Penn State Smeal College of Business Center for Supply Chain Research<sup>®</sup>

# 2021 - 2022 Center for Supply Chain Research Impact Report



Center for Supply Chain Research®

smeal.psu.edu/cscr

# **From the Executive Director**

When I agreed to join the Center for Supply Chain Research<sup>®</sup> back in 2013, I did so fully aware that the transition from industry to academia might be unique. Now, as I look back on the almost nine years since, I am amazed at how much I have learned and experienced from the 'community of practice' that we call the CSCR<sup>®</sup>.

The center is an amazing place for collaboration and truly defines the meaning of the word 'collegial.' Whether it is working with our faculty, our students, staff, or you-the industry partners and friends who help support us—the benefits are compounded by the fact that we share a common purpose for knowledge and exceptional performance in all that we do.

Looking back on the legacy that Dr. Coyle and, Dr. Grenoble—

who we, unfortunately, lost this year—we still have the same shared vision of bringing together a community for the purpose of advancing the supply chain profession. While some things remain the same, others have changed.

With the advisory board's guidance, we're in the process of finalizing our next strategic plan—a plan that will take us into our fourth decade. Technology is now a more critical component than ever and that shows up time and again in our work. This plan will maintain the same mission of combining our legacies in talent, knowledge, research, and networking, with some new but very important initiatives like expanding diversity, equity, and inclusion among our faculty, Ph.D. candidates, students, and staff-that will make that fourth decade one we can be equally proud of.

At the end of the day, none of what we do would even be remotely possible without the unending support of you, our industry partners. You're the

"The center is an amazing place for collaboration and truly defines the meaning of the word 'collegial.' "

fuel that feeds our fire to keep this train rolling. We can't thank you enough for the many years of support you have given to us and in advance for the many years to come. Thank you for being part of this wonderful 'community of practice,' that is the Center for Supply Chain Research.





### **Steve Tracey**, **CSCR** Executive Director



## Mission Statement and Core Values

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#### The Center for Supply Chain Research (CSCR)

is part of the internationally ranked Penn State Smeal College of Business that connects researchers and professionals from leading organizations within a community that is shaping the future of the supply chain discipline. Although research is in our name and a core part of what we do, it is just one aspect of a mission that includes knowledge enhancement through educational offerings, access to emerging talent from one of the nation's leading supply chain institutions, and opportunities to network with other supply chain professionals.



CSCR is committed to upholding our core values which represent our commitment to excellence. These values guide our processes, actions, and how we connect with others to create a better, more equitable world.

## **Receptive Listening:** We respect the needs and goals of our students, alumni, partners, and faculty. **Evolving Expertise:** We know that adaptability is vital to our executive learning programs and courses. **Inclusive Diversity:** We commit to being as inclusive as possible and open to diverse opinions for better research, more informed leadership, and the betterment of our center. **Lifetime Partnership:** We aim to serve not only as a resource for you in the present but also as a lifetime partner for future collaborations. **Thought Leadership:**

We support our students, alumni, partners, and faculty as they lead, inspire, and serve as an invaluable resource for the supply chain industry.



We believe that self-awareness and self-improvement are crucial catalysts for both career and individual growth.



#### **Lifelong Learning:**

We embrace a lifelong learning mindset and provide engaging learning opportunities for our community.



# By the Numbers: Academic Year 2021/2022







Industry partners, averaging greater than 10 years of sponsorship

Supply chain professionals attended 34 Supply Chain Leadership Academy education sprints

Student/recruiter interactions logged while 1,429 students and 179 companies interacted at 5 career fair days held in both spring and fall semesters

Attendees in 5 CSCR learning and networking events

Students participating in 44 research projects, engaging with 37 companies

## **Community and Connections**

Tune into the social buzz across four social media platforms, hear from supply chain experts on the CSCR Supply Chain Podcast, and access relevant research-based resources through the CSCR Research Portal.

### **CSCR Social Media**



**Total impressions** 

8,575 **Total followers** 

Penn State Smeal CSCR | smeal.psu.edu/cscr

1,022 6,489

46+

626

**Fun Fact:** 

Conrail became the first corporate sponsor of the center in the early 1990s.



# **Significant Impacts**





### **Students Setting a High Standard**

Penn State Smeal students are driven and primed to step into industry without missing a beat. Our students pivoted to embrace new learning styles during the pandemic and discovered alternate ways of networking, all while still pursuing their goals. Throughout the past year, Smeal supply chain students dove headlong into student activities, research opportunities, and professional experiences to make an impact in the face of adversity.

**Ben Krantwiess** is a senior in the supply chain and information management systems program at Smeal. In spring of 2022, Krantwiess visited a local paper mill as part of a research engagement project supported by the center.

