

David Rea

ASSISTANT PROFESSOR, LEHIGH UNIVERSITY

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A.BIBLIOGRAPHIC INFORMATION

ACADEMIC APPOINTMENTS

College of Business, Decision and Technology Analytics

Assistant Professor

Lehigh University

Aug. 2021 - Present

College of Health

Affiliated Faculty

Lehigh University

Aug. 2021 - Present

FULL EMPLOYMENT HISTORY

Note: Includes all paid activities after starting undergraduate studies.

Doctoral Researcher

University of Cincinnati Departments of Emergency Medicine & Operations, Business Analytics, and Information Systems

Cincinnati, OH

2016-2021

Consultancy

GE Aviation

Cincinnati, OH

- Optimal Inventory Segmentation and Fixed Day Supply
- Supervisor: Uday Rao, PhD

Research Assistant

University of Cincinnati: Department of Operations, Business Analytics, and Information Systems

Cincinnati, OH

- Identifying the Structure of the Bitcoin Community on Twitter Using a Stochastic Block Model
- Supervisors: Yichen Qin, PhD & Zhe Shan PhD

Research Assistant

Zentrum für Technomathematik Universität Bremen

Bremen, Germany

- Dictionary Learning via Alternating Projection
- Supervisor: Emily Kang, PhD

Apprentice Teacher

Saint Martin DePorres High School

Cleveland, OH

- Earned Ohio Non-Tax Teaching Certificate
- Teach for America partner program

Goalkeeper

Wollongong Olympic Football Club

Wollongong, Australia

2011

Strengthening After Schools Program Summer Intern

Center for Civic and Urban Engagement

Springfield, OH

2010

Tutor

Wittenber Math Workshop

Springfield, OH

- Head tutor from 2011

Freedom School Servant Leader Intern

Children's Defense Fund

Cleveland, OH

2009

COMPLETE EDUCATIONAL HISTORY

Ph.D. in Operations and Business Analytics

University of Cincinnati: Operations, Business Analytics & Information Systems

Cincinnati, OH

2021

- Committee members: Drs. Craig Froehle (adviser & dissertation chair), Uday Rao, Yichen Qin, and Jeff Mills
- Recipient of Lindner College of Business Outstanding Doctoral Student Research Award

M.S. in Mathematical Sciences

Clemson University

Clemson, SC

2015

- Thesis: Can a CUSP Catastrophe model predict a recession?
- Advisor: Jim Brennan, Ph.D.

B.S. in Mathematics and Economics

Wittenberg University

Springfield, OH

2012

- Minor: Computational Science

B. PUBLICATIONS AND OTHER SCHOLARLY WORK

Note: Parenthetical codes in section titles used in statement

REFEREED BOOK CHAPTER (RBC)

Manuscripts as a book chapter.

RBC 1. Dixon, M., **Rea, D.**, Victorino, L., & Froehle, C. (2022). Perceived justice and control of priority lines. In M. Davis (Ed.), *Research handbook on services management* (pp. 17–128). Edward Elgar Publishing,. <https://doi.org/10.4337/9781800375659.00016>

REFEREED JOURNAL ARTICLES (RJA)

Manuscripts published at a journal.

RJA 2. Lane, B. H., **Rea, D.** J., Gottula, A. L., Cathers, A. D., Ziegler, R. M., Latimer, A. J., Danielson, K. R., Theiling, B. J., Froehle, C. M., & Hinckley, W. R. (2024). Association of Geographic Distance and Hospital Characteristics With Use of Interhospital Transfer by Air: A Multicenter Retrospective Study. *Air Medical Journal*, 43(2), 111–115. <https://doi.org/10.1016/j.amj.2023.11.002>

RJA 1. **Rea, D.**, Froehle, C., Masterson, S., Stettler, B., Fermann, G., & Pancioli, A. (2021). Unequal but Fair: Incorporating Distributive Justice in Operational Allocation Models. *Production and Operations Management*, 30(7), 2304–2320. <https://doi.org/10.1111/poms.13369>

UNDER REVIEW / UNDER REVISION AT JOURNALS (UR)

Manuscripts currently in the review process at a journal.

UR 5. Arhin, K., Treku, D., & **Rea, D.** (2025). A Data-Centric Contextualization of the Accuracy-Fairness Trade-off in Artificial Intelligence Decision-Making. *Management Information Systems Quarterly (Lehigh Top Tier)*. Stage: Under Review (2nd).

