# **Muer Yang**

Department of Operations and Supply Chain Management, Opus College of Business, University of St. Thomas, Minneapolis, MN Office: TMH 451E Tel: 651-962-4159 Email: yangmuer@stthomas.edu

## EDUCATION

- Ph.D., Operations Management, College of Business, University of Cincinnati.
- M.S. in Management Science, School of Economics and Management, Tsinghua University.
- B.S. in Management Information System, School of Economics and Management, Tsinghua University.

#### ACADEMIC EXPERIENCE

- Associate Professor, University of St. Thomas, 09/2017 Present.
- Assistant Professor, University of St. Thomas, 09/2011 08/2017.
- Instructor, University of Cincinnati, 09/2008 05/2011

#### **PUBLICATIONS (Peer Reviewed)**

- Kumar, S., Yang M., Goldschmidt K.H., (2018), Will aging voting machines cause more voters to experience long waits?, *International Journal of Production Economics*, 198, 1-10.
- Kumar, S., Yang, M., & Bekx, P. (2017). Why many diabetic patients do not take the A1C test as recommended? *IISE Transactions on Healthcare Systems Engineering*, 7(3), 145-154.
- Kumar, S., Yang, M. (2016), Analyzing patient choices for routine procedures in U.S. versus overseas before and after Affordable Care Act. *Health Systems*, 5, pp. 21-28.
- Yang, M, Wang X., & Xu N. (2015), A Robust Voting Machine Allocation Model to Reduce Extreme Waiting, *Omega The International Journal of Management Science*, 57, pp. 230-237.
- Yang, M., Fry, M. J., & Scurlock, C. (2015). The ICU will see you now: Efficient-equitable admission control policies for a surgical ICU with batch arrivals. *IIE Transactions*, 47(6), pp. 586-599
- Kumar, S., Yang, M., & Strike, D. (2015). Assessing effect of global inventory planning with enterprise-wide information for a large manufacturer. *Journal of Manufacturing Systems*, *34*, pp. 34-42.
- Wang, X., Yang, M., & Fry, M. J. (2015). Efficiency and equity tradeoffs in voting machine allocation problems. *Journal of Operational Research Society*, 66, pp. 1363-1369.
- Yang, M., Fry, M. J., Kelton, W. D., & Allen, T. T. (2014). Improving voting systems through service operations management. *Production and Operations Management*, *23*(7), pp. 1083-1097.
- Yang, M., Allen, T. T., Fry, M. J., & Kelton, W. D. (2013). The call for equity: Simulation-optimization models to minimize the range of waiting times. *IIE Transactions*, *45*(7), pp. 781-795.
- Yang, M., Fry, M. J., Raikhelkar, J., Chin, C., Anyanwu, A., Brand, J., & Scurlock, C. (2013). A model to create an efficient and equitable admission policy for patients arriving to the cardiothoracic intensive care unit. *Critical Care Medicine*, *41*(2), pp. 414-422.
- Yang, M., Fry, M. J., & Kelton, W. D. (2009). Are all voting queues created equal? *Proceedings of the 2009 Winter Simulation Conference*, pp. 3140-3149.
- Sun J. and Yang M. (2008), A VAR Control Scheme for multivariate autocorrelated observations, *Application of Statistics and Management*, 27(2), pp. 298-303. (in Chinese)
- Yang M. and Sun J. (2007), Residual-based T<sup>2</sup> control chart for monitoring multivariate autocorrelated process, with J. Sun, *Journal of Tsinghua University (Sci & Tech)*, 47(12), pp. 2184-2187. (in Chinese)
- Residual-based T<sup>2</sup> control chart for bivariate autocorrelated processes, with J. Sun, *Journal of Tsinghua University* (*Sci & Tech*), 2006, 46(3), pp. 403-406. (in Chinese)

# **BOOKS AND CHAPTERS**

- Fry, M. J., & Yang, M. (2013). Using OR to overcome challenges in implementing new voting technologies. *Wiley Encyclopedia of Operations Research and Management Science*, pp. 1-8.
- Jing, S., Wang, S., & Yang, M. (2013). *Process capability analyses*. Tsinghua University Press, Beijing, China (in Chinese)
- Liu J., Chen X., & Yang, M. (2005), *Advanced Cases for Excel 2003/XP*, Jilin Electron Press, Changchun, China (in Chinese).
- Liu J., Yang, M., & Chen X. (2005), Tips for Excel 2003/XP, Yanbian Education Press, Yanji, China (in Chinese)