The American Eagle Paper Mills plant makes paper entirely from recycled paper. The mill sought a solution for disposing of a costly byproduct made during the process of creating new paper entirely from recycled paper. To mitigate these expenses, an alternative arose to provide the lime to local farmers as a suitable replacement for what they put on their land. Thus far, research on this lime mud shows even better outcome for a farmers' yield than the lime they would have purchased straight from a lime manufacturer.

Krantwiess visited the plant along with Lauren Bechtel, program director for CSCR, and Ilona Ballreich, program manager for the Penn State Sustainable Communities Collaborative, to get a better understanding of the entire process. His research highlights a cost/benefit analysis of the solution and achieves a sustainability metric due to the innovative reuse of the byproduct.



"Taking on this project has given me first-hand experience working with business stakeholders in a real-world setting. Through this experience I have been able to thoroughly develop my research and project management skills. The Center for Supply Chain Research, specifically Lauren Bechtel, has supported me every step of the way providing me fantastic opportunities to learn and grow. In addition, touring the paper manufacturing site helped me develop a deeper understanding of the project specifications and see directly how the manufacturing process produces the lime byproduct."

**Lois Jung** graduated with a bachelor's degree in industrial engineering and a Smeal College Business Fundamentals Certificate in May 2022. During her time at Smeal, Jung conducted two CSCR student engagement research projects in logistics and procurement. The experiential learning opportunity enabled her to work closely with Odyssey and LMI, two of the center's valued sponsors.

Her first project with Odyssey focused on identifying leading external indicators which can improve their freight rate prediction algorithm from Odyssey's internal shipment data. Jung's skills were put to use as she analyzed and normalized the internal data and searched for the possible external factors which may affect the freight rate whether it be GDP, weather, housing price, unemployment rate or Covid-19.

During her second project with LMI, Jung stepped into a role of conducting market research on an integrated digital supply chain that can be implemented in the U.S. Department of Defense's acquisition system. She first searched for the possible suppliers and conducted a comparison analysis that organized and rated the pros and cons of each supplier's software.

These research projects helped Jung to stand out as a supply chain student and prove her abilities as a future leader. As a result, outside organizations took notice and Jung became the recipient of two prestigious awards. The first was the MIT 2022 Supply Chain Excellence Award. With this award, Jung earned a

tuition fellowship of \$25,000 towards the MIT Supply Chain Management (SCM) Master's Degree Program, an honor that is given out to outstanding graduating supply chain seniors. She was also awarded the Best Engineering Design Award, sponsored by People's Choice of Delphi Technologies, that took place through an engineering design capstone class involving 260 other teams.



"Because procurement, manufacturing, and logistics are closely intertwined within the supply chain, my field experiences at each Kimberly-Clark, Lockheed Martin, and Amazon have given me valuable insights while working at the Penn State Center for Supply Chain Research (CSCR).As an independent researcher at CSCR, I assisted in developing a freight rate forecasting model and conducted market research on a digital supply chain for Department of Defense (DoD). Throughout these research projects, I was able to broaden my perspective and better understand the complex supply chain system of industries."

### **Student Accomplishments**

The AWESOME Excellence in Education Scholarship was created in 2013 to provide women enrolled in a full-time supply chain degree program with the opportunity to attend the AWESOME Symposium and the CSCMP EDGE Conference. Since that inaugural year, five women have been selected each year until 2021, when the program was expanded to include 20 recipients and a \$5,000 financial award toward tuition.

#### **Award Recipients**

- Katie Cocco, SCIS '23
- Maria Karamanos, SCIS '23

The MIT Supply Chain Excellence Award are fellowships given annually at select universities, to the most outstanding graduating senior supply chain and/or industrial engineering majors. Recipients of the award earn a tuition fellowship of \$25,000 towards the MIT Supply Chain Management Master's Degree Program and Honorable Mentions receive a \$10,000 tuition fellowship.

#### **MIT Supply Chain Excellence Award Recipients**

- Emily Irvin, SCIS '22
- Lois Jung, SCIS '22
- Catherine Taylor, SCIS '22

#### Honorable Mentions

- Jonathan Eyer, SCIS '22
- Katherine Groves, SCIS '22

Helen Eakin Eisenhower Award Awarded to graduating seniors who have demonstrated scholarship, leadership, character, and service to the Smeal College of Business.

Emily Irvin, SCIS '22

The John M. and Anne B. Stevens Academic Integrity Award: Awarded to a graduating senior or seniors who demonstrate leadership in academic integrity by serving on a college committee, task force or in a leadership role, dedicated to upholding the Smeal Honor Code and to promoting a culture of academic integrity.

Sydney Ascencio, SCIS '22

**Smeal Student Marshal:** Students are selected for their outstanding academic achievement and contributions to student life. The student marshal leads their fellow graduates in the procession to enter the commencement hall.