UR 4. Frounfelker, R., Hargrove, K., Blomkvist, K., **Rea, D.**, & McAndrew, T. (2025). Enhancing local public health decision-making: Incorporating end-user perspectives into influenza forecasting models. *Qualitative Research in Medicine and Healthcare*. Stage: Under Review.

UR 3. **Rea, D.**, Aktekin, T., & Irie, K. (2025). Will There Be a Crowd? Real-time Uncertainty Quantification in the Emergency Department. *Production and Operations Management (Lehigh Top Tier)*. Stage: Under Review.

UR 2. **Rea, D.**, & Chen, V. (2025). Equity-Efficiency Symbiosis. *Management Science (Lehigh Top Tier)*. Stage: Under Review.

UR 1. **Rea, D.**, Anderson, D., & Bjarnadóttir, M. (2024). Hidden Flexibility: How Workload Shapes Strategic Effort Allocation During ED Shifts. *Manufacturing & Service Operations Management (Lehigh Top Tier)*. Stage: Preparing Major Revision (3rd).

IN PREPARATION FOR SUBMISSION (IPS)

Core research analysis is complete and manuscript is being written or revised, but not formally in a journal process.

- IPS 4. Anderson, D., **Rea, D.**, Bjarnadóttir, M., & Ross, D. (2025). Pay Equity and Salary Range Laws. *Organization Science (Lehigh Top Tier)*. Stage: In Preparation for Submission.
- IPS 3. Mir, S., **Rea, D.**, & Zacharia, Z. (2025). *Impact of contextual factors on allocation of scarce supplies*. Stage: In Preparation for Submission to *Journal of Operations Management (Lehigh Top Tier)*.
- IPS 2. Ye, H., **Rea, D.**, Fan, R., & Peng, D. (2025). Profit seeking in interhospital transfer decisions. *Production and Operations Management (Lehigh Top Tier)*. Stage: In Preparation for Submission.
- IPS 1. **Rea, D.**, Lozano, L., & Froehle, C. (2024). Equality, Equity, and Profit: Exploring Fairness-Performance Trade-Offs in Allocation Models. *Decision Sciences*. Stage: In Preparation for Submission.

ONGOING RESEARCH (OR)

Projects that are ongoing and not yet ready to be written up in detail.

- OR 6. Arhin, K., Kim, S., & **Rea, D.** (2025). *Prediction Driven Truck Driver Hiring Process*. Stage: Data Collection.
- OR 5. Baucum, M., Chen, V. (Xinying), & **Rea, D.** (2025). *Impact-Aware Resource Allocation with Fairness*. Stage: Analysis.
- OR 4. Nenova, Z., **Rea, D.**, Bjarnadóttir, M., & Marks, M. (2025). *Alcohol use disorder treatment*. Stage: Data Analysis.
- OR 3. **Rea, D.**, & Gomez-Rodriguez, F. (2025). *Surge shock and recovery*. Stage: Data Analysis.
- OR 2. Rovella, E. J., **Rea, D.**, & Peng, D. (2025). *The Relationship Between Hospital Admission Decisions And Financial Variables*. Stage: Drafting.
- OR 1. Samuel, B., **Rea, D.**, Green, B., Froehle, C., Truitt, M., Gorecki, M., & Riley, C. (2025). *Modality shifts in emergency food distribution*. Stage: Data Collection.

C.HONORS AND AWARDS

Meritorious Service Awards - Reviewer

Health Care Management Science

Recognizes reviewers who have made exemplary contributions to the journal. Their reviews have consistently been detailed and constructive, and, in the case of articles that were eventually published in the journal, the reviews significantly improved the quality of the published papers.

2024

- <https://link.springer.com/article/10.1007/s10729-024-09679-2>

Lindner College of Business Outstanding Doctoral Student Research Award

University of Cincinnati

Recognizes one doctoral student from across the entire college based on their research output

2021

- <https://www.uc.edu/news/articles/2021/05/lindner-college-of-business-celebrates-2020-21-outstanding-students.html>

Omega Rho

University of Cincinnati

2016

Mortar Board

Wittenberg University

2012

Phi Beta Kappa

Wittenberg University

2012

Departmental Honors in Economics

Wittenberg University

2012

University Honors

Wittenberg University

2012

Phi Eta Sigma

Wittenberg University

2012

D.RESEARCH FUNDING

College of Health Faculty Research Grant

Lehigh University College of Health

Co-PI with Rochelle Frounfelker, Thomas McAndrew

2023

- \$10,000 (Institutional/equipment grant)

Conference Travel (EAAMO)

- \$1,558 (Institutional/equipment grant)

Bert Trucksess Foundation Research Grant

Bert Trucksess Foundation

Co-PI with Saif Mir, Zach Zacharia

- \$5,000 (Competitively awarded research grant)

2022

G. SCHOLARLY PRESENTATIONS

INVITED PRESENTATIONS

- Includes upcoming presentations
- Presenting author indicated with an asterisk (*).

