

SECTION I: TPG Summary and Relevance

A. Long-term Goals and Objectives of the Program

The Occupational Health Psychology (OHP) graduate training program at the University of Connecticut is designed to recruit and train highly qualified and diverse graduate students from areas of psychology, public health and nursing to become Ph.D. researchers capable of conducting multi-disciplinary and trans-disciplinary research focusing on the behavioral aspects of occupational health. A number of occupational trends, such as downsizing, contingent labor and longer work hours, telework, and increasing levels of automation in the workplace have propelled the need for studies on occupational health psychology. OHP is concerned with the broad range of exposures and mechanisms that affect the quality of working life and the responses of workers, such as how individual psychological attributes interact with job content and work organization as well as organizational policies and practices. OHP research and practice explores interventions targeting the work environment as well as the individual to create healthier workplaces and organizations, and to improve the capacity of workers to protect their safety and health and also to maximize their overall effectiveness and sense of wellbeing. As such, OHP fits many of the strategic goals of the NIOSH Total Worker Health initiative.

B. Key Elements of the Training Program

Trainees learn how to contribute to the OHP knowledge base and become highly capable at discovering or implementing new ways of maintaining and promoting worker health and safety. The OHP concentration is integrated within the Industrial/Organizational (I/O) Psychology doctoral training program. As such, the training program follows a scientist-practitioner model in which trainees must complete 12 credits of prescribed coursework, three credits of applied field or lab research under the supervision of OHP faculty, master- and dissertation-level research, and participate in faculty research labs. With respect to the coursework, all trainees complete a graduate seminar that covers principles of behavioral science, ergonomics and epidemiology and which requires development of a multidisciplinary research proposal; this course is taught by core OHP faculty and also an epidemiologist from the School of Medicine. In addition, trainees complete an additional required epidemiology course and two elective graduate courses in psychology and/or public health that meet a required breadth requirement covering personnel/organizational psychology, human factors/ergonomics or public health. This combination of course content and applied research training is designed not only to equip trainees with the necessary skills to address today's occupational health problems, but also to enable them to introduce new concepts of work organization and workplace design for enhancing worker health and productivity beyond current expectations, thus realizing the true potential of trans-disciplinary occupational health research to meet both regional and national needs.

C. Trainees

We recruit primarily from and also for the Psychology Department's I/O doctoral program in an effort to add extensive OHP training to trainees' more general doctoral requirements. The University of Connecticut's I/O program is the only one in the New England states, making it possible to recruit stellar students for this training. The training program takes approximately 5 years to complete, during which master- and dissertation-level research is completed, as well as additional research to enable trainees to be competitive in a tight job market. Trainees get jobs in academia, industry, consulting firms and governmental agencies. We support approximately 10 trainees annually. Two are supported with full-time, year-long stipends; the remaining receive travel support to attend research conferences. Students outside the I/O Psychology program can complete the 15-credit program to obtain a Graduate Certificate in OHP, but are not eligible for grant support.

TPG web link: <http://io.psychology.uconn.edu/occupational-health-psychology/>

Relevance:

The Graduate Training Program in Occupational Health Psychology (OHP) at the University of Connecticut (UConn) recruits qualified doctoral-level graduate students in industrial/organizational psychology, nursing, public health, and occupational and environmental medicine for specialized training in occupational health

psychology (OHP). Trainees learn how to contribute to the OHP knowledge base and become highly capable at discovering or implementing new ways of maintaining and promoting worker health and safety. The training program entails a combination of course content and applied research training that is designed not only to equip trainees with the necessary skills to address today's occupational health problems, but also to enable them to introduce new concepts of work organization and workplace design that can enhance worker safety, health and productivity through proactive approaches to workplace interventions.

SECTION II: Program Highlights of High Impact

Activities of two full-time, year-round trainees. Our budget allows us to fully fund two trainees full-time and year-round. The continuity of this funding has been extraordinarily valuable to our two trainees (Bizarro and Petery). Bizarro defended her dissertation and Petery defended her master's thesis during this funding period. Additionally, both presented at conferences during their tenure as trainees.

Program publication and conference presentation products. Past or current trainees published 11 chapters or articles during this project period; an additional four are (or have been) under review. In all, trainees presented eight research projects during this project period.

Completed theses. Seven students graduated with MA (5) or PhD (2) degrees during this reporting period. Details are noted in Section III below.

Internship placements. Four trainees worked in OHP-related internships during this reporting period. Dove-Steinkamp was working at the Army Research Institute. Calabrese continued at the the VOLPE Transportation Center as an intern. Bauerle continued his full-time internship at the NIOSH Office of Mine Safety and Research. Tubbs completed a full-time internship with the Liberty Mutual Research Institute for Safety (LMRIS).