• Katherine Groves, SCIS, '22





Outcomes

**Supply Chain Management** 



### **Shattering Glass Ceilings**

Over the past few decades, women have made steady advancement in the supply chain profession. They are breaking barriers and overcoming obstacles to lead the way for future female leaders in the field. CSCR is pleased to spotlight women who are making a difference in their professional careers by hosting annual panel sessions and maintaining a dedicated platform with multimedia interviews with women as they share their experiences, advice, and insights into their careers in supply chain.

#### Maria Karamanos

Karamanos is a senior in the Penn State Smeal Supply Chain & Information Systems Department. Karamanos is a part of Smeal's renowned Sapphire Leadership Academic Program and envisions a world where every woman has a seat at the table. Karamanos acknowledges the value-add of Smeal offerings and expresses her thanks for faculty like Dr. Novack who inspire her and provide mentorship regarding career decisions. Upon graduation, Karamanos will be joining Microsoft as a supply chain planner.

"Whether it comes to being in a class or being in the workplace—if you don't understand something or there is something you'd like to see changed—you have to be the one to start the conversation. The incredible resources at Smeal and CSCR empower me to do just that."





#### **Donna Palumbo-Miele**

Palumbo-Miele is founder and CEO of Concordia Supply Chain Group LLC, a WBENC-certified supply chain management solution consulting firm she founded in 2020, providing startups to Fortune 500 clients with solutions in business process outsourcing, strategic sourcing, supplier relationship management, supplier diversity, and supply chain sustainability. Prior, she held an executive level position in global procurement for Bloomberg L.P., lead roles at Johnson & Johnson, and spent 15 years at The Walt Disney Company. Additionally, Palumbo-Miele was the first woman to serve as chairperson for the CSCR Advisory Board and holds a bachelor's degree in business logistics from Penn State, a master's in business administration from the University of Tampa, and a doctorate degree in organizational leadership

from Nova Southeastern University.

"At the end of the day, we can all empower one another, so I encourage other women to be mentors, advocates, and champions for other women. We all started somewhere in our careers and if we each help one person, we are making a positive difference in our profession and the impact can be exponential."



Myers is the Senior Manager of Capital and Government Property at The Boeing Company. Myers joined the organization in 2007, shaping her career through several roles at Boeing including procurement agent, procurement career advancement top of mind, Myers participated in one of Boeing's leadership development programs from 2015 to 2018. She's primarily supported the defense aerospace market and has experience in commercial aerospace and indirect supply chain. Myers holds a bachelor's degree in supply chain and information systems at Penn State and a master's degree in business administration from St. Joseph's University.

"Sometimes you have to sit there and think, 'No, I've done the schooling, I have the experience, and I'm empowered to

be in this position.' There was a reason why I was chosen."

#### Johanna Amaya

Amaya is an associate professor of supply chain management at Smeal. She is an experienced researcher skilled in transportation systems, humanitarian logistics, operations management, and supply chain resilience. Since joining the faculty in 2021, she has shared her knowledge of transportation and logistics to improve sustainability and quality of living, especially in urban areas. Amaya holds a doctoral degree in transportation engineering from the Rensselaer Polytechnic Institute and a master's degree in industrial and systems engineering from the University of Florida.

"It is important to have the support of others in the field when you are in the process of developing your research agenda. I had the opportunity to work with great people who have provided me with advice and support in this process. I consider them my mentors. Being a good mentor is not just about having someone assigned to you; it's working with someone (assigned or not) while being open to providing advice and support in any possible way that could allow them to move further, to succeed... It is really important to give a hand to others who are coming behind us."

27 narrative experiences from alumni, professionals from sponsor organizations, and Penn State students

#### **Ashley Myers**



### **Empowering Our Partners**

The Center for Supply Chain Research offers an array of learning and networking opportunities designed to add to the cannon of supply chain research, provide a platform for discussion, support professional development, and foster a sense of community within leaders in the supply chain field.

#### **Diversified Learning Portfolio**

The Supply Chain Leaders' Forum connects leading supply chain professionals with academics twice a year to discuss business challenges organizations must address to remain competitive. These forums are uniquely formatted to drive purposeful discussion and to seek commonalities in business practice.

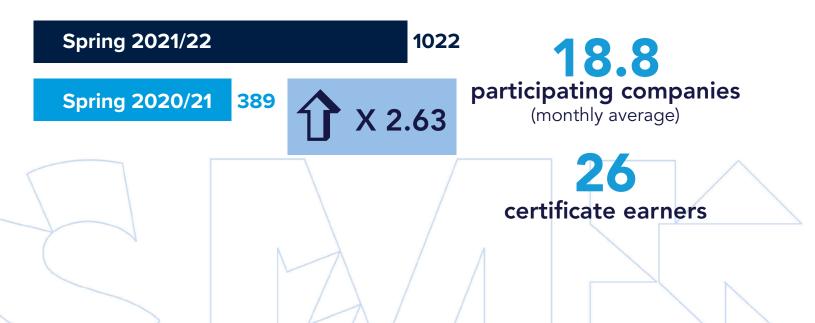
- Fall 2021 Supply Chain Finance Evolution and the Digital Era
- Spring 2022 What the Heck Just Happened and What Do We Do Now?