1. *Nenova, Z., **Rea, D.**, Bjarnadottir, M., & Marks, M. (2026). Aligning recovery needs with workforce skills [Conference]. *Production and Operations Management Society Annual Meeting (Reno, NV)*.
2. ***Rea, D.**, Irie, K., & Aktekin, T. (2026). A bayesian state space model for managing demand surges in the emergency department [Conference]. *Production and Operations Management Society Annual Meeting (Reno, NV)*.
3. *Rovella, E., **Rea, D.**, & Peng, D. (2026). ED admission decisions linked to financial and organizational variables [Conference]. *Production and Operations Management Society Annual Meeting (Reno, NV)*.
4. Mir, S., **Rea, D.**, & *Zacharia, Z. (2025). The role of buyer power and buyer needs in allocating limited product supply [Conference]. *Production and Operations Management Society Annual Meeting (Atlanta, GA)*.
5. *Nenova, Z., **Rea, D.**, Bjarnadottir, M., & Marks, M. (2025). A patient prospective on treatments for substance use disorder [Conference]. *Institute for Operations Research and the Management Sciences Annual Meeting (Atlanta, GA)*.
6. *Nenova, Z., **Rea, D.**, Bjarnadottir, M., & Marks, M. (2025). A patient prospective on treatments for substance use disorder [Conference]. *Production and Operations Management Society Annual Meeting (Atlanta, GA)*.
7. ***Rea, D.** (2025). From justice to fairness: Developing principled operational systems [Invited Seminar]. *Supply Chain Management Department Seminar Series (Newark, NJ)*.
8. ***Rea, D.** (2025). From justice to fairness: Developing principled operational systems [Invited Seminar]. *Rotman Young Scholar Seminar Series (Virtual)*.
9. ***Rea, D.**, & Chen, V. (2025). Equity-efficiency symbiosis [Conference]. *Production and Operations Management Society Annual Meeting (Atlanta, GA)*.
10. ***Rea, D.**, Irie, K., & Aktekin, T. (2025). A bayesian state space model for managing demand surges in the emergency department [Conference]. *Production and Operations Management Society Annual Meeting (Atlanta, GA)*.
11. **Rea, D.**, & *Chen, V. (2025). Fairness-efficiency symbiosis [Conference]. *Institute for Operations Research and the Management Sciences Annual Meeting (Atlanta, GA)*.
12. *Mir, S., **Rea, D.**, & Zacharia, Z. (2024). Allocation in buyer-supplier relationships: A justice perspective. *Decision Science Institute Annual Meeting (Atlanta, GA)*. https://convention2.allacademic.com/one/dsi/dsi23/index.php?cmd=Online+Program+View+Session&selected_session_id=2093254&PHPSESSID=u8dus6po1jmada8e87rb7cik7u
13. *Mir, S., **Rea, D.**, & Zacharia, Z. (2024). Impact of contextual factors on allocation of scarce supplies [Conference]. *Production and Operations Management Society Annual Meeting (Minneapolis, MN)*.
14. ***Rea, D.**, Anderson, D., & Bjarnadottir, M. (2024). Time VS testing: Initial conditions and ED physician behavior [Conference]. *Production and Operations Management Society Annual Meeting (Minneapolis, MN)*.
15. ***Rea, D.**, Anderson, D., & Bjarnadottir, M. (2024). Time VS testing: Physician information gathering under variable conditions [Conference]. *Institute for Operations Research and the Management Sciences Annual Meeting (Seattle, WA)*.
16. ***Rea, D.**, Irie, K., & Aktekin, T. (2024). A bayesian state space model for demand surge mitigation in the emergency department [Conference]. *Philadelphia Operations and Technology Day (Lehigh University, Bethlehem, PA)*. <https://sites.google.com/lehigh.edu/operations-tech-conference-24/schedule>
17. ***Rea, D.**, Lozano, L., & Froehle, C. (2024). Can justice be profitable? The benefits of balancing equity and equality in optimization models [Conference]. *European Conference on Operational Research (Copenhagen, DK)*.
18. *Ye, H., **Rea, D.**, Feng, R., & Peng, D. (2024). An examination of busy hospital's transfer decisions and insurance-based discrimination [Conference]. *Production and Operations Management Society Annual Meeting (Minneapolis, MN)*.
19. *Mir, S., **Rea, D.**, & Zacharia, Z. (2023). Allocation in buyer-supplier relationships: A justice perspective [Confer-

