# CARISCAREPORT

CENTER FOR APPLIED RESEARCH AND INNOVATION IN SUPPLY CHAIN - AFRICA

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# Reaching a global audience, CARISCA hosts first Supply Chain Research Summit

The Center for Applied Research and Innovation in Supply Chain—Africa hosted its first Supply Chain Research Summit July 21-22, 2021. The two-day event featured four keynote presentations, six sessions, two panel discussions, and a PhD dissertation proposal award session. Envisioned as an annual event, the Supply Chain Research Summit attracted 300 supply chain researchers, practitioners and students from 40 countries (including 20 African countries).

Above, from left to right: CARISCA team member Elsie Addae with CARISCA PhD scholarship recipients Grace Annan, Owusu Boahen, Priscilla Agyemang and Priscilla Asamany. (Photo by Emmanuel Offei/KNUST)

# OPENING A DIALOGUE ON AFRICAN SUPPLY CHAIN RESEARCH

Of all CARISCA's events, the Supply Chain Research Summit, a conference for supply chain researchers and practitioners, is a centerpiece of CARISCA's strategy to put Africa's supply chain research on the map. The goal of this event is to strengthen African supply chain capacity through bringing together academic and non-academic researchers, as well as public, private, and civil society organizations to create an ongoing dialogue to address complex supply chain challenges in Africa.

The Supply Chain Research Summit was envisioned as a forum to address critical development priorities and showcase locally relevant supply chain research and innovations. Many of CARISCA's activities focus on capacity-building activities in Ghana and specifically at KNUST. The summit is the first of many steps that CARISCA is taking to create a pan-African hub for supply chain research, industry reports and publications, and best-in-class degree programs and training for supply chain practitioners and researchers.

(Continued on page 4)







# **CARISCA Scholarships fuel dreams**



CARISCA's scholarship program provides opportunities for KNUST graduate students in supply chain management. CARISCA scholarship recipient Olivia Adu-Poku is pursuing her master's degree in Logistics and Supply Chain Management at KNUST.

Growing up as the first child in a tight-knit family of four, setting the right example for her sister was very important to Olivia Adu-Poku.

"A firstborn carries a lot of responsibilities, my sister looks up to me, she follows my footsteps — my success determines her success and that is why I have to work very hard," said Adu-Poku.

Being a role model for her sister meant Adu-Poku had to put in a lot of effort in school.

"I always remember having my nose in a book. In my school magazine, my picture was tagged 'Olivia is always reading everything, even math." Olivia Adu-Poku (left) with her mother. (Photo courtesy of Olivia Adu-Poku)

Adu-Poku's mother envisioned her daughters as one day becoming notable women in Ghana and prioritized education as the way to achieving this dream.

Adu-Poku's family struggled financially.

"It was difficult, my mother was a trader and my dad was in the mining sector, money was not very easy to come by," but her mother's ongoing encouragement helped Adu-Poku to keep working hard to make her mother proud and graduate from secondary school.

Due to financial constraints, Adu-Poku believed that her educational journey would end right after she finished secondary school.

Through her mother's sacrifices and words of encouragement, Adu-Poku completed her bachelor's degree in political science and information studies at the University of Ghana.

"I am grateful to my mother for her sacrifices and words of encouragement, she is my backbone."

# CARISCA SCHOLARSHIP OPENS DOORS TO GRADUATE STUDY

Today, Adu-Poku is a beneficiary of CARISCA's scholarship program, and she is pursuing a Master's of Science in Logistics and Supply Chain Management at KNUST. CARISCA is awarding scholarships at KNUST to significantly increase the number of supply chain professionals in Ghana with advanced degrees and to provide opportunities to students like Adu-Poku.

Adu-Poku said that it was never part of her plan to get a master's degree.

"After my undergraduate studies, I was done, there was no way I could further my education even if I wanted to. At least I had done my best, but thanks to CARISCA, I have the opportunity to pursue a master's course in logistics and supply chain."