#### **Executive Education that Excites**

In response to corporate sponsor requests for convenient, online self-development opportunities, the Center for Supply Chain Research offered the Virtual Supply Chain Leadership Academy Sprint in partnership with CorpU, a Udemy Company. Offered exclusively to our corporate sponsors, these executive education benefits are available bimonthly in a flexible, virtual format. In 2022, a new element was introduced to compliment the pre-existing professional development benefit: the Supply Chain Leadership Academy certificate series. The certificate series are made up of three individual sprints that are stacked together based on topic. Sponsors can earn an applicable certificate at the completion of the series.

- Total Cost of Ownership Series
- Logistics Series
- Risk and Agility Series
- Future of Procurement Series

### **Number of Participants**



#### **Supply Chain Talent Development Symposium**

Held biennially, the Supply Chain Talent Development Symposium is an event designed to connect thought leaders, industry experts, and peers around the ever-changing talent management landscape. Research shows that organizations with leading talent management practices have significantly outperformed other organizations by a wide margin. For this reason, the center offers this symposium to share the latest in talent development and help organizations transform their workforce strategies.

#### **Corporate Sponsor Meetings**

CSCR corporate sponsors meet with the center's leadership team twice a year. These advisory meetings provide opportunities to review and discuss the state of the center, future event planning, administrative matters, and the planning and debriefing of research programs.

#### **Expert Insight on Emergent Topics**

In 2022, the Center for Supply Chain Research added a new program designed to foster networking opportunities and facilitate peer-to-peer interactions. The CSCR Advisory Board Webinar Series are board-directed virtual events that aim to address special topics that are timely, relevant, and of interest to our community. The webinars will take place during months the center does have a predetermined event, ensuring that sponsor members receive numerous opportunities to interact with colleagues and discuss emergent topics.

#### **Community on the Go**

The Penn State Smeal Supply Chain Podcast, sponsored by the Center for Supply Chain Research, shares a monthly discussion of contemporary topics in supply chain management with Penn State faculty, expert practitioners, and CSCR sponsor organizations. Steve Tracey, professor of practice and executive director for the Center Supply Chain Research and Irv Grossman, executive vice president of Chainalytics, bring listeners a conveniently accessible discussion of happenings at the CSCR, current research topics, hot takes on supply chain topics in the news, and discussions with leaders in the supply chain industry.

All-time downloads from listeners across the United States and a host of other nations

2024

**Episodes featuring leading** supply chain experts discussing the latest in the industry

#### Matt Peterson – Principal, Supply Chain Solutions, LMI

LMI has consistently taken advantage of student research opportunities as a key benefit or our CSCR corporate sponsorship. In May, Penn State students completed six LMI-sponsored research projects on a variety of supply chain topics, including commercial supply chain technologies, supply chain risk, and climate change logistics. The sponsored research provides academic rigor and directly links to LMI's strategic innovation initiatives. LMI experts collaborate with Penn State students and faculty to build on an LMI capability, offering, or prototype to help solve some of the government's toughest supply chain challenges. We look forward to this year's student projects and to continuing our valued 20+-year partnership with CSCR.

#### Jim Owens - Chief Growth Officer, SDI

SDI has been a corporate sponsor for several years and we continue to find new ways to create enterprise value through our affiliation with the CSCR. From sponsor meetings and supply chain forums where there is opportunity for networking and best practice sharing to access to world class research and collaboration on real world problem solving, we value our relationship with the CSCR and the broader community. We also take advantage of the educational opportunities such as supply chain sprints which allowing our employees to access practical information and skills that has direct relevance and impact on their roles and performance.

#### Brenda Berg – Supply Chain Projects Leader, IBM

IBM is committed in supporting supply chain employees with their skills progression. We offer numerous internal educational opportunities for employees to explore, enhance and develop new skills. By partnering with Penn State CSCR through their Supply Chain Leadership Academy, we have been able to develop a customized learning program that is relevant, practical, and directly aligns to our IBM Supply Chain strategy. Through the customized learning program, our supply chain employees are able to learn, collaborate, and apply their new knowledge, which enables us to continue to deliver innovative and operational excellence to our clients and stakeholders.

