Grand, J.A.** (May, 2017). *Changing systems through effective teams*. Invited presentation at Academic Emergency Medicine Consensus Conference, Orlando, FL.

Grand, J.A. (October, 2015). *Opening the black boxes: Myths and realities of computational modeling*. Invited presentation at Ohio University Computational Modeling Workshop, Athens, OH.

Grand, J.A. (April, 2015). *I/O without borders: Our impact in a multidisciplinary world*. Invited Executive Board symposium presented at the 30th annual meeting of the Society for Industrial and Organizational Psychology, Philadelphia, PA.

Workshops

Grand, J.A., & Rand, W. (November, 2018). *Foundations for developing, reviewing, and constructing agent-based models*. Invited seminar/workshop at the Army Research Institute for the Behavioral and Social Sciences, Ft. Belvoir, VA.
[doi:10.5281/zenodo.33575840](https://doi.org/10.5281/zenodo.33575840)

Fernandez, R., Compton, S., Redman, R., **Grand, J.A.**, & Zalenski, R. (2009, January). *Promoting excellence in end-of-life care: Developing a blended simulation-based educational experience for healthcare practitioners*. Workshop presented at the 9th annual International Meeting on Simulation in Healthcare, Orlando, FL.

Refereed Presentations & Posters

† Denotes student presenter/co-author at time of presentation

* Denotes undergraduate student co-author at time of presentation

Chao, G.T., Braun, M.T., **Grand, J.A.**, Kozlowski, S.W.J., & Kuljanin, G. (2024). *Advancing organizational science with process theory, data, and analytics*. Panel discussion at the 39th annual meeting of the Society for Industrial and Organizational Psychology, Chicago, IL.

Vancouver, J.B., Braun, M.T., **Grand, J.A.**, Hardy III, J.H., Kennedy, D.M. Neil, A. Tang, C. Wang, M., Weinhardt, J.M., & Zhou, L. (2024). *New frontiers series book on computational modeling for IO psychologists: Meet the authors*. Panel discussion at the 39th annual meeting of the Society for Industrial and Organizational Psychology, Chicago, IL.

Carmichael-Tanaka, N., Grant, R.S., Braun, M.T., **Grand, J.A.**, Kuljanin, G., Liu, Y., Lowe, A. (2024). *Computational modeling for everyone: A beginner's guide to modeling in IO research*. Panel discussion at the 39th annual meeting of the Society for Industrial and Organizational Psychology, Chicago, IL.

†Tronetti, A.C., *Vasquez, D.R., *Tonle, M. H., *Terrill, J., *Chen, A., *Noble, K., †Strauss, J.A., **Grand, J.A.** (2024). *Gender and communication: Unpacking common leader emergence topics*. Poster presented at the 39th annual meeting of the Society for Industrial and Organizational Psychology, Chicago, IL.

Grand, J.A., Rosenman, E.D., & Fernandez, R. (April, 2023). Studying leadership-as-process by mining behavioral sequences. Symposium presentation at the 38th annual meeting of the Society for Industrial and Organizational Psychology, Boston, MA.

Torres, E.M., Coen, C., **Grand, J.A.**, & Lungeanu, A. (April, 2023). Modelers unite! Guidance on using agent-based modeling in I/O psychology. Panel discussion at the 38th annual meeting of the Society for Industrial and Organizational Psychology, Boston, MA.

†Tronetti, A.C., & **Grand, J.A.** (April, 2023). *Eye eye, captain! An exploration into emergent leadership and wearable eye-tracking glasses*. Symposium presentation at the 38th annual meeting of the Society for Industrial and Organizational Psychology, Boston, MA.

Hanges, P.J., **Grand, J.A.**, Epistola, J., & Stark, S. (May, 2022). *My leader ridicules me: Validation of a forced-choice destructive leadership measure*. Symposium presentation at the International Perspectives on Leadership Conference, Mykonos, Greece.

Kozlowski, S.W.J., Braun, M.T., Chao, G.T., **Grand, J.A.**, & Kuljanin, G. (April, 2022). *Advancing process-oriented theorizing via computational modeling*. Symposium presentation at the 37th annual meeting of the Society for Industrial and Organizational Psychology, Seattle, WA.

†Strauss, J.A., & **Grand, J.A.** (April, 2022). *Team cognition and performance: Simulating a process-oriented theory*. Symposium presentation at the 37th annual meeting of the Society for Industrial and Organizational Psychology, Seattle, WA.