Some young women in Ghana are wary of pursuing a degree in a male-dominated sector like supply chain management. Adu-Poku, however, has a long-term goal of managing her own cosmetic company, which means she has a keen interest in learning more about supply chain logistics.

"I am looking forward to managing my own company, I want to learn more about warehousing, logistics and everything else."

Adu-Poku added, "I want to motivate my sister; I want to prove to her that there is no such thing as a male-dominated field. If you can do something, don't let your gender define you. Go for it. Little girls should be encouraged to read about and study such programs."

Adu-Poku believes in the power of talking to young ladies about logistics and supply chain as a profession because it will help them build their interest and passion for the field.

"Thanks to CARISCA, today my mother walks head high; she's so proud of me and boasts of having a daughter on her way to holding a master's degree."

-Olivia Adu-Poku



Olivia Adu-Poku (second from right) with (from left to right) her mother, cousin and sister. (Photo courtesy of Olivia Adu-Poku)

#### BY THE NUMBERS, JUNE 2020-SEPTEMBER 2021

### **Data Snapshot: Year One**

#### 18 events, trainings and workshops

CARISCA hosted 18 webinars, stakeholder meetings, partner convenings and capacity building workshops in year one.

#### 60+ Scholarships

In its first year, CARISCA awarded over 60 Ph.D. and master's scholarships to Ghanaian students with financial need.

# 1,100+ Attendees at CARISCA events, trainings and workshops

CARISCA hosted 1,144 attendees (413 female attendees) at its year one events, workshops and trainings.

#### **Access and inclusion**

CARISCA's events attracted a large number of women (37%), a key goal for CARISCA's programming.

#### 4 meetings with key advisors

CARISCA held two advisory board meetings in year one, October 2020 and April 2021. Advisory board members support CARISCA activities.

KNUST hosted Partnership Coordination Committee (PCC) meetings in March and September 2021.
The PCC builds and manages key stakeholder relationships.

#### 5 degree programs, 2 courses

CARISCA created two new supply chain courses and five new degree programs

#### **Staying Connected**

CARISCA more than doubled its mailing list in the second half of year one ending the first year of the project with nearly 1,000 subscribers from around the world.



Some of the CARISCA team members, summit panelists and session hosts assemble outside the IDL Conference Center at KNUST. (Photo by Emmanuel Offei/KNUST)

#### (Continued from page 1)

According to CARISCA's principal investigator and executive director, Dale Rogers, "Hosting this event the first year of the project is critical because we need as much time as possible to ramp up research cooperation between global supply chain academics and academics and practitioners in Africa. Our job is to strengthen KNUST through CARISCA, and there is no reason to wait."

Conferences serve many purposes. They provide opportunities for networking, exposure to new ideas and approaches, and the chance to appreciate upcoming scholars.

According to Rogers, "conferences like our research summit are powerful because they germinate ideas, plant seeds and give researchers and practitioners opportunities to meet people they otherwise never would. I think the summit is a great investment of people's time and I think this summit is the beginning of something really special."

Like many organizations, CARISCA had to adapt to COVID-19 restrictions and pivoted to a virtual conference format. This format attracted interest and participation from a global audience.

# BUILDING A ROBUST PAN-AFRICAN SUPPLY CHAIN NETWORK

The goal of the summit is to create a supportive network of pan-African supply chain researchers to facilitate large-scale collaborations among higher education institutions, government agencies, business partners, and civil society organizations (CSOs) to improve supply chains.

CARISCA's director at KNUST, Professor Nathaniel Boso, explains that "the aim of this unique summit is to bring together supply chain scholars in Africa and beyond to have a conversation on Africa's supply chain research and how it can be harnessed to address the continent's supply chain challenges."

CARISCA invited faculty and students from higher education institutions throughout Africa and a wide range of public, private, and CSO stakeholders to source challenges that can inform research in supply chains, provide insight into supply chain innovations emerging in the field and expand CARISCA's base of funding and partner support. Hosting a free virtual event enabled broad participation with attendees across the globe.