#### Kim Kainer, Vice President, Supply Chain Planning, Dell

At Dell, we have gained great benefit and value through our consistent partnership with the CSCR office and Penn State students. These research projects provide a fresh and unique perspective on solving current challenges facing Dell's supply chain. The Penn State supply chain program equips students with the knowledge and resources which lead to innovative and out of the box solutions that help solve Dell's prevalent issues and stay on top of industry trends. Our collaboration with CSCR continues to enable Dell to be an industry supply chain leader that continues to challenge the status quo and face today's every changing challenges.

### CSCR's Commitment to Diversity, Equity, and Inclusion

In recent years, the field of supply chain has placed increased focus on diversity and inclusion initiatives. In full support of these actions, the Center for Supply Chain Research is pleased to highlight a few ways we are striving to make supply chain a more equitable and inclusive field.

#### Ph.D. Unrepresented **Constituencies Program**

To positively change the future makeup of professors in academia, it is our belief that we must actively engage individuals from underrepresented constituencies to encourage and attract them to enroll in doctoral-level education and an academic career as their aspiration.

"We must open the doors of opportunityand we must also prepare our people to walk through those doors successfully," - President Lyndon B. Johnson

Each year, the college will be adding positions and funding for four new Ph.D. candidate positions that are dedicated to persons from underrepresented constituencies in the academic community. Not only will these positions be created, but we will also intentionally recruit individuals from institutions and encourage students of color to consider an academic career as a potential life choice. Unfortunately, in today's current climate, communities of color are significantly less represented in the academic community than in the population; we will work to change that.

As of 2021, CSCR executive director Steve Tracey and Felisa Higgins, clinical professor of supply chain management and associate dean for undergraduate education at Smeal, have been selected to serve as co-academic Our aim is to address that at Smeal by creating representatives on the advisory council as well the pathway for future academicians to earn as subcommittee members on the academic their Ph.D.'s from a top-tier research institution. engagement workstream. Additionally, Tracey is Our belief is that this initiative will have knockacting as the lead author on a diversity-focused on effects on the perception of attainable scholarship program that will be designed to success. When students of color see themselves support educational opportunities for students in the front of the classroom, more people will of color who are interested in the supply chain recognize a college education as a pathway to profession. success.

#### **DISCOVERing Diversity Partnerships**



In 2017, the Center for Supply Chain Research entered a partnership with DISCOVER (Diversity and Inclusion in Supply Chain), a cross-industry organization that serves as a catalyst for the advancement of people of color in supply chain. In addition to supporting DISCOVER's annual summit, Smeal's CSCR has put forth two thought leaders to serve on the organization's Advisory Board Council.

### Where Research and Business Meet

#### **Engaging with Industry**

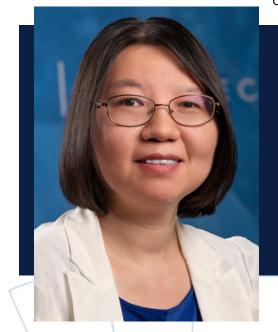
Staying engaged with business community is among the focuses of CSCR® to promote not only knowledge dissemination, but also contemporary relevance to supply chain professionals. Last year, CSCR participated in four renowned industry conferences in-person and virtual, including CSCMP, NASPO, Supply Chain Digital Growth Expo, and Business Transformation & Operational Excellence Summit & Industry Awards. CSCR also made six speaking appearances at various reputable venues. There, CSCR had a lively discussion on pivotal topics, including supply chain risk management, lastmile logistics in the digital era, supply chain agility and resiliency, the future of procurement, and sustainability-infused digital transformation.

#### **New Leadership for CSCR Research**

CSCR is pleased to announce Dr. Hui Zhao and Dr. Brent Moritz have been appointed as the center's co-directors of research. The Smeal College of Business faculty members will share the role within CSCR and focus on bolstering the center's research portfolio and industry relationships.

Zhao, associate professor and the Charles and Lilian Binder Faculty Fellow, has an extensive background in both teaching and researching supply chain, logistics, and analytics. Her research focuses on improving supply chain effectiveness and efficiency through the application of analytics to align incentives and induce collaboration. Aside from academia, Zhao's work has been well recognized by industry and government agencies such as the U.S. Food and Drug Administration, the National Science Foundation, and Department of Justice.

As an associate professor with global business experiences, Moritz brings a wealth of knowledge around the discipline of supply chain in teaching, research, and industry. His research is in behavioral operations management, focusing on decision-making in contexts



*"I believe industry and academia can mutually benefit"* from each other. While many of our faculty do research that I believe could directly benefit the industry, the industry could feed the academia with current and future challenges that can develop into great research topics," explained Zhao. "CSCR is the perfect platform for such collaboration, and I hope to help strengthen this mutually beneficial relationship with this codirector of research position."

such as inventory and forecasting. Moritz spent a decade working in manufacturing operations and supply chain management—including international experiences working in Mexico, England, and Germany-before going on to academia.

"I'm looking forward to helping to make connections—hearing from firms about the challenges they face and connecting them to researchers who can help solve those challenges. I can help spread the news about some of the excellent research already happening at Smeal," said Moritz.