Mohammed, S., Rico, R., Argote, L., Carley, K., Cronin, M.A., **Grand, J.A.**, & Lewis, K. (August, 2021). *Team cognition at a crossroad: Forging the way forward*. Panel discussion at the 81st annual meeting of the Academy of Management. [Virtual conference]

Hanges, P.J., **Grand, J.A.**, †Epistola, J.J., & Stark, S. (August, 2021). *A new multidimensional destructive leadership scale: Ideal point scoring of a forced-choice measure*. Symposium presentation at the 81st annual meeting of the Academy of Management. [Virtual conference]

†Strauss, J., †Yan, L., *Tronetti, A.C., & **Grand, J.A.** (April, 2021). Transition to telework: Lessons from the COVID-19 pandemic. Symposium presentation at the 36th annual meeting of the Society for Industrial and Organizational Psychology. [Virtual conference]

Braun, M.T., Olenick, J., **Grand, J.A.**, Kozlowski, S.W.J., Kuljanin, G., Weinhardt, J.M., & Zhou, L. (April, 2021). *Understanding what, when, why, and how to begin using computational models*. Panel discussion at the 36th annual meeting of the Society for Industrial and Organizational Psychology. [Virtual conference]

Grand, J.A., Kuljanin, G., Braun, M.T., Chao, G.T., & Kozlowski, S.W.J. (April, 2021). *Dynamic bottom-up effects of a newcomer on team cohesion*. Symposium presentation at the 36th annual meeting of the Society for Industrial and Organizational Psychology. [Virtual conference]

Grand, J.A. (April, 2021). *Hello world! Getting started with computational modeling*. Symposium presentation at the 36th annual meeting of the Society for Industrial and Organizational Psychology. [Virtual conference]

Braun, M.T., Olenick, J., **Grand, J.A.**, Kuljanin, G., Weinhardt, J.M., & Zhou, L. (April, 2020). *Getting started with computational modeling: Understanding what, when, why, and how*. Panel discussion at the 35th annual meeting of the Society for Industrial and Organizational Psychology, Austin, TX.

*** Conference cancelled due to COVID-19 pandemic**

Grand, J.A., Kuljanin, G., Braun, M.T., Chao, G.T., & Kozlowski, S.W.J. (April, 2020). *Bottom-up influence in organizational systems: Does one person make a difference?* Symposium presentation at the 35th annual meeting of the Society for Industrial and Organizational Psychology, Austin, TX.

*** Conference cancelled due to COVID-19 pandemic**

Grand, J.A. (April, 2020). *Hello world! Tools, techniques, and getting started with computational modeling*. Symposium presentation at the 35th annual meeting of the Society for Industrial and Organizational Psychology, Austin, TX.

*** Conference cancelled due to COVID-19 pandemic**

†Epistola, J., †Samuelson, H., **Grand, J.A.**, & Hanges, P.J. (August, 2019). *Measuring leaders behaving badly: Improving forced-choice assessment of negative leadership*. Symposium presented at the 79th annual meeting of the Academy of Management, Boston, MA.

Grand, J.A., Braun, M.T., Kuljanin, G., Kozlowski, S.W.J., & Chao, G.T. (August, 2019). *How can teams be more (or less) than the sum of their parts?* Symposium presented at the 79th annual meeting of the Academy of Management, Boston, MA.

Grand, J.A., Kuljanin, G., Braun, M.T., Chao, G.T., & Kozlowski, S.W.J. (July, 2019). *Unpacking team cohesion and leadership emergence*. Symposium presented at the 14th annual meeting of the Interdisciplinary Network for Group Research (INGRoup), Lisbon, Portugal.

Grand, J.A. (July, 2019). *Exploring teams as complex systems: Mechanisms of emergent affective/motivational team properties*. Symposium chaired at the 14th annual meeting of the Interdisciplinary Network for Group Research (INGRoup), Lisbon, Portugal.

Grand, J.A. & Kozlowski, S.W.J. (May, 2019). *Priming the pump: Principles for computational theory development*. Symposium presented at the 19th annual meeting of the European Association of Work and Organizational Psychology, Turin, Italy.

Grand, J.A. (April, 2019). *“Actors, not factors”: Principles for building and testing computational theories*. Symposium presented at the 34th annual meeting of the Society for Industrial and Organizational Psychology, National Harbor, MD.

Kuljanin, G., & **Grand, J.A.** (April, 2019). *Modeling emergent phenomena: Implementations and process insights*. Symposium chaired at the 34th annual meeting of the Society for Industrial and Organizational Psychology, National Harbor, MD.

Grand, J.A., & †Levine, B.R. (April, 2019). *Understanding judgment in situational judgment tests*. Symposium presented at the 34th annual meeting of the Society for Industrial and Organizational Psychology, National Harbor, MD.