- ence]. *Decision Science Institute Annual Meeting (Atlanta, GA)*.
- 20. ***Rea, D.**, Anderson, D., & Bjarnadottir, M. (2023). Time and testing in the emergency department [Invited Seminar]. *Boston University Operations & Technology Management Seminar Series (Boston, MA)*.
 - 21. *Ye, H., **Rea, D.**, Feng, R., & Peng, D. (2023). Effect of hospital utilization on interhospital transfer decisions [Conference]. *Production and Operations Management Society Annual Meeting (Orlando, FL)*.
 - 22. Ye, H., ***Rea, D.**, Feng, R., & Peng, D. (2023). Do busy hospitals discriminate when making transfer decisions? [Conference]. *Institute for Operations Research and the Management Sciences Healthcare (Toronto, CA)*.
 - 23. Ye, H., ***Rea, D.**, Feng, R., & Peng, D. (2023). Who gets transferred when hospitals are busy? [Invited Seminar]. *Baruch Zicklin Omega Seminar Series (New York City, NY)*. <https://blogs.baruch.cuny.edu/deltaomega/omega-schedule>
 - 24. Ye, H., ***Rea, D.**, Feng, R., & Peng, D. (2023). Who gets transferred when hospitals are busy? [Conference]. *Philadelphia Operations and Technology Day (Philadelphia, PA)*. <https://sites.google.com/temple.edu/operation-management-2023/home>
 - 25. *Mir, S., **Rea, D.**, & Zacharia, Z. (2022). Impact of contextual factors on allocation of scarce supplies [Conference]. *Decision Science Institute Annual Meeting (Houston, TX)*.
 - 26. ***Rea, D.**, Lozano, L., & Froehle, C. (2022). The equity-equality tradeoff in multi-stakeholder routing problems [Conference]. *Production and Operations Management Society Annual Meeting (Virtual)*.
 - 27. ***Rea, D.** (2021). Can you automate 'fair' [Conference]. *Center for Supply Chain Research at Lehigh Fall Forum (Lehigh University, Bethlehem, PA)*. https://youtu.be/-126gg_9bv4
 - 28. ***Rea, D.**, Lozano, L., & Froehle, C. (2021). Fair allocation decisions in multi-stakeholder healthcare scenarios [Conference]. *Institute for Operations Research and the Management Sciences Annual Meeting (Virtual)*. <https://youtu.be/EFEhG7Ca6AA>
 - 29. ***Rea, D.**, & Froehle, C. (2020). Adapting emergency department operations in real-time [Conference]. *Institute for Operations Research and the Management Sciences Annual Meeting (Virtual)*. <https://davidjrea.github.io/INFORMS2020Talk.html>
 - 30. ***Rea, D.**, Froehle, C., Masterson, S., Stettler, B., Fermann, G., & Pancioli, A. (2020). Unequal but fair: Incorporating distributive justice in operational allocation models [Conference]. *Decision Sciences Institute Annual Meeting (Virtual)*. <https://davidjrea.github.io/DSI2020-UnequalButFair.html>
 - 31. ***Rea, D.**, Lozano, L., & Froehle, C. (2020). Designing fair allocation algorithms for healthcare gig work [Conference]. *Decision Sciences Institute Annual Meeting (Virtual)*. <https://davidjrea.github.io/DSI2020-AlgorithmicJustice.html>
 - 32. *Green, B., & **Rea, D.** (2019). Coping with the business cycle as a non-profit organization [Conference]. *Institute for Operations Research and the Management Sciences Annual Meeting (Seattle, WA)*.
 - 33. ***Rea, D.**, & Froehle, C. (2019). Accommodating demand surges via proactive staff-planning in the emergency department [Conference]. *Institute for Operations Research and the Management Sciences Annual Meeting (Seattle, WA)*.
 - 34. ***Rea, D.**, & Froehle, C. (2019). Probabilistic forecasting for online staffing decisions in the emergency department [Conference]. *Production and Operations Management Society Annual Meeting (Washington, DC)*.
 - 35. ***Rea, D.**, Froehle, C., Masterson, S., Stettler, B., Fermann, G., & Pancioli, A. (2019). Ensuring fairness in physician time allocation: A multi-objective optimization approach [Conference]. *Production and Operations Management Society Annual Meeting (Washington, DC)*.
 - 36. ***Rea, D.**, Froehle, C., Masterson, S., Stettler, B., Fermann, G., & Pancioli, A. (2019). Optimizing fairness in a multi-site emergency department staff allocation model [Conference]. *Institute for Operations Research and the Management Sciences Healthcare (Boston, MA)*.
 - 37. ***Rea, D.**, Froehle, C., Masterson, S., Stettler, B., & Pancioli, A. (2019). A novel approach to fair allocation of physician clinical time across multiple locations [Conference]. *Society for Academic Emergency Medicine (Las Vegas, NV)*.
 - 38. ***Rea, D.**, Froehle, C., & Qin, Y. (2019). Managing uncertainty via distributional demand forecasting [Conference]. *Institute for Operations Research and the Management Sciences Healthcare (Boston, MA)*.
 - 39. ***Rea, D.**, Babar, A., & Froehle, C. (2018). Allocating clinical capacity to maximize staff satisfaction [Conference]. *Production and Operations Management Society Annual Meeting (Houston, TX)*.
 - 40. ***Rea, D.**, & Froehle, C. (2017). Improving patient transport services through crew flexibility [Conference]. *Institute for Operations Research and the Management Sciences Annual Meeting (Houston, TX)*.
 - 41. ***Rea, D.**, Froehle, C., & Powell, E. (2017). Optimal staffing, scheduling and dispatch policies for emergency transport services [Conference]. *Production and Operations Management Society Annual Meeting (Seattle, WA)*.