Sharing the director position for CSCR's research agenda is a new path forward and one where the center benefits from the expertise of two leading Smeal faculty members. The co-directors' collective knowledge will be instrumental in achieving the center's vision for research collaborations and solving problems that persist in supply chain.

#### Honoring CSCR Leadership Team Members for Service, Dedication

The Center for Supply Chain Research offers heartfelt thanks to Aydin Alptekinoglu and John Langley for their years of service on the CSCR Leadership Team. Alptekinoglu, who served as the center's longest standing Director of Research to date, will be taking sabbatical in the fall of 2022. Langley, CSCR's Director of Development for nearly 12 years, will be scaling back and diversifying the portfolio of his work at Penn State. Accompany us in thanking Alptekinoglu and Langley for their guidance in positioning the center for excellence.



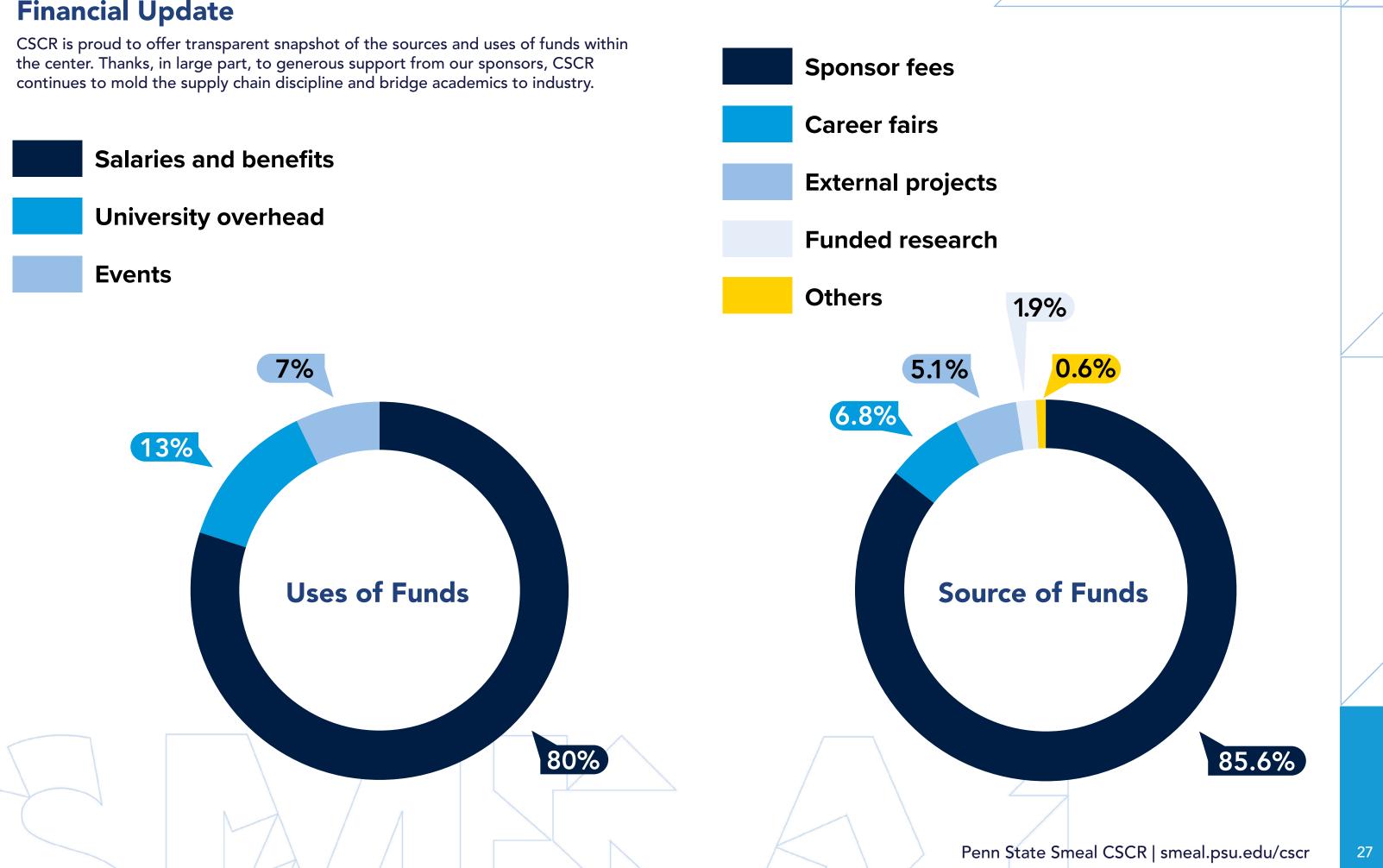




# **Dollars and Sense**



### **Financial Update**





# **Appreciation for our Partners**





### Thank you!

A heartfelt thanks to our valued sponsors, board of advisors, and key contributors for their continued service and support of the Center for Supply Chain Research. We are proud to partner with many public and private sector companies who are devoted to sharing their insights and thought leadership as they help maintain the center as a leader in supply chain research, executive education, and talent development. The center is grateful for generous support provided by our corporate sponsor members.