†Levine, B.R., **Grand, J.A.**, Fernandez, R., Rosenman, E.D., Broliar, S., Kozlowski, S.W.J., & Chao, G.T. (August, 2018). *Development of a generalizable method for assessing, predicting, and improving team adaptability*. Poster presented at the 10th annual meeting of Military Health System Research Symposium, Orlando, FL.

Fernandez, R., Rosenman, E.D., Broliar, S., Kozlowski, S.W.J., Chao, G.T., †Levine, B.R., & **Grand, J.A.** (August, 2018). *Development of an integrated team training design architecture to support adaptability in healthcare teams*. Poster presented at the 10th annual meeting of Military Health System Research Symposium, Orlando, FL.

Hill, N.S., Trinh, M.P., Coen, C., **Grand, J.A.**, Kennedy, D.M., & Kozlowski, S.W.J. (July, 2018). *Using computational simulation to study dynamics and emergence in team research*. Panel discussion presented at the 13th annual meeting of the Interdisciplinary Network for Group Research (INGRoup), Bethesda, MD.

Grand, J.A. (April, 2018). *Myths and realities of computational modeling*. Symposium presented at the 33rd annual meeting of the Society for Industrial and Organizational Psychology, Chicago, IL.

Grand, J.A. (April, 2018). *Promoting prediction: Tools for advancing team research*. Symposium presented at the 33rd annual meeting of the Society for Industrial and Organizational Psychology, Chicago, IL.

Kuljanin, G. Braun, M.T., **Grand, J.A.**, Kozlowski, S.W.J., & Chao, G.T. (April, 2018). *Leadership and teamwork under varying task environments: A computational examination*. Symposium presented at the 33rd annual meeting of the Society for Industrial and Organizational Psychology, Chicago, IL.

†Samuelson, H.L., †Barth, S.E., †Levine, B.R., Wessel, J.L., & **Grand, J.A.** (April, 2017). *Computational modeling in the study of diversity*. Symposium presented at the 32nd annual meeting of the Society for Industrial and Organizational Psychology, Orlando, FL.

DeChurch, L.A., **Grand, J.A.**, & Jundt, D.K. (April, 2017). *Multiteam systems*. Community of interest presented at the 32nd annual meeting of the Society for Industrial and Organizational Psychology, Orlando, FL.

†Levine, B.R., †Barth, S.E., †Samuelson, H.L., Wessel, J.L., & **Grand, J.A.** (April, 2017). *Underneath the glass ceiling: Modeling gender stratification in organizations*. Symposium presented at the 32nd annual meeting of the Society for Industrial and Organizational Psychology, Orlando, FL.

Grand, J.A., Kuljanin, G., Braun, M.T., Kozlowski, S.W.J., & Chao, G.T. (April, 2017). *Task environments and team effectiveness: A computational exploration*. Symposium presented at the 32nd annual meeting of the Society for Industrial and Organizational Psychology, Orlando, FL.

Grand, J.A. & Nicklin, J.M. (April, 2017). *Impact, contribution, and the culture of science in I-O Psychology*. Panel discussion chaired at the 32nd annual meeting of the Society for Industrial and Organizational Psychology, Orlando, FL.

Grand, J.A. & †Levine, B.R. (April, 2017). *A tale of two responses: Preliminary evidence for a cognitive processing model of SJT responding*. Symposium presented at the 32nd annual meeting of the Society for Industrial and Organizational Psychology, Orlando, FL.

Gittinger, M., Broliar, S., **Grand, J.A.**, Nichol, G., & Fernandez, R. (May, 2016). Impact of an automated chest compression device on team communication during simulated emergency department cardiac arrest resuscitations: A pilot study. Poster/abstract presented at the 2016 Annual Meeting of the Society for Academic Emergency Medicine, New Orleans, LA.

Grand, J.A., Pearce, M., Fernandez, R., Kozlowski, S.W.J., & Chao, G.T. (April, 2016). *Disentangling teamwork and taskwork over time: A complex affair*. Symposium presented at the 31st annual meeting of the Society for Industrial and Organizational Psychology, Anaheim, CA.

Grand, J.A., Reeder, M., & Allen, M. (April 2016). *Thinking, fast and slow: A conceptual framework for SJT performance*. Poster presented at the 31st annual meeting of the Society for Industrial and Organizational Psychology, Anaheim, CA.

Braun, M.T., **Grand, J.A.**, Kuljanin, G., Kozlowski, S.W.J., & Chao, G.T. (April, 2016). *A computational integration of procedural and outcome interdependence in teams*. Symposium presented at the 31st annual meeting of the Society for Industrial and Organizational Psychology, Anaheim, CA.

