

ROBERT MARLEY, Ph.D., CPE

Abbreviated Resume

Name: Robert J. Marley
Title: Robert B. Koplak Professor of Engineering Management
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Education

Ph.D. Industrial Engineering, Wichita State University, 1990
Major area: Occupational Ergonomics/Human Factors Engineering
Minor areas: Statistics, Experimental Design, Engineering Psychology

M.S. Engineering Management Science, Wichita State University, 1987

B.G.S. General Studies, Wichita State University, 1983

Additional Training

ACE Fellowship, Texas A&M University, College Station, TX, 2012 - 2013

Academic and Leadership Appointments (reverse chronology)

Robert B. Koplak Professor of Engineering Management, Missouri S&T, Rolla, MO, July, 2019, to present.

Provost and Executive Vice Chancellor, Missouri S&T, Rolla, MO, 2014 - 2019.

Vice President for Student Success (interim), Montana State University, Bozeman, MT, 2013 - 2014.

Dean and Director, College of Engineering and Engineering Experiment Station, Montana State University, Bozeman, MT, 2001 to 2013.

Associate Dean, College of Engineering, Montana State University, Bozeman, MT, 1996 - 2001.

Assistant Professor / Associate Professor / Professor, Montana State University, Bozeman, MT, 1990 - 2014.

Key Accomplishments in Leadership

- Created concept and cultivated donor for \$50 Million gift for the “Asbjornson Innovation Center” at Montana State—formally gifted in 2014 resulting in named College and major new facility.
- Secured increases in MSU engineering endowments and current year donations—over \$30 Million raised from private sources during my deanship (in addition to Asbjornson Center), including establishing the MSU College of Engineering’s first six named and endowed positions.
- Secured over \$34 Million in System, State, and Federal funds to support initiatives as Dean or Provost.
- Facilitated a tripling of annual research expenditures during deanship, helping secure Montana State’s elevation from R2 to R1 in Carnegie classification for research in 2006.
- Oversaw faculty growth, diversity and achievement at both Montana State and Missouri S&T.
 - Five-fold increase in female faculty in engineering at MSU during my deanship
 - 40% increase in under-represented minority faculty at Missouri S&T since 2014
 - Numerous NSF Career Awards, NEH Awards, AAAS Awards, and other faculty achievement.
- Oversaw strategic enrollment and diversity growth at both Montana State and Missouri S&T.
 - Top 5 universities for graduating Native American students in engineering and CS (MSU).

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- Record numbers of female and African American students at S&T in 2017.
- Facilitated student success in award of Rhodes, Goldwater, Marshall scholarships, and a Gates-Cambridge Fellowship while Dean at MSU
- Facilitated significant increase in international enrollments in engineering (MSU)
- Missouri S&T fastest growing public university in State during last 5 years.
- Led multiple strategic planning efforts at both college and university-wide levels at two research universities.
- Oversaw implementation of new Title IX, VAWA and related policies while Vice President (MSU).
- Completed organizational redesign following re-introduction of dean level administration (S&T).

Selected Scholarly Works (most impactful)

Books and Chapters

1. Fernandez, JE and **Marley, RJ** (2013). Applied Occupational Ergonomics: A Textbook, 4th Edition. Fairfax, VA: Society for Industrial and Systems Engineering Press, ISBN: 9781938496486.
2. Fernandez, JE **Marley, RJ**, Noriega, S, and Ibarra, G (2008). Ergonomia Ocupacional: Diseno y Administracion del Trabajo. Cincinnati, OH, International Journal of Industrial Engineering Press, ISBN: 97809654506-5-2.
3. Fernandez, JE and **Marley, RJ** (1997). Lifting physical work capacity as a function of frequency. In Karwowski, W, Wogalter, MS, and Dempsey, PG (Eds), Ergonomics and Musculoskeletal Disorders: Research on Manual Materials Handling, 1983-1996. Santa Monica, CA: The Ergonomics and Human Factors Society. [*reprinted article selected by editors of special issue as most influential on topic in previous 12 years*]

Journals and Proceedings

1. Gosavi, A and **Marley, RJ** (2020). Public policy in a pandemic: A hazard-control perspective and case study of the BCG vaccine for COVID-19. IEEE Engineering Management Review, 48(3), pp. 111-117. Print ISSN: 0360-8581; Online ISSN: 1937-4178; DOI: 10.1109/EMR.2020.3010438.
2. Fernandez, JE and **Marley, RJ** (2014). The development and application of psychophysical methods in upper-extremity work tasks and task elements. International Journal of Industrial Ergonomics, 44(2), pp. 200-206. [selected as lead article for special issue]
3. E.Wang, C.Plumb, G.Denzine, J.Tester, J.Hamann, **R. Marley**, D Munoz, D.Porter, and A.Vollstedt (2009). Perception of teaching excellence by faculty and administrators in the Engineering Schools of the West. Proceedings of ASEE/IEEE Frontiers in Education Conference, 2009, San Antonio, TX, pp M4E-1 to 6.
4. **Marley, RJ** and Yerneni, H (2003). Modeling of maximum acceptable weight of lift (MAWL) using artificial neural networks. International Journal of Industrial Engineering, 10(4), 577-583.
5. **Marley, RJ** and Thomson, MR (2000). Isokinetic strength characteristics in wrist flexion and extension. International Journal of Industrial Ergonomics, 25(6), 633-643.
6. **Marley, RJ**, and Fernandez, JE (1999). Work thresholds for repetitive hand-intensive activities. International Journal of Industrial Engineering, 6(3), 196-202.
7. **Marley, RJ**, Gebhardt, AJ, Stewart, KJ, and Nicholls, R (1997). A proactive group surveillance protocol for musculoskeletal disorders. In, Das, B, and Karwowski, W (Eds), Advances in Occupational Ergonomics and Safety 1997. Amsterdam: IOS Press, pp. 365-368.
8. **Marley, RJ** and Dugassani, A (1996). Effects of industrial back supports on physiological demand, lifting style and perceived exertion. International Journal of Industrial Ergonomics, 17(6), 445-453.
9. **Marley, RJ**, and Kumar, N (1996). An improved musculoskeletal discomfort assessment tool. International Journal of Industrial Ergonomics, 17(1), 21-27.
10. **Marley, RJ** and Fernandez, JE (1995). Psychophysical frequency and sustained exertion at varying wrist posture for a drilling task. Ergonomics, 38(2), 303-325.

