BIOGRAPHICAL SKETCH

Provide the following information for the Senior/key personnel and other significant contributors. Follow this format for each person. DO NOT EXCEED FIVE PAGES.

NAME: Timothy Vogus, PhD

eRA COMMONS USER NAME (credential, e.g., agency login): VOGUSTJ

POSITION TITLE: Associate Professor of Management (with tenure), Vanderbilt Owen Graduate School of Management

EDUCATION/TRAINING

INSTITUTION AND LOCATION	DEGREE (if applicable)	Completion Date MM/YYYY	FIELD OF STUDY
Michigan State University, East Lansing	B.A.	12/95	Political Economy and Spanish
Ross School of Business, University of Michigan, Ann Arbor	Ph.D.	12/04	Management and Organizations

A. Personal Statement

My expertise is in how organizations create and sustain cultures of inclusion and safety as well as how reliability is developed through mindful organizing. I will specifically provide advice and guidance from my expertise in organizational culture and high reliability for thinking through how to intervene in practice to enhance workplaces to be more inclusive and improve employee and organizational outcomes. I am well qualified to perform these duties and responsibilities, and am very enthusiastic about doing so. I will be actively involved in all specific aims of the proposal and will participate in quarterly mentorship meetings. My disciplinary background and faculty position in management provides a unique and complementary scholarly perspective to the team.

B. Positions and Honors

List in chronological order previous positions, concluding with the present position. List any honors. Include present membership on any Federal Government public advisory committee.

Positions

- Brownlee O. Currey, Jr., Professor of Management (with tenure), Owen Graduate School of Management, Vanderbilt University, August 2017 -- Present
- Deputy Director, Initiative on Autism, Innovation, and the Workforce, Vanderbilt University, 2017 -Present
- Faculty Director, Leadership Development Program, Owen Graduate School of Management, Vanderbilt University, 2015 – Present
- Associate Professor of Management (with tenure), Owen Graduate School of Management, Vanderbilt University, 2013 – Present
- Assistant Professor of Management, Owen Graduate School of Management, Vanderbilt University, 2004 – 2013
- Adjunct Associate Professor of Healthcare Administration, Virginia Commonwealth University, 2013 Present
- Visiting Faculty, Armstrong Institute for Patient Safety and Quality, Johns Hopkins University, 2015-2016

Honors (selected)

- Horace H. Rackham Graduate School Predoctoral Fellowship, Social Science Division, 2003-2004
- Thomas William Leabo Memorial Award for Academic Excellence, 2001
- Research Productivity Award, Owen Graduate School of Management, 2013

 James A. Webb Award for Teaching Excellence, Owen Graduate School of Management, 2007 and 2013

Relevant Service Activities

- National Academy of Science/National Research Council, Member of Safety Culture in the Offshore Oil and Gas Framing Study Committee. 2014 - 2016
- Healthcare Management Division, Academy of Management, Program Chair (part of 5 year leadership cycle), 2016 - Present
- Healthcare Management Division, Academy of Management, Academic at Large, 2013 2015
- Managerial and Organizational Cognition Division, Academy of Management, Archivist/Historian, 2007
 2010
- Judge, Outstanding Practitioner-Oriented Publication in Organizational Behavior, Organizational Behavior Division, Academy of Management (2012, 2013)
- Judge, INFORMS/Organization Science Dissertation Proposal Competition (2008)
- Judge, Industry Studies Association Best Paper Award (2017)
- Editorial Board, Organization Science, 2008 2016
- Editorial Board, Academy of Management Review, 2014 2017
- Editorial Board, Health Care Management Review, 2016 Present

C. Contribution to Science

- 1. <u>Use of High Reliability Organizations to improve healthcare system safety and performance</u>
 From the IOM's landmark *To Err Is Human* report onward, there has been a push for hospitals to emulate nearly error-free high-reliability organizations like aircraft carrier flight decks, air traffic control towers, and nuclear power control rooms. However, we lacked the requisite tools to do so. Specifically, prior research on high-reliability organization had been exclusively qualitative case studies. So my co-authors and I developed and validated a measure of the behaviors through which high-reliability organizations achieve their exceptional performance safety organizing. We subsequently demonstrated that safety organizing explains variation in medication errors and patient falls and that the effects were strengthened when hospital units paired high levels of safety organizing with extensive use of care pathways. We also found that safety organizing was good for employees (specifically nurses) in terms of lower levels of emotional exhaustion (on the most error-prone units) and lower turnover. Taken together this work substantiates the promise of emulating high-reliability organizations. Most recently, we have applied safety organizing to help rethink the daily operations of emergency departments. In each case the research has been conducted in real-world settings with parallel attempts to aid the organizations in building the types of habits described.
 - a. **Vogus, T. J.**, & Sutcliffe, K. M. (2007). The safety organizing scale: Development and validation of a behavioral measure of safety culture in hospital nursing units. *Medical Care*, 45, 46-54. PMID: 17279020
 - b. Vogus, T. J., & Sutcliffe, K. M. (2007). The impact of safety organizing, trusted leadership, and care pathways on reported medication errors in hospital nursing units. *Medical Care*, 45, 997-1002. PMID: 17890998
 - c. **Vogus, T. J.,** Cooil, B., Sitterding, M., & Everett, L. Q. (2014). Safety organizing, emotional exhaustion, and turnover in hospital nursing units." *Medical Care*, 52(10), 870-876. PMID: 25222533
 - d. Ward, M. J., Ferrand, Y., Laker, L., Froehle, C. M., Vogus, T. J., Dittus, R., Kripalani, S., & Pines, J. M. (2015). The nature and necessity of operational flexibility in the emergency department. *Annals of Emergency Medicine*, 65(2), 156-161. PMCID: PMC4302065
 - e. **Vogus, T. J.**, & Hilligoss, B. (2016). The underappreciated role of habit in highly reliable health care. *BMJ Quality & Safety*, 25(3): 141-146.
 - f. **Vogus, T. J.**, & Rerup, C. (In Press). Sweating the "small stuff:" High reliability organizing as a foundation for sustained superior performance. *Strategic Organization*.
- 2. <u>Application of mixed methods to study care transitions and care coordination between organizations</u>
 Building on the work described above, with a team of collaborators, I have begun to conceptualize and study (using qualitative and quantitative methods) care transitions and care coordination across