ORGANIZED AND CHAIRED SESSIONS

Miniconference Organizer:

College of Health Care Operations Management SYNPASE Mini-conference

2026

- with E. David Zepeda, Nan Liu, Wiljeana Glover, Xin (David) Ding, Ebru Bish,

Session Organizer & Chair: Empirical Studies of Physician Behavior

Institute for Operations Research and the Management Sciences Healthcare

2026

Session Organizer & Chair: Mental Health

Production and Operations Management Society 2025 Annual Conference

2026

- with Zlati Nenova

Session Organizer & Chair: Dynamic Fairness

Production and Operations Management Society 2025 Annual Conference

2025

- with Violet Chen

Session Organizer & Chair: Fairness and Equity in OM

Production and Operations Management Society 2025 Annual Conference

2025

- with Aydin Alptekinoglu

Miniconference Organizer:

College of Health Care Operations Management SYNPASE Mini-conference

2025

- with E. David Zepeda, Nan Liu, Wiljeana Glover, Xin (David) Ding, Ebru Bish,

Panel Organizer & Facilitator: Developing and Managing Interdisciplinary Collaborators

Equity and Access in Algorithms, Mechanisms, and Optimization (EAAMO) Faculty Network

May 22nd 2024

- with Woojin Jung, Nikhil Garg, Faidra Monachou, Tom Hartvigsen

Session Organizer & Chair: Empirical Healthcare Operations

Institute for Operations Research and the Management Sciences 2024 Annual Meeting

October 21st 2024

Miniconference Organizer:

College of Health Care Operations Management SYNPASE Mini-conference

2024

- with E. David Zepeda, Nan Liu, Wiljeana Glover, Xin (David) Ding, Tinglong Dai

Track Chair: Health Care Operations Management

Health Care Operations Management

2024

- with Susan Lu, Guihua Wang

Session Organizer & Chair: Fairness in Healthcare Operations

Institute for Operations Research and the Management Sciences Healthcare

2023

- with Shannon Harris

Miniconference Organizer:

College of Health Care Operations Management SYNPASE Mini-conference

2023

- with E. David Zepeda, Tinglong Dai, Nan Liu, Wiljeana Glover, Xin (David) Ding

Panel Facilitator: Engaging with Industry for Teaching and Research

Production and Operations Management Society College of Health Care Operations SYNPASE Mini-conference