Other research activities. Trainees continue to participate in activities with the Center for Promotion of Health in the New England Workplace (CPH-NEW, www.uml.edu/centers/CPH-NEW), one of three funded "centers of excellence" in the NIOSH Total Worker Health Initiative. The interdisciplinary CPH-NEW research team (psychologists, epidemiologists, ergonomists, economists, public health and health promotion professionals) studies worker engagement in the design and implementation of workplace health promotion/protection field-based initiatives. Several trainees receive grant support from CPH-NEW during this project period (Gannon, Tubbs). Other trainees have access to extensive CPH-NEW data sets for their independent research investigations on topics like the health effects of work-family conflict, incivility, and WMSDs.

Faculty continue working with trainees on local and national applied research projects. (1) Prof. Magley continued her collaboration with Robert Trestman, PhD/MD, Executive Director of the Correctional Managed Health Care (CMHC). CMHC provides all health care to incarcerated individuals within the state of CT and employs over 800 FTEs. The last of the long-term evaluation data collections was administered during this funding period; trainees Nelson, Young and Zhu assisted to date. (2) Barnes-Farrell is PI on contract work from the Volpe Transportation Center surveying railway workers regarding health and safety. Two trainees (Burch and Barr) continue to assist with this work.

OHP-related courses offered in I/O program. Human Factors, a Foundation course in the program, was offered by Henning in Fall 2015. Additionally, Organizational Stress was offered by Magley in Fall 2015 as a specialization seminar that students could take.

OHP promotion. OHP faculty continue to promote the Society for Occupational Health Psychology (SOHP; www.sohp.psy.uconn.edu/index.html). Magley completed her two-year Past-President term 12/31/15. Magley testified with the National Academies of Sciences on her research on individual and organizational coping with sexual harassment. She also consulted with the National Parks Services on sexual harassment.

Section III: Complete Program Products

1. Degrees Attained

Name: Timothy J. Bauerle

Degree earned: Doctor of Philosophy (Ph.D.)

Dissertation title: Ad Hoc Groups Engaged in Emergency Decision Making: A Mixed-Methods Study to Improve Successful Self-Escape from Underground Coal Fires

Name: Andrea M. Bizarro

Degree earned: Doctor of Philosophy (Ph.D.)

Dissertation title: Social Dynamics of Leadership: Is there Value in Considering Multi-Source Feedback Ratings from a Social Relations Model Perspective?

Name: Katrina A. Burch

Degree earned: Master of Arts (M.A.)

Thesis title: Exploring the Relationship between Commuting Stress, Job Strain, and Safety Behaviors while Commuting: The Dual Role of Work-Related Rumination

Name: Lindsey A. Graham

Degree earned: Master of Arts (M.A.)

Name: Kerri Nelson

Degree earned: Master of Science (M.S.)

Thesis title: Incivility as a Communication Barrier: The Effects of Incivility Experiences, Appraisals, and Context on Employees' Constructive Voice Behavior

Name: Gretchen A. Petery

Degree earned: Master of Arts (M.A.)

Thesis title: The Moderating Role of Chronological Age on the Relationship Between Psychological Age and Facets of Health: A Longitudinal Analysis

Name: Diana Tubbs

Degree earned: Master of Science (M.S.)

Thesis title: Overtime Work Hours, Health Behaviors and Health Outcomes for Correctional Officers: An Examination of Moderated Effects

2. Publications (Former trainees and current trainees)

Bauerle, T.J., McGonagle, A.K., & Magley, V.J. (2016). Mere overrepresentation? Using cross-occupational injury and job analysis data to explain men's risk for workplace fatalities. *Safety Science*, 83, 102-113.

Burch, K., & Barnes-Farrell, J. (2016). Taking work home with you: The impact of work-related rumination on risky commuting safety behaviors. In K. Teoh, V. Dediu, N. J. Saade, & J. Hassard (Editors), *Proceedings of the 12th European Academy of Occupational Health Psychology Conference: 'OHP in Times of Change: Society and the Workplace'*, (pp. 168-169). Nottingham, U. K.: European Academy of Occupational Health Psychology.

Cherniack, M., Dussetschleger, J., Dugan, A., Farr, D., Namazi, S.(g), El Ghaziri, M., Henning, R.A. (2016). Participatory action research in corrections: The HITEC 2 program. *Applied Ergonomics* 53 (2016) 169-180.

Note: Namazi is a student in Occupational and Environmental Medicine who was supervised by Henning in this project in order to satisfy the field research requirement for the Occupational Health Psychology Certificate.

Dugan, A., G., Fortinsky, R. H., Barnes-Farrell, J. L., Kenny, A. M., Robison, J. T., Warren, N., & Cherniack, M. (2016). Associations of eldercare and competing demands with health and work outcomes among manufacturing workers. *Community, Work and Family*, 19, 569-587. DOI: 10.1080/13668803.2016.1150809. Available at: <http://dx.doi.org/10.1080/13668803.2016.1150809>

Henning, RA, Zweber, ZM, Bizarro, AM, Bauerle, T, Tubbs, DC, and Reeves, D (2016). The Application of salutogenesis to correctional officers in corrections settings. In: MB Mittelmark, S Sagy, M Eriksson, GF Bauer, JM Pelikan, B Lindström, GA Espnes, (Eds.), The handbook of salutogenesis, Ch. 24, pp. 247-257. Springer, DOI 10.1007/978-3-319-04600-6.