#### **SUMMIT HIGHLIGHTS**

Professor Felicity Asiedu-Appiah moderated a panel discussion, Advancing Women in Supply Chain: Research Questions and Opportunities, that shed light on the personal experiences of the panelists and what unique characteristics they bring to the supply chain management field.

"I thought that particular session was really well done because it gave both an African and an American perspective on challenges that women in supply chains face in the job market. While there is some overlap between the challenges that Africans and Americans face, there are also some stark differences that were brought out by the panel members who had experience in both the U.S. and African countries," said Rogers.

#### **DISSERTATION AWARD SESSION**

The summit also included a dissertation award competition to showcase the best logistics and supply chain management PhD research projects being carried out in African higher education institutions. Last spring, CARISCA invited submissions from doctoral researchers whose primary affiliation is from universities or higher institutions of learning in Africa and whose research is in logistics and supply chain management.



Assilah Agigi from the University of Pretoria was the top student in CARISCA's PhD Dissertation Session. (Photo courtesy of Assilah Agigi)

Applicants were required to be PhD researchers who would have at least defended their proposals by the time of the conference. Proposals were also invited from candidates close to the final submission or defense of their thesis.

"It is important to recognize and develop African researchers because they are the next generation of supply chain leaders," said Rogers.

Assilah Agigi from the University of Pretoria was

the top student with her submission, "An Investigation of the Relationship Between the Diffusion and Adoption of Sustainable Supply Chain Management Practices, Organization Capabilities Development and Firm Innovativeness."



KNUST Professors Felicity Asiedu-Appiah (left) and Dorcas Nuertey (right) in a panel discussion at the summit (Photo by Emmanuel Offei/KNUST)

In the Sustainability in Supply Chains session, the session chair, Sherwat Elwan Ibrahim of the American University in Cairo, Egypt, said, "sustainability in supply chains is an area near to my heart, and if you have been in supply chain for quite a while you might notice that supply sustainability in supply chain management began more like a peripheral topic, but now it's becoming at the forefront of supply chain management."

In addition to keynote presentations and the dissertation proposal award, dynamic session chairs hosted sessions about myriad supply chain topics, ranging from Supply Chain Analytics to Healthcare Supply Chains. Additional proceedings from the Supply Chain and Information Systems, The Intersection of Public Health Supply Chain Research and Policy, Global Supply Chains sessions and the Supply Chain Financing Panel can be found on CARISCA's website.

#### **WORLDWIDE INTEREST**

Summit attendees came from 40 different countries, including participants from 18 African countries and 300 individuals attended at least one session. Ghanaians accounted for approximately half of all attendees, followed by the United States, Nigeria, the United Kingdom, Tanzania, Uganda and South Africa.

One of CARISCA's goals is to promote the inclusion of women in all its activities. Thirty-five percent of attendees were female and 65 percent male, which exceeds CARISCA's long-term goal of 30 percent inclusion of women in all of its activities.

The event showcased supply chain scholars from around the world including 23 presenters from African higher education institutions.

Rogers was surprised at the global reach of the first summit.

"It was great to see how successful the event was in its first year. The event logistics were great, which enabled us to work across the globe and attract a large audience. I think that this research summit can become a flagship event for African supply chains," he said.

#### **LOOKING AHEAD**

Rogers believes, "there is energy moving forward from this event. The feedback I have received is positive and there is a lot of enthusiasm about supply chains. This is important because the truth is, we [American scholars] don't do research in Africa because Africa has been a smaller market and it has not been a source for products, but this is starting to change. I believe we are at the right time and place to start doing this type of research. There is an important need that the CARISCA project can help fill, and it's clear there is interest."

Each year, CARISCA plans to increase the scope and scale of the summit to accommodate the growth of the CARISCA stakeholder base. More than 600 summit registrants opted into the CARISCA mailing list. Registrations came from nearly 100 higher education institutions, including more than 40 from Africa.

CARISCA will continue to leverage the summit to build a diverse network of supply chain researchers and practitioners.

#### JOIN US NEXT YEAR

Join us next summer for CARISCA's 2022 Supply Chain Research Summit. The call for papers will be posted fall 2021.

The call for applications for the dissertation proposal award session will be issued in January 2022.