2023

Session Organizer & Chair: Empirical Assessments of Health Systems

Production and Operations Management Society 2023 Annual Conference

2023

Session Organizer & Chair: Service Operations and Human Behavior

Production and Operations Management Society 2023 Annual Conference

2023

- with Craig Froehle

Session Organizer & Chair: Deploying Health Technology

Production and Operations Management Society 2023 Annual Conference

2023

- with Eric Xu

Session Organizer & Chair: Designing Patient-Centric Systems (1)

Production and Operations Management Society 2022 Annual Conference

2022

Session Organizer & Chair: Designing Patient-Centric Systems (2)

Production and Operations Management Society 2022 Annual Conference

2022

Session Organizer & Chair: Designing Fair Service Systems (1)

Production and Operations Management Society 2022 Annual Conference

2022

Session Organizer & Chair: Designing Fair Service Systems (2)

Production and Operations Management Society 2022 Annual Conference

2022

Session Organizer & Chair: Managing Uncertain Patient Demand

Institute for Operations Research and the Management Sciences Healthcare

2019

Session Organizer & Chair: Implementing Data Driven Technology

Institute for Operations Research and the Management Sciences Healthcare

2019

Session Organizer & Chair: Human-Centric Healthcare Operations

Production and Operations Management Society Annual Meeting

2019

Session Organizer & Chair: Data-Driven Decision-Making

Production and Operations Management Society Annual Meeting

2019

OTHER SPEAKING & MEDIA

Fairness Efficiency Symbiosis

Presentation

College of Business Research Retreat

5/15/2025

- David Rea
- College of Business Research Retreat (Bethlehem, PA)

Fairness in Operations

Presentation

College of Business Faculty Research Talks

4/10/2025

- David Rea
- College of Business Faculty Research Talks (Bethlehem, PA)

The Business of Healthcare

Magazine Article

Lehigh Business Magazine, Issue No. 11

2025/Fall

- David Rea
- Lehigh Business Magazine, Issue No. 11 (Bethlehem, PA)

Fairness Efficiency Symbiosis

Magazine Article

Lehigh Business Magazine, Issue No. 11

2025/Fall

- David Rea
- Lehigh Business Magazine, Issue No. 11 (Bethlehem, PA)
- <https://business.lehigh.edu/news/lehigh-business-magazine/issue-no-11-2025-2026/research-bulletins>

Fairness and Efficiency

Podcast

iLLuminate Podcast, Lehigh University Business Blog

10/7/2025

- David Rea
- iLLuminate Podcast, Lehigh University Business Blog (Bethlehem, PA)
- <https://business.lehigh.edu/blog/2025/david-re-a-fairness-and-efficiency>

Who Is Transferred When Hospitals Get Busy?

Presentation

Lehigh College of Business Research Retreat

5/19/2023

- Han Ye, David Rea, Raymond Feng, David Peng
- Lehigh College of Business Research Retreat (Bethlehem, PA)

Fairness in Healthcare Operations

Presentation

Lehigh College of Health Research Roundtable

3/29/2023

- David Rea
- Lehigh College of Health Research Roundtable (Bethlehem, PA)

Automating Fairness

Magazine Article

Lehigh News

3/28/2023

- Lehigh News (Bethlehem, PA)
- <https://www2.lehigh.edu/news/david-re-a-automating-fairness>

Healthcare, Food and Fairness

Lehigh Business Magazine, Issue No. 8

- Lehigh Business Magazine, Issue No. 8 (Bethlehem, PA)
- <https://business.lehigh.edu/news/lehigh-business-magazine/issue-no-8-fall-2022/health-care-food-and-fairness>

Magazine Article

2022/Fall

Healthcare, Food and Fairness

iLUminate Podcast, Lehigh University Business Blog

- iLUminate Podcast, Lehigh University Business Blog (Bethlehem, PA)
- <https://business.lehigh.edu/blog/2021/david-reas-health-care-food-and-fairness>

Podcast

12/1/2021

Who's Still Showing Up? Changes in Emergency Department Patient Population During the COVID-19 Pandemic

Emergency Medicine Research Interest Group, University of Cincinnati

Presentation

7/9/2020

- David Rea
- Emergency Medicine Research Interest Group, University of Cincinnati (Cincinnati, OH)

Balancing Equity and Equality in the Allocation of Physician Clinical Time Across Multiple Emergency Department Facilities

Emergency Medicine Research Interest Group, University of Cincinnati

Presentation

5/8/2019

- David Rea
- Emergency Medicine Research Interest Group, University of Cincinnati (Cincinnati, OH)

What to do with a degree in math?