McDonald, D., Shellman, J., Graham, L., & Harrison, L. (June, 2016). The relationship between reminiscence functions, optimism, depressive symptoms, physical activity and pain in older adults. *Research in Gerontological Nursing*.

McGonagle, A., Fisher, G, Barnes-Farrell, J. & Grosch, J. (2015). Individual and work factors related to perceived work ability and labor force outcomes, *Journal of Applied Psychology*, 100 (2), 376-398.

Petery, G., Barnes-Farrell, J., & Cherniack, M. (2016). The relationship between psychological age and facets of health over time: The moderating role of chronological age. In K. Teoh, V. Dediu, N. J. Saade, & J. Hassard (Editors), *Proceedings of the 12th European Academy of Occupational Health Psychology Conference: 'OHP in Times of Change: Society and the Workplace'*, (pp. 182-183). Nottingham, U. K.: European Academy of Occupational Health Psychology.

Robertson, M.M., Henning, R.A., Warren, N., Nobrega, S., Dove-Steinkamp, M. (g), Tibirica, L., Bizarro, A. (g) (2015). Participatory design of integrated safety and health interventions in the workplace: a case study using the Intervention Design and Analysis Scorecard (IDEAS) Tool. *Int. J. Human Factors and Ergonomics*, 3, 3/4, 303-326.

Note: invited paper for a special issue on interventions.

Zweber ZM, Henning RA, Magley VJ [2015]. A practical scale for multi-faceted organizational health climate assessment. *Journal of Occupational Health Psychology*. Advance online publication; <http://dx.doi.org/10.1037/a0039895>.

Zweber ZM, Henning RA, Magley VJ, Faghri P. (2015). Considering the differential impact of three facets of organizational health climate on employees' well-being. *The Scientific World Journal*, <http://dx.doi.org/10.1155/2015/407232>.

3. Manuscripts Under Review

Barnes-Farrell, J., & Petery, G. A. (under review). The moderating role of employment status and gender on the relationship between psychological age and health: A two-wave cross-lagged panel analysis of data from the Health and Retirement Study. *Work, Age and Retirement*.

Barnes-Farrell, J. L., & Petery, G. A. (in press, 9/2015 – anticipated publication, October 2016). Older Worker Issues. In S. Rogelberg (Ed.), *The Encyclopedia of Industrial and Organizational Psychology*, 2nd ed., Vol. x (pp. xxx-xxx). New York: Sage Publications.

Bizarro, AM, Zhu, S, Henning, RA (under revision). Decision Authority Risks Burnout for Employees with Low Sense of Coherence.

Walsh, B.M., & Magley, V.J.. Workplace civility training: Development and test of a model of training effectiveness.

4. Conference Presentations/Posters

- Boyko, N. & Barnes-Farrell, J. (2016, April). Cognition-based and Emotion-based Distraction Processes: Examination within a Work-Family Framework. In S. Culbertson & A. Huffman (Co-chairs), *Expanding Research on Types, Sources, and Moderators of Work Distractions*. Symposium presented at Society for Industrial and Organizational Psychology conference, Anaheim, CA.
- Burch, K., & Barnes-Farrell, J. (2016, April). *Taking work home with you: The impact of work-related rumination on risky commuting safety behaviors*. Paper presented at European Academy of Occupational Health Psychology Conference, Athens, Greece.
- Leiter, M.P., Peck, E., Magley, V., Shapiro, J., & Tennen, H. (2015, July). Person and daily levels of links of burnout with workplace civility. In L. Borgogni (Chair), *Emotional and Relational Factors Contributing to Burnout: New Developments in Service Professions*. Symposium presented at the European Congress of Psychology, Milan, Italy.
- McDonald, D., Shellman, J., Harrison, L & Graham, L. (2015, November). *The relationship between reminiscence, depressive symptoms, physical activity, and pain*. Poster presented at the Gerontological Society of America Annual Conference, Orlando, FL.
- Nelson, K. C., & Magley, V. J. (2016, April). Examining mechanisms linking incivility to engagement. In L.M. Cortina & E.A. Vargas (Co-chairs), *Workplace (in)civility: New insights into contexts, consequences, and boundary conditions*. Symposium accepted to the annual meeting of the Society for Industrial and Organizational Psychology, Anaheim, CA.
- Petery, G. A., Barnes-Farrell, J., & Cherniack, M. G. (2016 April). Longitudinal relationships between psychological age and facets of health: The moderating role of chronological age. *Presented at the 12th European Academy of Occupational Health Psychology Conference, Athens, Greece.*
- Petery, G. A., Barnes-Farrell, J., & Cherniack, M. G. (2015 November). Do gender and chronological age influence patterns of causal relationships between health and psychological age? A cross-lagged panel analysis. *Presented at the Age in the Workforce Meeting, Limerick, Ireland.*
- Tubbs, D. & Robertson, M. (2016, January). *Organizational readiness for change: A systematic literature review and field experience as related to safety and wellness improvements at work*. Paper presented at the European Academy of Management Conference 2016; Paris, France.