# CARISCA's 2021 Supply Chain Research Summit

**SPECIAL THANKS** to our session and panel chairs, presenters and panelists, and keynote speakers. Proceedings online: <a href="mailto:links.asu.edu/carisca-summit">links.asu.edu/carisca-summit</a>.

#### **KEYNOTE SPEAKERS**

**Keynote 1:** Managing the Supply Chain in a Turbulent and Uncertain World by Prof. Martin Christopher, Emeritus Professor, Cranfield University, U.K.

**Keynote 2:** Digitization and Medical Supply Chains in Africa by Mr. Daniel Sarfo Marfo, Senior Vice President, Zipline International, Ghana

**Keynote 3:** Sustainability Issues in Supply Chains in Africa by Professor Kenneth Amaeshi, University of Edinburgh, Scotland

**Keynote 4:** Health Product Supply Chains – Opportunities for Teaching, Research and Service Impact by Dr. Prashant Yadav, Center for Global Development, U.S./U.K., Harvard Medical School, USA

# PANEL DISCUSSION 1: ADVANCING WOMEN IN SUPPLY CHAIN: RESEARCH QUESTIONS AND OPPORTUNITIES

**Moderator:** Dr. (Mrs.) Felicity Asiedu-Appiah, KNUST, Ghana **Panelists:** 

- Prof. Yemisi Bolumole, Ryder Professor of Supply Chain Management, University of Tennessee, U.S.
- Ms. Azuka Okeke, Chief Executive Officer, Africa Resource Center, Nigeria
- Dr. Dorcas Nuertey, Lecturer, KNUST, Ghana
- Mrs. Stella Addo, Country Manager, Chartered Institute of Procurement & Supply (CIPS), Ghana

#### PANEL DISCUSSION 2: SUPPLY CHAIN FINANCING

**Moderator:** Prof. Thomas Choi, Arizona State University, U.S. Panelists:

- Erik Hofmann, Professor, University of St. Gallen, Switzerland
- Simon Templar, Visiting Fellow, Cranfield School of Management, U.K.
- Rudi Leuschner, Associate Professor, Rutgers University, U.S.
- Mostafa Elnahhas, Chief Technology Officer, Fawry and Angel Investor, Egypt
- Dale Rogers, Professor, Arizona State University, U.S.

#### **SESSION 1: HEALTHCARE SUPPLY CHAINS**

Paper 1: Multi-Stakeholder Response to COVID-19 Emergency in Sub-Saharan Africa: An ISM Analysis of Critical Barriers by Temidayo Akenroye, Senior Lecturer, Liverpool John Moores University, U.K.

Paper 2: Closing the treatment gap: Anti-epileptic Drug Availability, Affordability and Quality in Urban and Rural Ghana by Priscilla Mante, Senior Lecturer, KNUST

Paper 3: mHealth Impact on Demand-Capacity Mismatch in Accessing Health Services in Africa by **Session Chair** Prof. Gilbert Nyaga, Northeastern University, U.S.

#### **SESSION 2: SUPPLY CHAIN ANALYTICS**

Paper 1: Big Data Analytics Capability and Market Performance by Oluwaseun Olabode, Assistant Professor, University of Bradford, U.K.

Paper 2: The Perils and Promises of Big Data Research in Operations Management and Supply Chain Management by Francis Kofi Andoh-Baidoo, Bright Frimpong, Christian Bautista, and Rakesh Guduru, University of Texas Rio Grande Valley

Paper 3: Enhancing participation in online health communities: A decision tree induction theory development approach by Joseph Manga, Emmanuel Ayaburi and **Session Chair** Francis Kofi Andoh-Baidoo, University of Texas Rio Grande Valley

#### **SESSION 3: SUSTAINABILITY IN SUPPLY CHAINS**

**Session Chair:** Prof. Sherwat Elwan Ibrahim, American University in Cairo, Egypt

Matthew Quayson, University of Electronic Science and Technology of China

Vivian Osei, Dept. of Management Science, Business School, Ghana Institute of Management and Public Administration Joseph Sarkis, Professor, Worcester Polytechnic Institute, U.S.