Gittinger, M., Broliar, S., **Grand, J.A.**, Nichol, G., & Fernandez, R. (November, 2015). Impact of an automated chest compression device on team communication during simulated cardiac arrest resuscitations—A pilot study. Poster/abstract presented at the American Heart Association's 2015 Scientific Sessions and Resuscitation Science Symposium, Orlando, FL.

Grand, J.A., Braun, M.T., Kuljanin, G., Kozlowski, S.W.J., & Chao, G.T. (August, 2015). *An investigation of team knowledge-building processes: A multilevel, multi-temporal perspective*. Symposium presented at the 75th annual meeting of the Academy of Management, Vancouver, BC.

Grand, J.A. (July, 2015). *Leadership in extreme action teams*. Symposium presented at the 10th annual meeting of the Interdisciplinary Network for Group Research (INGRoup), Pittsburgh, PA.

Fernandez, R., Patterson, M., Su, L., **Grand, J.A.**, Waller, M., & Parker, S.H. (July, 2015). *Leadership and decision-making in adaptive action teams: Theory, research, and practice*. Panel discussion presented at the 10th annual meeting of the Interdisciplinary Network for Group Research (INGRoup), Pittsburgh, PA.

Fernandez, R., Baard, S., Golden, S., **Grand, J.A.**, Chao, G.T., & Kozlowski, S.W.J. (April, 2015). *Description of a novel team leadership training program*. Symposium presented at the 2015 International Symposium on Human Factors and Ergonomics in Health Care, Baltimore, MD.

Grand, J.A. (April, 2015). *Modeling and simulation in I/O psychology: A world of opportunity*. Symposium chaired at the 30th annual meeting of the Society for Industrial and Organizational Psychology, Philadelphia, PA.

Kuljanin, G., Braun, M.T., **Grand, J.A.**, Chao, G.T., & Kozlowski, S.W.J. (April, 2015). *Modeling the temporal dynamics of team process*. Symposium presented at the 30th annual meeting of the Society for Industrial and Organizational Psychology, Philadelphia, PA.

Grand, J.A., & Ryan, A.M. (April, 2015). *Brain drain? An examination of stereotype threat effects during training*. Poster session presented at the 30th annual meeting of the Society for Industrial and Organizational Psychology, Philadelphia, PA.

Russell, T.L., Sparks, T.E., Campbell, J.P., Handy, K., Ramsberger, P., & **Grand, J.A.** (April, 2015). *Defining and assessing ethical behavior at work*. Poster session presented at the 30th annual meeting of the Society for Industrial and Organizational Psychology, Philadelphia, PA.

Grand, J.A., & Kuljanin, G. (2014, May). *Let the data speak! Bayesian inferences in organizational sciences*. Symposium presented at the 29th annual meeting of the Society for Industrial and Organizational Psychology, Honolulu, HI.

Grand, J.A., & Chao, G.T. (2014, May). *Computational modeling: Advancing research on team dynamics*. Symposium co-chaired at the 29th annual meeting of the Society for Industrial and Organizational Psychology, Honolulu, HI.

Grand, J.A., Kozlowski, S.W.J., Chao, G.T., Braun, M.T., & Kuljanin, G. (2014, May). *A methodological framework for studying multilevel emergent dynamics*. Symposium presented at the 29th annual meeting of the Society for Industrial and Organizational Psychology, Honolulu, HI.

Pickhardt, D., Mak, S., Kozlowski, S.W.J., Chao, G.T., **Grand, J.A.**, Braun, M.T., & Kuljanin, G. (2014, May). *Team macrocognition: Integrating computational modeling and research methods*. Symposium presented at the 29th annual meeting of the Society for Industrial and Organizational Psychology, Honolulu, HI.

Grand, J. A., Pearce, M., & Kozlowski, S. W. J. (2013, August). *Investigating the episodic relationship between team processes and performance*. Symposium presented at the 73rd annual meeting of the Academy of Management, Orlando, FL.