Department of Mathematics, Wittenberg University

Panelist

10/5/2018

- David Rea
- Department of Mathematics, Wittenberg University (Springfield, OH)

Preliminary Results for Physician Clinical Hour Allocation Model

University of Cincinnati Emergency Medicine Research Interest Group

Presentation

5/2/2018

- David Rea
- University of Cincinnati Emergency Medicine Research Interest Group (Cincinnati, OH)

Balancing Equity and Equality in Time Allocation

Emergency Medicine Research Interest Group, University of Cincinnati

Presentation

4/10/2018

- David Rea
- Emergency Medicine Research Interest Group, University of Cincinnati (Cincinnati, OH)

Allocating Clinical Capacity Across Multiple Hospital Locations to Maximize Staff Satisfaction

Graduate Student Poster Expo, University of Cincinnati

Poster

2/15/2018

- David Rea
- Graduate Student Poster Expo, University of Cincinnati (Cincinnati, OH)

Healthcare Analytics: Saving Lives and Lowering Costs

Departmental Colloquium Series, Wittenberg University

Presentation

4/3/2017

- David Rea
- Departmental Colloquium Series, Wittenberg University (Springfield, OH)

Preliminary Results for University of Cincinnati Health Patient Transport System

Emergency Medicine Research Interest Group, University of Cincinnati

Presentation

5/3/2017

- David Rea
- Emergency Medicine Research Interest Group, University of Cincinnati (Cincinnati, OH)

University of Cincinnati Health Patient Transport System Simulation

Emergency Medicine Research Interest Group, University of Cincinnati

Presentation

3/8/2017

- David Rea
- Emergency Medicine Research Interest Group, University of Cincinnati (Cincinnati, OH)

Can a CUSP Catastrophe Model Describe the US Economy?

Department of Mathematics Clemson University

Masters Thesis Defense

4/23/2015

- David Rea
- Department of Mathematics Clemson University (Clemson, SC)

Dictionary Learning via Alternating Projection

Zentrum für Technomathematik Universität Bremen

Presentation

7/7/2014

- David Rea

- Zentrum für Technomathematik Universität Bremen (Bremen, Germany)

The Effect of Climate Change and Climate Change Policy on Ohio's Economy

Wittenberg University Honors Thesis Defense

Undergraduate Honors Thesis Defense

4/21/2012

- David Rea

- Wittenberg University Honors Thesis Defense (Springfield, OH)

Tracking Student Improvement for On-the-Rise

Center for Civic and Urban Engagement Internship Presentation

Presentation

2010/08

- David Rea

- Center for Civic and Urban Engagement Internship Presentation (Springfield, OH)

H.TEACHING

Intro to Supply Chain Operations Management

Lehigh University

Instructor

Fall 2025

- number of sections: 2

Analytics for Service Operations

Lehigh University

Instructor

Spring 2025

- number of sections: 1

Intro to Supply Chain Operations Management

Lehigh University

Instructor

Fall 2024

- number of sections: 2

Healthcare Operations Management Analytics

Lehigh University

Instructor

Fall 2024

- number of sections: 1
- Independent Study for PhD Student (EJ Rovella); Uncredited

Analytics for Service Operations

Lehigh University

Instructor

Spring 2024

- number of sections: 1

Intro to Supply Chain Operations Management

Lehigh University

Instructor

Fall 2023

- number of sections: 2

Analytics for Service Operations

Lehigh University

Instructor

Spring 2023

- number of sections: 1
- designed from scratch: experiential learning, case based design
- ratings above university, college, and department average across all 6 questions

Intro to Supply Chain Operations Management

Lehigh University

Instructor

Fall 2022

- number of sections: 2

Intro to Supply Chain Operations Management

Lehigh University

Instructor

Spring 2022

- number of sections: 2

Supply, Cost, and Risk Management

Lehigh University

Instructor

Fall 2021

- number of sections: 1
- redesigned from scratch: case based
- ratings above university, college, and department average across all 6 questions