organizational boundaries (e.g., inter-facility transfer and developing Accountable Care Organizations). These studies emphasized the role of organizational behavior factors (e.g., physician awareness) in managing transitions smoothly and how their absence compromises effective transitions and care. A key component has been describing and evaluating ways to improve system performance.

- a. Hilligoss, B., & Vogus, T. J. (2015). Navigating care transitions: A process model of how doctors overcome organizational barriers and create awareness. *Medical Care Research & Review*, 72(1), 25-48. PMID: 25516526
- b. Ward, M. J., Kripalani, S., Storrow, A. B., Speroff, T., Matheny, M., Thomassee, E., **Vogus, T. J.**, Munoz, D., Scott, C., Fredi, J. L., Dittus, R. S. (2015). Timeliness of inter-facility transfer for emergency department patients with ST-Elevation Myocardial Infarction. *American Journal of Emergency Medicine*, 33(3), 423-429.
- c. **Vogus, T. J.**, & Singer, S. J. (2016). Unpacking accountable care: Using organization theory to understand the adoption, implementation, spread, and performance of Accountable Care Organizations. *Medical Care Research & Review*, 73(6): 643-648.
- d. **Vogus, T. J.**, & Singer, S. J. (2016). Creating highly reliable Accountable Care Organizations. *Medical Care Research & Review*, 73(6): 660-672.

3. Development of a conceptual model of safety culture in healthcare

In efforts to improve hospital safety there have been repeated calls to build a strong culture of safety. However, the research on how to do so is scattered across studies that each take a partial component of how to do so. In other words, there was a significant conceptual gap in how to create and sustain safety culture. Through three papers my co-authors and I integrated the research into a coherent and parsimonious model of safety culture which articulates the interplay between how leader behaviors and organizational practices enable a safety culture, how the activities of the frontline enact a safety culture, and how structured learning practices elaborate and refine a safety culture. I have also engaged in work that produced a published report to serve as a guide for how to intervene to strengthen safety culture in the offshore oil and gas industry. The template draws heavily from work done in health care and has relevant and ready application to it.

- a. **Vogus, T. J**, Sutcliffe, K. M., & Weick, K. E. (2010). Doing no harm: Enabling, enacting, and embedding a culture of safety in health care delivery. *Academy of Management Perspectives*, 24(4), 60-77.
- b. Singer, S. J., & **Vogus, T. J**. (2013). Safety climate research: Taking stock and looking forward. *BMJ Quality and Safety*, 22(1), 1-4. PMID; 23112287
- c. Singer, S. J., & **Vogus, T. J**. (2013). Reducing hospital errors: Interventions that build safety culture. *Annual Review of Public Health*, 34, 373-396. PMID: 23330698
- d. Vogus, T. J. (2016). Safety climate strength: A promising construct for safety research and practice. BMJ Quality & Safety, 25(9): 649-652.
- e. National Research Council. 2016. Strengthening Safety Culture in the Offshore Oil and Gas Industry. Washington, DC: National Academies Press.

4. <u>Use of organizational factors to examine the patient's experience</u>

Recently I have begun to investigate the role of organizational factors in understanding perceptions of quality and other measures of patient experience. Prior work has largely explored structural (e.g., teaching hospital) and patient characteristics as antecedents of patient experience ratings. My co-authors and I have gone into more depth conceptually and empirically to posit a range of organizational factors and specifically investigate the role of leaders and how they foster compassion. At the same time we have looked to see if there are identifiable differences across hospitals in their quality. We found that labeling a hospital as high or low quality was difficult and highly sensitive to the specific elements of the composite measure.

a. Austin, J.M., D'Andrea, B. G., Milstein, A., Pronovost, P., Romano, P. S., Singer, S. J., Vogus, T. J., & Wachter, R. M. (2014). Safety in numbers: The development of Leapfrog's composite patient safety score in U. S. hospitals. *Journal of Patient Safety*, 10(1), 64-71. PMID: 24080719

- b. McClelland, L. E., & **Vogus, T. J.** (2014). Compassion practices and HCAHPS: Does rewarding and supporting workplace compassion influence patient perceptions? *Health Services Research*, 49(5), 1670-1683.PMCID: PMC4213055
- c. Austin, J. M., Jha, A. K., Romano, P. S., Singer, S. J., **Vogus, T. J.**, & Wachter, R. M. (2015). National hospital ratings systems share few common scores and may generate confusion instead of clarity. *Health Affairs*, 34(3), 423-430.PMID: 25732492
- d. **Vogus, T. J.**, & McClelland, L. E. 2016. When the customer is the patient: Lessons from healthcare research on patient satisfaction and service quality ratings. *Human Resource Management Review*, 26(1), 37-49.

Complete List of Published Work in MyBibliography:

http://www.ncbi.nlm.nih.gov/pubmed/?term=vogus+tD.

D. Additional Information: Research Support and/or Scholastic Performance

None.