- Conrad, M., & **Grand, J.A.** (2013, May). *What works for IPE activity design: From faculty ownership to student engagement*. Podium presentation presented at The Ohio Consortium of Nursing Learning Labs, Columbus, OH.
- Kozlowski, S.W.J., Chao, G.T., **Grand, J.A.**, Braun, M.T., Kuljanin, G., Pickhardt, D., & Mak, S. (2013, April). *Macro cognition in teams: Agent-based interventions and the emergence of team knowledge*. Symposium presented at the 28th annual meeting of the Society for Industrial and Organizational Psychology, Houston, TX.
- Reeder, M.C., Inceoglu, I., Bartram, D., Ryan, A.M., Golubovich, J., & **Grand, J.A.** (2013, April). *Implementation equivalence: Do cultural values affect testing practice?* Symposium presented at the 28th annual meeting of the Society for Industrial and Organizational Psychology, Houston, TX.
- Grand, J.A.**, Pearce, M., Rench, T.A., Chao, G.T., Fernandez, R., & Kozlowski, S.W.J. (2013, January). *Going DEEP: A procedural methodology for developing and improving assessment tools for simulation-based team training initiatives*. Podium presentation presented at the 13th annual International Meeting on Simulation in Healthcare, Orlando, FL.
- Fernandez, R., Pearce, M., **Grand, J.A.**, Rench, T.A., Brooks-Buza, H., Chao, G.T., & Kozlowski, S.W.J. (2013, January). *Evaluation of a computer-based educational intervention to improve medical teamwork and performance during simulated patient resuscitations*. Poster session presented at the 13th annual International Meeting on Simulation in Healthcare, Orlando, FL.
- Grand, J.A.**, Allen, M.T., & Pearlman, K. (2012, April). *The role of general and specific knowledge in SJT scores*. Symposium presented at the 27th annual meeting of the Society for Industrial and Organizational Psychology, San Diego, CA.
- Kozlowski, S.W.J., Chao, G.T., **Grand, J.A.**, Braun, M.T., & Kuljanin, G. (2012, April). *BOIDS, DROIDS, & NOIDS: Description and implications of an integrative research paradigm on macro cognition*. Symposium presented at the 27th annual meeting of the Society for Industrial and Organizational Psychology, San Diego, CA.
- Pearce, M., Kozlowski, S.W.J., Chao, G.T., Fernandez, R., **Grand, J.A.**, Rench, T.A., Huang, J.L., & Curran, P.G. (2012, April). *Enhancing emergency medical team performance via team process training*. Symposium presented at the 27th annual meeting of the Society for Industrial and Organizational Psychology, San Diego, CA.
- Pearce, M., Kozlowski, S. W. J., Chao, G. T., **Grand, J. A.**, Rench, T. A., Huang, J. L., & Curran, P. G. (2011, July). *A high-fidelity research paradigm for examining action teams*. Paper presented at the 6th annual INGRoup conference, Minneapolis, MN.

- Grand, J.A.**, Huang, J.L., Ryan, A.M., Honeybourne, C., & Delaney, T. (2011, April). *A tale of two countries: Culture and multinational selection practices*. Symposium presented at the 26th annual meeting of the Society for Industrial and Organizational Psychology, Chicago, IL.
- Golubovich, J., **Grand, J.A.**, Schmitt, N., & Ryan, A.M. (2011, April). *Examining differential item functioning of "insensitive" test items*. Poster session presented at the 26th annual meeting of the Society for Industrial and Organizational Psychology, Chicago, IL.
- Kozlowski, S.W.J., Chao, G.T., **Grand, J.A.**, Keeney, J., Braun, M.T., & Kuljanin, G. (2011, April). *Macro cognition and teams: The emergence and measurement of team knowledge*. Symposium presented at the 26th annual meeting of the Society for Industrial and Organizational Psychology, Chicago, IL.
- Grand, J.A.**, Golubovich, J., Ryan, A.M., & Schmitt, N. (2010, April). *Beyond skin deep: Investigating the "Who" of the sensitivity review*. Symposium presented at the 25th annual meeting of the Society for Industrial and Organizational Psychology, Atlanta, GA.
- Golubovich, J., **Grand, J.A.**, Ryan, A.M., & Schmitt, N. (2010, April). *Sensitivity review practices*. Symposium presented at the 25th annual meeting of the Society for Industrial and Organizational Psychology, Atlanta, GA.
- Rench, T.A., Fernandez, R., Chao, G.T., Kozlowski, S.W.J., **Grand, J.A.**, Huang, J.L., & Curran, P. (2010, January). *An evidence-based approach to rater training and assessment in human patient simulations: Building a quality research tool*. Poster presented at the 10th Annual International Meeting on Simulation in Healthcare, Phoenix, AZ.
- Grand, J.A.**, Ryan, A.M., Schmitt, N., & Hmurovic, J. (2009, April). *Saving face (validity)? The potential detriment of context specific testing*. Poster session presented at the 24th annual meeting of the Society for Industrial and Organizational Psychology, New Orleans, LA.
- Hmurovic, J., Ryan, A.M., Schmitt, N., & **Grand, J.A.** (2009, April). *Sensitivity or stereotype threat? Effects of gendered test content*. Poster session presented at the 24th annual meeting of the Society for Industrial and Organizational Psychology, New Orleans, LA.
- Grand, J.A.**, Fernandez, R., Kozlowski, S.W.J., Chao, G.T., Huang, J.L., & Curran, P. (2009, January). *Designing, developing, and evaluating event-based team simulations: Helping medical educators put theory into practice*. Poster session presented at the 9th annual International Meeting on Simulation in Healthcare, Orlando, FL.