### **CSCR Board of Advisors**

#### **Board Chairpersons**

 CSCR 2022 Advisory Board Chairperson Matt Schlosser Vice President, Supply Chain Strategy & Program Management, The Hershey Company

 CSCR 2022 Advisory Board Vice-Chairperson Linda Bixby, Ph.D. Director, Academic Programs, NobleReach Foundation

#### **New Board Members**

- Shannon Beecher Vice President, Services Supply Chain, IBM
- Sylvie Thompson Consulting Vice President, Consumer Brands, Retail and Distribution, NTT Data Consulting
- David Vieira President and Chief Executive Officer, CLX Logistics

#### **Returning Board Members**

- Michael A. del Rosario Regional Transportation Manager, Walmart
- Jim Owens Chief Growth Officer, SDI
- Linda Pulli Executive Director, Global Supply Chain, Merck

The center would like to extend our sincerest congratulations to Shannon Beecher for her promotion to VP of Services Supply Chain at IBM; Michael del Rosario on his promotion to Regional Transportation Manager at Walmart; and Matt Schlosser for his promotion to Vice President, Supply Chain Strategy & Program Management at The Hershey Company.. We are proud to have these members serve on the CSCR Advisory Board as they dedicate their time and expertise to supporting the forward trajectory of the center.

## **Special Recognition**

CSCR would like to offer special thanks to several key sponsors for their unique contributions goals and mission.

GoChain's CEO Henry Ines entered a partnership with the center in the enterprise and government blockchain solutions space. The partnership has brought Penn State among early adopters and one of more than 20 operating nodes using proof-of-reputation as the algorithm that powers real projects aimed at bringing the potential of blockchain to supply chain management.

**LMI** recently sold its for-profit subsidiary which will retain the LMI name, and the remaining entity will be re-branded as the NobleReach Foundation. The center gains an additional sponsor in the NobleReach Foundation and is pleased to retain our friendship with Dr. Linda Bixby who was instrumental in leading an initiative to increase the diversity of Ph.D. candidates at Penn State and facilitating LMI's involvement in seven student research projects.

The Hershey Company's Matt Schlosser was appointed as the 2022–2023 CSCR Advisory Board Chairperson and tasked with managing board meetings and serving as the voice of the board to the CSCR Executive Director, CSCR leadership, and University administration as appropriate. Schlosser has played a key role in leading data collection, analysis, and the creation of the future iteration of the CSCR Strategic Plan.

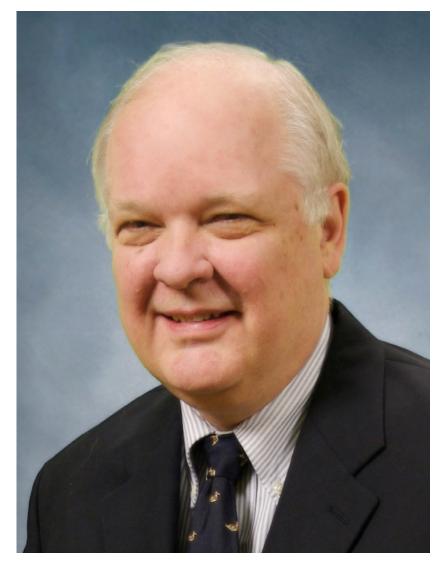
**IBM** is a recognized leader in agile culture with Digital Supply Chain Transformation Leader Galen Smith at the helm. Smith collaborated with Steve Tracey and Dr. Kusumal Ruamsook on supplychain agility research and co-authored an article, Cultivating Relentless Supply Chain Agility At IBM, published in the Supply Chain Management Review. Additionally, IBM participated in a Ph.D. candidate project in collaboration with Penn State students and faculty. Titled the Cost of Supply Chain Complexity, the research is being co-advised by Smeal College of Business professors Dr. Dan Guide and Dr. Saurabh Bansal.

Johnson & Johnson's Laverne Bastress was the first to introduce the Center for Supply Chain Research to DISCOVER (Diversity and Inclusion in Supply Chain), a cross-industry organization that serves as a catalyst for the advancement of people of color in the supply chain. In 2017, CSCR received an invitation to participate in the non-profit organization and as of 2021, Smeal academic leaders Steve Tracey and Felisa Higgins were selected to serve as co-academic representatives on the advisory council as well as subcommittee members of the organization's academic engagement workstream.