# PRESENTATIONS

- M. Yang, M. Fry, C. Scurlock, C. Becker, Improving Operational Efficiency for Tele-ICUs, POMS Production and Operations Management Society, Houston. May 2018.
- Kumar S., Yang, M., "Why do many diabetic patients not take the A1C test as recommended?," POMS -Production and Operations Management Society, Houston. May 2018
- Yang, M., Kumar, S. and Goldschmidt., "Will Aging Voting Machines Cause Long Waiting Lines," INFORMS - Institute for Operations Research and Management Sciences, Nashville, Houston. November 2017.
- Wang, X., Yang, M., and Fry, M., "A Scenario Robust Optimization Model to Stockpile Strategic Relief Supplies for Natural Disasters," POMS Annual Meeting, Seattle, May 2017.
- Incentive Scheme For Diabetes Patients To Take A1c Test Quarterly, INFORMS Annual Meeting, Nashville, Tennessee. November 2016, with Kumar, S. and Bekx, P.
- A Robust Model to Preposition Relief Supplies, POMS Annual Meeting, Orlando, May 2016, with X. Wang
- Multiple Resource Type Straddling a Standard with Applications in Election Resource Allocation, INFORMS Annual Meeting, Philadelphia, Nov 2015, with T.T. Allen
- Convergent Algorithms for Satisfying Standards with Election System, INFORMS Annual Meeting, San Francisco, Nov 2014, with T.T. Allen
- Feasible Allocation thru Iterative Relaxations with Election Systems, INFORMS Annual Meeting, San Francisco, Nov 2014, with T.T. Allen
- Managing Tele-ICUs: A Service Factory for the Critically Ill, POMS Annual Meeting 2014, Atlanta, May 2014, with M. Fry and C. Scurlock
- Modeling Business Value of Global Planning at 3M Company, INFORMS Annual Meeting 2013, Minneapolis, Oct 2013, with S. Kumar and D. Strike
- The ICU Will See You Now: Efficient-Equitable Admission Policies, INFORMS Annual Meeting 2013, Minneapolis, Oct 2013, with M. Fry and C. Scurlock
- Operations Improvement for Tele-ICUs, POMS 24th Annual Conference, 2013, Denver, Colorado, 5/3013, with M. Fry and C. Scurlock
- Building Flexibility in US Healthcare Delivery through Medical Tourism, INFORMS Annual Meeting 2012, Phoenix, AZ, 10/2012, with S. Kumar
- Robust Voting Machine Allocations, INFORMS Annual Meeting 2012, Phoenix, AZ, 10/2012, with X. Wang and N. Xu
- The ICU Will See You Now: Efficient–Equitable Admission Control Policies for a Surgical ICU with Batch Arrival, 23rd Annual POM Conference, Chicago, IL, April 2012
- Efficient-Equitable Allocation Policies for the Voting Systems, 23rd Annual POM Conference, Chicago, IL, April 2012.
- Who is the Next Patient in ICU? INFORMS 2011 Annual Meeting at Charlotte, NC, November 2011, with Yang, M. Fry, M. Scurlock, C.
- Using OR to Improve Voting Operations, INFORMS 2011 Annual Meeting at Charlotte, NC, November 2011

# PRESS COVERAGE

- Experts predict long lines for some on Election Day in Maricopa County, R.L. Sanders, *The Republic* | *azcentral.com*, October 2016.
- Featured in the article Improving the Efficiency of ICU Admission Decisions by Cooke CR in *Critical Care Medicine*, 2013
- Are all voters allowed equal access given ballot length diversity? IE Industrial Engineer, Jun 2013.
- Voting-machine-allocation method could reduce voters' wait time by 36 percent, Science News Daily, 2010
- Featured in Portfolio, the annual alumni magazine of College of Business at University of Cincinnati, 2010

### **HONORS & AWARDS**

- The Susan E. Heckler Research Excellence Award, University of St. Thomas, 2015
- OCB Summer Research Grant, University of St. Thomas, 2012-2016
- 2<sup>nd</sup> place, INFORMS Public Sector OR Best Paper Competition, 2011

### **SERVICES & AFFILIATIONS**

- Expert witness in recent cases related to voting issues.
- VP of Communications, INFORMS Public Sector OR, 2018
- Chair, 2016 INFORMS Public Sector OR Best Paper Competition, 2016
- Reviewers for MSOM, Decision Sciences Journal, OMEGA, Journal of Manufacturing Systems, Information Systems and Operational Research, and International Journal of Production Economics, Simulation Modelling Practice and Theory, Information Systems and Operational Research, etc.
- The Institute for Operations Research and the Management Sciences (INFORMS)
- Production and Operations Management Society (POMS)
- Election Verification Network (EVN)