Schmidt, G.B., Park, G.H., Huang, J., Ghuman, S., Fandre, J., & **Grand, J.A.** (2008, August). *Job apathy: An investigation of its antecedents and work-related outcomes*. Poster session presented at the 68th annual meeting of the Academy of Management, Anaheim, CA.

Grand, J.A. (2008, April). *Changing Gears: Modeling gender differences in mechanical comprehension test performance*. Poster session presented at the 23rd annual meeting of the Society for Industrial and Organizational Psychology, San Francisco, CA.

Irons, J.G., Bradford, D., **Grand, J.A.**, McGrew, J., Brice, S., Simmons, L., & Correia, C.J. (2007, February). *Physiological and mood effects of caffeine on healthy young adults*. Paper presented at the meeting of the 53rd annual meeting of the Southeastern Psychological Association, New Orleans, LA.

Referred Abstracts & Proceedings

† Denotes student presenter/co-author at time of presentation

Rosenman, E.D., Misco, A., Olenick, J., Chipman, A.K., Vrablik, M.C., Broliar, S.M., Kalynych, C., **Grand, J.A.**, Chao, G.T., Kozlowski, S.W.J., & Fernandez, R. (2019). Does gender matter? Addressing the question of gender superiority in resuscitation leadership. *Circulation*, 140, A190.

Fernandez, R., Rosenman, E.D., Chipman, A.K., Broliar, S., Vrablik, M.C., Misco, A.T., Olenick, J., **Grand, J.A.**, Kalynych, C., Kozlowski, S.W.J., & Chao, G.T. (2019). Translating simulation-based team leadership training into patient-centered outcomes. *Journal of Clinical and Translational Science*, 3, 57-58.

†Archibald, E., †Bao, L., Coen, C.A., **Grand, J.A.**, †Gupta, P., & Trinh, M.P. (2019). *Application of agent-based modeling (ABM) in organizational research on teams and groups*. *Academy of Management Proceedings*, 2019, 15008.

†Samuelson, H.L., †Levine, B.R., †Barth, S.E., Wessel, J.L., & **Grand, J.A.** (2018). The effects of developmental opportunities and external hiring in a gender stratification. *Leadership Excellence and Gender in Organizations*, 2, 4.

Gittinger, M., Broliar, S., **Grand, J.A.**, Nichol, G., & Fernandez, R. (2016). Impact of an automated chest compression device on team communication during simulated emergency department cardiac arrest resuscitations: A pilot study. *Academic Emergency Medicine*, 23, 606.

Gittinger, M., Broliar, S., **Grand, J.A.**, Nichol, G., & Fernandez, R. (2015). Impact of an automated chest compression device on team communication during simulated cardiac arrest resuscitations: A pilot study. *Circulation*, 132, A15955.

Fernandez, R., Pearce, M., **Grand, J.A.**, Rench, T., Jones, K., Chao, G.T., & Kozlowski, S.W.J. (2013). A randomized comparison study to evaluate the effectiveness of a computer-based teamwork training intervention on medical teamwork and patient care performance. *Academic Emergency Medicine*, 20, S125.

Teaching Activities

Undergraduate Courses

Survey of Industrial/Organizational Psychology
Introduction to Experimental Psychology
Psychology of Small Group Behavior
Research Design and Measurement in Psychological Research

Graduate Courses

Introduction to Industrial/Organizational Psychology
Multilevel Theory & Dynamics
Theory of Decision and Choice
Research Methods in Social and Organizational Psychology

Teaching/Professional Development Activities

- | | |
|---|------------------|
| <i>Python Workshop</i> | 1/2017 |
| <ul style="list-style-type: none"> Four-day workshop sponsored by UMD College of Behavioral and Social Sciences on Python programming language for research and teaching | |
| <i>Teaching Big Data Workshop</i> | 1/2016 |
| <ul style="list-style-type: none"> Two-day workshop sponsored by sponsored by UMD College of Behavioral and Social Sciences for integrating data science analytics into undergraduate/graduate teaching in the social sciences | |
| <i>Undergraduate Teaching Workshop</i> | 1/2015 to 6/2015 |
| <ul style="list-style-type: none"> Six-day workshop sponsored by UMD College of Behavioral and Social Sciences on strategies and techniques for improving undergraduate teaching | |