## SESSION 4: SUPPLY CHAIN AND INFORMATION SYSTEMS

Paper 1: The Effect of Data-Driven Culture on Customer
Development and Firm Performance by Benjamin Agyei-Owusu,
Lecturer, KNUST

Paper 2: How Does IOS-Enabled Business Intelligence Enhance Supply Chain Performance? by Caleb Amankwaa Kumi, Lecturer, KNUST

Paper 3: The Effect of Supplier Integration on Firm Performance by **Session Chair** Prof. David Asamoah, KNUST, Ghana

# SESSION 5: THE INTERSECTION OF PUBLIC HEALTH SUPPLY CHAIN RESEARCH AND POLICY

**Session Chair:** Dr. Frankline Keter, Africa Resource Center (ARC)

Paper 1: The Role of the Private Sector in Resolving Current Challenges in Public Health Supply Chains in Enugu State, Nigeria by Patrick Oseloka Ezepue and Henry Uro-Chukwu, Coal City University, Enugu, Nigeria

Paper 2: Assessing Challenges in Last Mile Distribution of Family Planning Commodities and the Effects on Product Availability and Accessibility in Kano, Nigeria by Maxwell Adibe and Chukwu Otuto Amarauche, University of Nigeria, Nsukka

Paper 3: Lean thinking in Medical Supply Chains: Applicability and Success Factors by Severine Kessy, Gladness Salema and Yusta Simwita, University of Dar es Salaam, Tanzania

#### **SESSION 6: GLOBAL SUPPLY CHAINS**

Session Chair: Dr. Magnus Hultman, Brock University, Canada Oluwaseun Olabode, Asst. Professor, University of Bradford, UK Emmanuel Anin, Lecturer, Kumasi Technical University, Ghana Alexander Otchere Fianko, Senior Lecturer Kumasi Technical University, Ghana



### The Power of Networks: A virtual workshop for supply chain professionals

This event is part of CARISCA's Advancing Women in Supply Chain webinar series and part of CARISCA's larger goal to increase inclusion and impact for women in supply chain management.

While many parts of the world struggle with how and when to return to in-person events, it's more important than ever for students and professionals to develop a robust online presence to stay connected, network and advance their careers.

CARISCA hosted a two-hour LinkedIn training and networking event in July 2021, Endless Supply: Build and Leverage Your Professional Network for Supply Chain Students and Professionals, to jumpstart and build supply chain networks for women in an increasingly virtual world.

LinkedIn is an online professional social network that can help supply chain students and practitioners network and build their careers. Keane believes in the power of LinkedIn because it is the largest business-oriented networking website for professionals, with over 740 million active members in more than 200 countries.

Katy Keane led the event. A LinkedIn superuser, Keane is a lecturer in ASU's Supply Chain Management Department. She provides technical assistance for CARISCA on forecasting, inventory planning, business processes, and developing KNUST's continuing professional education (CPE) curriculum. Keane brings a history of leading transformational supply chain change in different industries.

Her experience and expertise in transportation, vendor compliance, allocation-forecasting, inventory planning, and business process re-engineering have driven significant savings and performance improvements for clients and companies.

#### TAPPING INTO THE POWER OF LINKEDIN

Keane emphasized the importance of optimizing individual LinkedIn profiles to highlight professional accomplishments and experiences to create opportunities for building trust with professional networks, employers, and recruiters.

She also shared expert tips by providing hands-on examples about setting up a professional profile with a personal headline, networking with first and second-level connections, using LinkedIn Learning, and leveraging LinkedIn for career advancement through recommendations.