Invited Presentations (selected)

- “Bridging the gap between practitioners and researchers: A call to action.” Keynote address to joint meeting of the International Society for Occupational Ergonomics & Safety (ISOES) and the American Society for Safety Professionals (ASSP). New Orleans, June 12, 2019.
- “Observations from 25 plus years in Engineering Education,” Keynote address to 3rd Annual World Conference of the Society for Industrial and Systems Engineering, San Antonio, TX, Oct 20, 2014.
- “Be a Leader.” Wichita State University College of Engineering Commencement address, May 17, 2014.
- “Establishing Pre-STEM Educational Partnerships with Research Universities for Underrepresented Students.” New Mexico Achievement Gap Summit, Las Cruces, NM, May 26, 2011

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- "History, current status, and potential changes to OSHA ergonomic regulation." Dept of Industrial Engineering Lecture Series, Virginia Tech, November 16, 2006.
- "A conceptual and strategic process for engineering program assessment: A case study at Montana State University." *Best Assessment Process IV*, Rose-Hulman Institute of Technology, Terre Haute, IN, April 7, 2001.
- "Ergonomic strategies for the utility industry." Western Electric Power Institute Safety Conference, Portland, OR, September 10, 1997 (*Keynote Address*).
- "Ergonomics--Cumulative Trauma Disorders." 1991 Governor's Conference on Workers' Compensation and Safety, Butte, MT, October 23, 1991.

Selected Funding as PI/Co-PI

1. "Designing Our Community," William and Flora Hewlett Foundation, Engineering Schools of the West Initiative, 2003-2006, **RJ Marley** and H Sherick, Co-PI's, \$734,580.
2. "Increasing CSE&M Degree Opportunities for Low-Income Students in Montana," National Science Foundation, 2000-2003, **RJ Marley**, PI, \$493,648.
3. "Building a Teaching and Learning Community at Montana State University," National Science Foundation, 1998-2000, M Malone, E Swanson, R Walker, **RJ Marley**, and J Adams, Co-PI's, \$200,000.
4. "Science for all: Opening the door for rural women," National Science Foundation, 1997-99, AS Pittendrigh, S Hapner, SL Young, and **RJ Marley**, Co-PI's. \$899,411.

Selected Honors and Awards

- "Resolution of Appreciation," Tau Beta Pi National Executive Council, 2013
- "Meritorious Service Award," American Society for Engineering Education, Board of Directors, 2006.
- "Award of Excellence," MSU Alumni Association and Bozeman Area Chamber of Commerce, 2002.
- "Outstanding Campus Representative," American Society for Engineering Education, PNW Section, 2000
- "Most Influential Papers," 10 Years of Manual Materials Handling Research, Ergonomics and Human Factors Society, 1997
- "Dow Outstanding New Faculty Award," American Society for Engineering Education, 1994
- Boeing Fellowship, Wichita State University, 1988-1990

Selected Service Activities

- University of Missouri System Chief Academic Officers Council, 2014-2019
- Missouri Department of Higher Education Academic Council, 2014-2019
- MSU President's Executive Council, 2013-2014
- MSU Innovation Campus, Advanced Technology, Inc, Board of Directors, 2011 to 2014
- 2yr-4yr Engineering Transfer Policy Summit, National Academy of Engineering, Richmond, VA, June, 2011
- President, International Society for Occupational Ergonomics and Safety (ISOES), 2009-10
- Executive Council, International Society for Occupational Ergonomics and Safety (ISOES), 2008-2011.
- American Society for Engineering Education, National Board of Directors, Chair of Sections Zone IV, 2004-2006 (elected position).

Selected Professional Membership and Certification

- Board Certified Professional Ergonomist-CPE (BCPE # 466)--by nomination and peer review of works; recertified in 2010, 2016
- Professional Registry Member of the Institute of Ergonomics & Human Factors (M.Erg.S.)—by nomination and peer review of works
- Human Factors and Ergonomics Society (Industrial Ergonomics, Safety, Surface Transportation technical groups)
- Alpha Pi Mu (Industrial Engineering Honorary)
- Tau Beta Pi (National Engineering Honorary)
- American Indian Science and Engineering Society.