Consulting Experience

- | | |
|--|------------------|
| Unveil, LLC | 3/2022 to 3/2024 |
| <i>Training Feedback & Delivery System</i> | |
| Consultant, Cincinnati, OH | |
| Partner/Client: Steve Wolf | |
| <ul style="list-style-type: none"> Development, construction, and calibration of feedback system to support the assessment and summary of learning objects within an augmented reality, just-in-time refresher training application for military medical providers. | |
| Human Resources Research Organization | 5/2009 to 8/2009 |
| <i>Personnel Selection & Development</i> | |

Research Associate/Intern, Alexandria, VA

Supervisor: Deborah Whetzel, Personnel Selection & Development Program

- Example work included data collection, management and analyses; development of ability (mathematical & mechanical) and situational judgment tests; assistance with pilot testing and delivery of assessment center; writing technical and research reports

The Christman Company

8/2008 to 5/2009

Employee Goal-Setting & Managerial/Employee Training

Supervised Consultant, Lansing, MI

Collaborator: Karen DeShon

- Examined goal-setting components of performance evaluation process in a medium-sized construction management company; redesigned goal-setting system/procedures to align with new organizational performance standards

I/O At Work (HRCatalyst, Inc.)

5/2008 to 12/2008

Translational Science Writer

Blogger, Lansing, MI

- Wrote numerous short translation summaries of peer reviewed journal articles targeted towards HR professionals

The Christman Company

1/2008 to 5/2008

Employee Feedback Audit

Supervised Consultant, Lansing, MI

Collaborators: Jessica Keeney and Karen DeShon

- Examined employee perceptions of new performance standards and feedback system in a medium-sized construction management company; designed, delivered and analyzed employee interview/survey data, delivered written/oral project results to company executives

Kalamazoo County Sheriff's Department

5/2007 to 7/2007

Assessment Center Development/Construction/Implementation

Supervised Consultant, Kalamazoo, MI

Collaborators: Ann Marie Ryan and Paul Curran

May 2007 to July 2007

- Created one-time selection tool for Administrative Manager position in civil service agency; conducted job analysis, developed assessment center (in-basket task) and structured interview materials, and analyzed/scored selection measures

Wonderlic

8/2006 to 1/2008

Mechanical Ability Test Development/Construction

Supervised Consultant, Lansing, MI

Collaborators: Ann Marie Ryan, Neal Schmitt, and Dave Waldschmidt

- Developed large-scale mechanical ability test for selection and training purposes; created test items, organized/evaluated sensitivity review, conducted pilot studies, performed item/test analyses, produced technical report

Technical Reports & Other Publications

Kozlowski, S.W.J., Chao, G.T., Braun, M.T., **Grand, J.A.**, & Kuljanin, G. (2020). *A computational modeling approach to organizational effectiveness: Mapping the effects of leadership, group structure, and environmental shocks*. Technical report prepared for the Army Research Institute for the Behavioral and Social Sciences (W911NF-14-1-0026), Fort Belvoir, VA.

Fernandez, R., & **Grand, J.A.** (2019). *Development of an integrated team training design and architecture to support adaptability in healthcare teams*. Annual report prepared for Defense Medical Research and Development Program (JPC-1) (W81XWH-15-1-0403), Fort Detrick, MD.

Grand, J.A. & Conrad, M. (2014). *Interprofessional awareness student activity: Summaries, highlights, and interpretations*. Technical report prepared for The University of Akron College of Health Professions, Akron, OH.

Kozlowski, S.W.J., Chao, G.T., Braun, M.T., **Grand, J.A.**, Kuljanin, G., Pickhardt, D., & Mak, S. (2013). *Team knowledge: Origins, emergence, & measurement*. Annual report prepared for Office of Naval Research (N00014-09-1-0519), Arlington, VA.

Grand, J.A., Huang, J., & Ryan, A.M. (2010). *Summary report: Analysis of global assessment and interview evaluation system*. Technical report prepared for IBM Corporation, Dallas, TX.

Russell, T.L., Waters, S.D., **Grand, J.A.**, & Sellman, W.S. (2009). *Empirical studies of nonverbal reasoning tests: Construct validation, planning, and preparation*. Technical report prepared for Defense Manpower Data Center, Seaside, CA.

Grand, J.A. (2009). *Analysis report: Summary of 2008 CVM student survey data*. Technical report prepared for Michigan State University College of Veterinary Medicine, East Lansing, MI.