#### 7-Point Tune-up for Your LinkedIn Profile

- 1. Use a specific title or tagline. This can be a job title, a mission statement, or anything that connects you with others.
- 2. Update your contact info! Make it easy for someone to get in touch with you.
- 3. Add a cover image related to your area. Check out Unsplash for ideas and inspiration.
- 4. Turn a critical eye to your profile photo. Does it look like you? Does the photo provide a clear view of your face? Do you have an open smile? Are you using a bright background?
- 5. Use the About section to summarize your interests and experience. Highlight your accomplishments and avoid the temptation to rehash your job descriptions.
- 6. Demonstrate your expertise with multimedia, photos, presentations and videos. You can create videos using Zoom and presentations using PowerPoint, Google Slides or SlideShare.
- 7. Customize your public profile URL with your name or business name: see Customize Your Public Profile URL. (Consider using the same handle or username across social media platforms.)

"Once you've got your LinkedIn profile built out, you can be proud of your professional and personal story and use it to network with others," Keane explained. "Your headline is your brand, it's what makes you stand out, and it's where you share your unique story in a short elevator pitch."

#### **USING LINKEDIN AS A PROFESSIONAL WEBSITE**

Keane encouraged participants to use LinkedIn as a professional website to build their online network, and she urged participants to develop their networks by joining affinity groups on its platform.

After Keane's presentation, participants moved into breakout groups to work on their LinkedIn profiles, develop their personal brands and stories, and network with other participants.

Participants shared their individual stories and received feedback from their peers about communicating their professional strengths on their LinkedIn profiles and communicating their professional successes to advance their careers.

Visit CARISCA's website for the webinar recording and links to more resources.

# Challenges facing women in Ghana's northern agricultural supply chains

After conducting site visits in the Northern Region of Ghana to assess how to best serve women in low-income agricultural supply chains, CARISCA team members summarized their findings in a policy brief published in Ghana's Business and Financial Times.

This applied research is an instrumental part of CARISCA's work to promote access and inclusion of women in supply chains, which is pivotal to increasing revenue for women and disenfranchised groups. CARISCA is also using the results of this needs assessment to guide its future activities and expand its locally relevant research footprint.

#### **CHALLENGES AND OPPORTUNITIES**

The research team uncovered three overarching themes facing women in agriculture and suggested opportunities for businesses, policymakers and universities to improve Ghanaian supply chains.



- Challenge: There is inadequate infrastructure, equipment and access to capital that leads to wasted food and lower wages along agricultural supply chains in the Northern Region of Ghana.
   Opportunity: New locally relevant policies and structures can encourage and provide rural communities with greater access to supply chain information and financial capital.
- 2. Challenge: It is difficult for women to overcome traditional gender roles that disenfranchise their ability to be active decision-makers in the production and distribution of wealth generated from supply chains.
  Opportunity: Rethink traditional economic models that do not capture women's engagement in the workforce. Develop and sustain educational strategies that inform Ghanaian society about the benefits of women's participation and success in supply chains.
- 3. Challenge: Limited technological awareness, knowledge of market conditions, and supply chain educational opportunities create market mismatches and waste.
  Opportunity: It is important to develop easy-to-use, accessible and affordable mobile-based toolkits and training manuals to help women find the proper market and price for their produce, to reach their full earning potential and so that aggregators and buyers can meet market demands.



Photo by CHUTTERSNAP on Unsplash

### CARISCA: Meeting the Needs of Supply Chain Professionals

CARISCA is creating professional development programs in supply chain management as part of its education and training portfolio.

In September-October 2021, CARISCA is hosting the workshop "Managing Supply Chain Risk and Resilience in a Developing Economy" in Kumasi and Takoradi, Ghana. Participants can upgrade their professional skills in risk management and expand their expertise in developing and executing organizational resilience strategies in complex and uncertain procurement and supply chains environments.

This three-day training workshop was designed for procurement and supply chain practitioners and professionals working for governmental and non-governmental entities.

#### **OPERATING UNDER COMPLEXITY**

Businesses continue to operate in an increasingly complex and interconnected global environment. Major supply chains experience surprising disruptions, risks and uncertainty – critical challenges that require your attention and leadership.

Managing risks and building resilience into an organization's supply chains in this environment are essential skills for professionals and practitioners responsible for managing complex procurement and supply chain processes.

This workshop will provide supply chain professionals with the relevant tools and insights required to effectively manage the risks while improving the resilience level of organizational supply chains. This training will focus on the necessary skills to identify, analyze and apply relevant tools and methods to mitigate risks to supply chains.