Introduction to Business Analytics

Instructor

- number of sections: 1

University of Cincinnati

Summer 2019

Services Management

Co-instructor

- number of sections: 1

University of Cincinnati

Fall 2018

Statistical Models

TA

- number of sections: 1

University of Cincinnati

Spring 2016

Statistical Methods

TA

- number of sections: 1

University of Cincinnati

Fall 2015

Introduction to Mathematical Analysis

Instructor

- number of sections: 2

Clemson University

Spring 2015

Introduction to Mathematical Analysis

Instructor

- number of sections: 1

Clemson University

Fall 2014

Precalculus Laboratory

TA

- number of sections: 2

Clemson University

Spring 2014

Precalculus Laboratory

TA

- number of sections: 1

Clemson University

Fall 2013

Essential of Calculus

Co-instructor

- number of sections: 1

Wittenberg University

Fall 2011

Essential of Calculus

Co-instructor

- number of sections: 1

Wittenberg University

Spring 2010

Algebra 1

Co-instructor

- number of sections: 5
- Americorps Funded
- Earned Ohio-Non Tax Teaching Certificate

Saint Martin DePorres High School

Year 2012-2013

J. SERVICE AND LEADERSHIP ROLES

LEHIGH UNIVERSITY

Center for Community-Driven Assistive Technologies (CDAT)

Lehigh University

2025 - Present

- Faculty Support Member

Computer Science and Business (CSB) Prelusion

Lehigh University

August 19th 2025

- Case Study Discussion Leader

New Faculty Orientation

Lehigh University

August 15th 2024

- “No Longer New” Faculty Panel Member

Impact Fellowship

Lehigh University Office of Creative Inquiry

December 3rd 2024

- Referee

Annual Women in Business Conference

Lehigh University

Feb 10th 2024

- Panel Facilitator

Impact Fellowship

Lehigh University Office of Creative Inquiry

May 7th 2024

- Referee

Interfolio Project Team

Lehigh University Office of Provost, Faculty Affairs

2024

- Committee Member

New Faculty Orientation

Lehigh University

August 16th 2022

- New Faculty Panel Member

College of Health Strategy Conference

Lehigh University

2022

- Invited External Faculty

Grad-Undergrad Research Connections Program

University of Cincinnati, Lindner College of Business

2019

- Mentor

COLLEGE LEVEL

Meet the Majors

Lehigh University

Septemper 20th 2025

- Presenter

Marketing Department Faculty Search

Lehigh University

2024

- External Committee Member

Admitted Student Open Discussion Lunch

Lehigh University College of Business

April 3rd 2023

- Faculty Participant

Accounting Department Faculty Search

Lehigh University

2022

- External Committee Member

AACSB Reaccreditation

Lehigh University College of Business

Feb 28th 2022

- Untenured Faculty Panel Member

Center for Supply Chain Research

Lehigh University College of Business

2021 - Present

- Faculty Support Member

OBAIS PhD Student Research Seminar

University of Cincinnati, Lindner College of Business

2020

- Organizer

DEPARTMENT LEVEL

Supply Chain Management Club

Lehigh University

2025 - Present

- Faculty Advisor

DATA Department Faculty Search

Lehigh University

- Departmental Committee Member

2025

Meeting with DATA Department Endowment Funders

Lehigh University

May 1st 2024

- Participant

DATA Departmental Research Seminar

Lehigh University

2023 - Present

- Seminar Organizer

MSBA Capstone Project

Lehigh University

2023

- Data Provider

DATA Department Faculty Search

Lehigh University

2023

- Departmental Committee Member

DATA Department Faculty Search

Lehigh University

2021

- Departmental Committee Member

EXTERNAL

Track Chair

Production and Operations Management Society Annual Meeting

Health Care Operations Management

2024

- with Susan Lu, Guihua Wang

Secretary (elected)

Production and Operations Management Society

College of Health Care Operations Management

2021 - Present

Reviewer

2020

- (1) 2020 DSI Annual Conference Student Paper Competition

2022

- (1) 2022 POMS College of Behavior Junior Scholar Competition
- (3) Annals of Operations Research
- (3) Health Care Management Science
- (1) International Journal of Operations & Production Management

2023

- (1) 2023 INFORMS DEI Student Paper Competition
- (3) Health Care Management Science
- (1) Journal of Operations Management
- (1) Manufacturing & Service Operations Management
- (2) Production and Operations Management

2024

- (3) Health Care Management Science
- (1) Management Science
- (2) Manufacturing & Service Operations Management
- (2) Production and Operations Management

2025

- (2) Health Care Management Science
- (2) Journal of Operations Management
- (8) POMS CHOM 2025 Best Paper Competition
- (2) Production and Operations Management