Grand, J.A. (2009). *Analysis report: Summary of goal-setting in The Christman Company*. Technical report prepared for The Christman Company, Lansing, MI.

Grand, J.A., & Fandre, J. (2008). *Employee perceptions of performance standards & feedback system: A justice perspective*. Technical report prepared for The Christman Company, Lansing, MI.

Grand, J.A., Ryan, A.M., & Schmitt, N. (2007). *Summary report: Preliminary pilot testing of Wonderlic Mechanical Aptitude Test*. Technical report prepared for Wonderlic, Inc., Libertyville, IL.

Invited Expert Advisory and Review Panels

[Advisory Panelist] Bond, W., Hui, J., Fernandez, R. (2017, May). *Catalyzing system change through healthcare simulation: Systems, competency, and outcomes.*

[Advisory Panelist] Yule, S. & Musson, D. (2016-2017). *Managing medical emergencies on deep space missions.*

[Review Panelist] Zalesny, M.D., Whitney, P.D., & White, A.M. (2016, March). *Modeling intent to use chemical/biological weapons.*

Professional Affiliations

Academy of Management (Organizational Behavior, Research Methods)
American Psychological Association
Interdisciplinary Network for Group Research
Society for Industrial/Organizational Psychology
Society for Simulation in Healthcare

Associate Editor

Journal of Business and Psychology

2024-present

Editorial Review Boards

SIOP Organizational Frontiers Series

2023-present

Journal of Management

2020-present

Journal of Applied Psychology

2017-2023

Journal of Business and Psychology

2013-2023

Reviewer for Funding Agencies

National Science Foundation (Science of Organizations)

Ad hoc Reviewer for Journals

Applied Psychology: An International Review

Cognitive Systems Research

Equality, Diversity, and Inclusion: An International Journal

European Journal of Work and Organizational Psychology

Journal of Cognitive Engineering and Decision-Making

Leadership Quarterly

Organizational Research Methods

Personnel Psychology

Sex Roles: A Journal of Research

Simulation & Gaming

Reviewer for Conferences

Interdisciplinary Network for Group Research

Society for Industrial/Organizational Psychology

Professional Committees (C = chair, M = member)

SIOP Open Science and Practice Committee (C)

2020-2022

SIOP Committee for Advancement of Professional Ethics (M)

2018-2020

SIOF Scientific Affairs Committee (C)	2016-2018
SIOF Scientific Affairs Committee (M)	2014-2016
SIOF Science Advocacy Mentoring Program (C)	2014-2016

Service to Department/Campus

Service Committees (C = chair, M = member)

Campus

Reviewer for MPower Accelerated Translational Incubator Pilot (M) 2022

College

UMD BSOS Buddies Program (M) 2023

Department

Open Science Committee (C)	2023-present
Faculty Search Committee (IO) (M)	2023
Open Science Committee (M)	2019-2022
Merit Review Committee (C)	2022
Psychology Department SONA Task Force (C)	2021-2022
Graduate Committee (M)	2021-2022
Faculty Search Committee (Developmental) (M)	2019
Psychology Space Committee (M)	2018-2019, 2022-2023
Psychology Faculty Workload Committee (M)	2016-2017
Faculty Search Committee (Quantitative) (M)	2016
SDOS Colloquium Series (M)	Ongoing

Advising & Mentoring

Undergraduate Advising

Undergraduate research/teaching assistants (cumulative total): 34

Undergraduate honor's theses (chair or member): 1

Thesis/Dissertation Advising (C = chair, D = Dean's representative, M = member)

University of Maryland

Joshua Strauss (C)
Hannah Samuelson (C)
Benjamin Levine (C)
Qihui Chen (D)
Xinyue Pan (M)
Molly Ellenberg (M)
Emily Forgo (M)
Jordan Epistola (M)
Adam Factor (M)
Rewina Bedemariam (M)
Jason Hasbrouck (M)
Jessica Fernandez (M)
Yuqing Lei (M)

Sara Barth (M)
Jasmine Wheeler (M)
Michelle Dugas (M)
Marina Chernikova (M)

Other Institutions

Emma Knight (M – The University of Queensland)
Diane Brown (M – The University of Akron)

Advisee Awards

Josh Strauss: Dean's Research Initiative grant (\$2000)	2020
Hannah Samuelson: Dean's Research Initiative grant (\$2000)	2018

Graduate Student Alums

Hannah Samuelson, PhD. (2019): Army Research Institute for the Behavioral & Social Sciences
Benjamin Levine, PhD. (2019): Johnson & Johnson