By the end of the workshop, participants will be able to:

- Understand supply chain risk management in uncertain business environments
- Identify the major sources of supply chain risk
- Identify strategies required to analyze and manage risk in supply chains
- Analyze the consequences of risk occurrence in supply chains and the mitigation strategies required to address such consequences
- Evaluate supply chain risk control mechanisms and strategies for building a resilient supply chain in uncertain business environments.

# WANT TO LEARN MORE ABOUT FUTURE PROGRAMS?

Additional programs are planned for 2021-2022. For more information about CARISCA's professional development and executive education programs, please contact:

Dr. John Frimpong, jmfrimpong@carisca.knust.edu.gh or Jacob Kuutuome, kuutuome@carisca.knust.edu.gh.

Visit <a href="https://carisca.knust.edu.gh">https://carisca.knust.edu.gh</a> and subscribe to CARISCA's mailing list, <a href="https://links.asu.edu/carisca-mailing-list">https://links.asu.edu/carisca-mailing-list</a>, for information about upcoming events and training opportunities.



## CARISCA: Progress and Future

#### Dear Colleagues:

In the first year of the CARISCA project, the team accomplished several key objectives and exceeded year one goals.

- An essential part of CARISCA's work is building faculty research capacity at KNUST. In year one, CARISCA hosted two workshops to build research skills.
- CARISCA engaged more than 1,100 stakeholders and partners in the first year and plans to work with many more African businesses over the next few years.
- A significant accomplishment in year one was awarding more than 60 PhD and master's scholarships
  to students studying supply chain at KNUST. These scholarships are transformational, creating a lasting
  impact for these students and their families.
- Thirty-seven percent of attendees at CARISCA's events, trainings and workshops were women. The CARISCA team also hosted four webinars by and for women working in supply chain.
- CARISCA created five new degree programs at KNUST and hosted its first executive education program.

A huge year one success was CARISCA's first Supply Chain Research Summit. This conference, held virtually in mid-July, was attended by 300 scholars and practitioners from 40 countries. Modeled after the Decision Sciences Institute's annual conference, this meeting was a huge success and highlighted the interest and need for original supply chain research in Ghana and Africa as a whole.

The CARISCA team started an independently funded reverse logistics consulting project for Dell in Africa. This project was funded separately by Dell as part of an effort to understand increased growth in demand for technology across the African continent.

The CARISCA team is working intensively to advance research, translation, and training in supply chain management theory and practice across Ghana and Africa. Our primary objective is to address barriers to development caused by inefficient and ineffective supply chains and to develop solutions that can be implemented and replicated efficiently.

We look forward to working with you to accomplish this critical goal.

Sincerely,

**Dale Rogers**, Arizona State University, <u>Dale.Rogers@asu.edu</u> **Nathaniel Boso**, Kwame Nkrumah University of Science and Technology, <u>NBoso@carisca.knust.edu.gh</u>



At the PhD Dissertation Award session of CARISCA's 2021 Supply Chain Research Summit, KNUST PhD student Henry Ataburo presented his dissertation "Resilient and Sustainable Transport Logistics System and Firm Competitiveness: Conceptual Development and Empirical Validation." His work focuses on the relationship between resilience and environmental sustainability. Ataburo was recognized as a runner-up at the event.

#### **Get Involved**

If you want to learn more or get involved, please visit CARISCA's website and sign up for our newsletter.

research.wpcarey.asu.edu/carisca

### **CARISCA's Upcoming Events**

Event dates and details are subject to change. Visit the <u>project website at ASU</u> or the <u>Center website at KNUST</u> for the latest information.

- CARISCA Advisory Board Meeting, October 13, 2021
- CPE Program: Managing Supply Chain Risk and Resilience in a Developing Economy, Takoradi, October 19-21
- Faculty Research Workshop, October 27-28
- Supply Chain Stakeholder Forum, November 30
- Advancing Women in Supply Chain Webinar, December 9, 2021

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