## and collaborations in the past year. Their support has been instrumental in achieving the center's

### In Memoriam

Our community sadly lost a pillar this past spring when William Luther Grenoble, IV, familiarly known as "Skip," passed away peacefully at home with his family on May 22, 2022, after an extended illness.



Grenoble joined the Smeal College of Business in 1987 as a Ph.D. candidate after an extensive and highly successful career in wholesale distribution. He went on to serve as the CSCR Administrative Director from 1990 to 2000, and then as CSCR's longest-serving Executive Director from 2000 to 2014, succeeding Dr. John Coyle. His research interests included customer service, benchmarking, the use of information technology in supply chain management, logistics complexity, and the role of transportation policy on logistics performance.

He was a member of the Council of Supply Chain Management Professionals, the Warehousing Education and Research Council, and the Distribution Committee of the National Defense Transportation

Association, among other professional affiliations. Grenoble had also served on the executive board of the International Customer Service Association, and on the board and the North American leadership team of the Supply Chain Council. He held a Ph.D. from Smeal, an M.B.A. from Columbia University, and a bachelor's degree from Princeton University.

Beyond question, Grenoble leaves an impressive and extensive professional legacy. Yet just as momentous, he will forever be remembered for his thoughtful disposition, kind nature, and the lasting impact he made on many lives.



# **Tomorrow's Supply Chain, Today**

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With an eye to the future, the Center for Supply Chain Research is aiming higher and calling on our partners to help us continue to transform the future of supply chain. Based on a survey of your peers, we've gathered that networking, benchmarking, and emergent technology are of critical importance to our members. As such, we have made intentional efforts to cater our offerings and programs to meet your needs.



### Leverage the Power of Partnership

For over three decades, CSCR has successfully built a community of researchers and leading organizations in both the private and public sectors to advance the supply chain discipline with impactful research, innovation, and world-class knowledge. Through our corporate sponsor program, supply chain organizations can curate and sustain world-class research, access executive education, and level up their talent development.



#### Insights

Meet consistently with the leadership team to weigh in on the CSCR agenda and participate on our CSCR Advisory Board.



#### Research

Direct and help facilitate the CSCR research agenda while gaining priority access to current faculty, practitioner collaboration, early working publications, and student research of your choice. Additionally, collaborate with talented students eager to fulfill your company's research requests.



#### Knowledge

Take advantage of self-development opportunities such as the Supply Chain Leaders' Forum, the Supply Chain Talent Development Symposium, and four pre-paid seats for monthly Supply Chain Leadership Academy courses.

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#### Talent

Access to over 1,000 Penn State students from supply chain and information systems, management information systems, industrial engineering and more at the fall and spring career fairs. Sponsorship benefits include complimentary registration and prime booth placement.



#### Networking

Tap into the multitude of opportunities to stay up-to-date on supply chain trends, connect with peers, and be inspired.



#### Support

Take advantage of available management support with our faculty who will consult on company-specific supply chain issues and topics. Additionally, each member company is assigned a key point of contact who will check in quarterly to address your concerns and provide updates on CSCR developments.



#### Communications

Stay in the loop on all CSCR happenings through the center's social media, news platform, and podcast as well as a member-exclusive online repository rife with programs, information, and research.

Penn State is an equal opportunity, affirmative action employer, and is committed to providing employment opportunities to all qualified applicants without regard to race, color, religion, age, sex, sexual orientation, gender identity, national origin, disability or protected veteran status. Nondiscrimination: https://policy.psu.edu/policies/ad85 U Ed BUS 22-08. RIIT0922

## **Stronger Together**

The Center for Supply Chain Research would not be where we are today, were it not for the tireless efforts of our supporters and core team. However, success is not stagnant, and our work is not done.

We seek to transform the supply chain field and become even more equipped to empower a community of academics and professionals. As we do so, we encourage you to engage with our carefully crafted events; interact with our recruiting opportunities; capitalize on your benefits as a sponsor; and share the good news of the impact report with your colleagues, family, and friends.

Our next steps forward as a center will continue to be rooted in our core values that emphasize equitable practices and humity, lifelong learning and partnership, as well as evolving expertise. We are committed to working alongside Penn State faculty, staff, students, and supporters to maintain the Center for Supply Chain Research as a leader in the supply chain space and business partner trusted to serve your organizations well today. And ten years from today.

#### Research

Access to the CSCR research agenda; connections with leading faculty; ability to tap into student collaborations to research issues facing your organization

#### Knowledge

Pre-paid virtual professional development courses; online knowledge repository access





#### • Talent

Guaranteed complimentary registration at the Supply Chain & Information Systems Career Fair each fall and spring

#### Networking

Complimentary participation in all events, including the Supply Chain Leaders' Forum, Supply Chain Talent Symposium, and the CSCR Corporate Sponsor Meeting