



#SOSANEWS

SOSA TURNS 10!

It is 2021 and we have a lot to celebrate. Firstly, we have and continue to survive the coronavirus pandemic. Secondly, through unprecedented collaboration and hard work by many scientists, we now have vaccines against the virus. Hopefully, we are seeing the light at the end of the tunnel.

The third reason to celebrate is the biggest one for SOSA. We are delighted to be celebrating our 10th anniversary!

Yes, SOSA turns 10 years old in 2021. This year marks a significant milestone for the organization which was birthed by a small group of fledgling scientists. A decade later, SOSA has grown tremendously from the vision of 4 young female scientists to an international body of scientists, STEM educators, and other stakeholders.

From its inception, SOSA has supported research and scientific growth in the Caribbean. This support has extended beyond the borders of the Caribbean, into North America and across the world through online programs. SOSA will continue to promote awareness of the STEM (Science, Technology, Engineering and Mathematics) disciplines through annual conferences and outreach workshops geared towards both academic professionals and students.

To celebrate this landmark year, we will be publishing a commemorative magazine to highlight the organization’s body of work and achievements to date. Look out for the magazine mid-year!



10 GOING FOR 100!

Will you join us on our goal to reach 10,000 students for our 10 year anniversary?
Visit www.thesosa.org/donate to learn more!

YEAR IN REVIEW...

2020, what a year it was! A pandemic. Countries on lockdown. Economies in shambles. Air travel almost grinding to a halt. And persons compelled to stay at home. No choice but to adapt! With this mindset, SOSA grasped the opportunity to launch virtual programming to cater to the realities of our circumstances.

We began with hands-on programs focused on virology, epidemiology, computer coding and engineering. As usual, we featured scientific luminaries at the top of their game, e.g. Dr. Kizzmekia Corbett—COVID-19 researcher of the NIH. Students ranged from elementary through high school, as well as undergraduate students. In September, we followed with a virtual career fair that catered to older students who are considering possibilities available to them in the various STEM fields. Our year culminated in November with our STEPS workshop and annual conference. We were happy to welcome participants from across the world including the USA and the Caribbean, and far-flung shores such as Brazil, India and Indonesia.



Dr. Corbett

This was all made possible by even more volunteerism from SOSA’s members, our donors, and a fantastic and dedicated Board of Directors, Advisory Board, and a brand-new Management Team!

We look forward to continuing to serve our communities through new and ongoing partnerships. Join us today!

~ Dr. Keriayn Smith, Chair, Board of Directors

INSIDE THIS ISSUE

Board of Directors	2
Management Team.....	3
Virtual Field Trip	4
Conference Recap	6
Upcoming Events	8
Get Involved.....	8

SPECIAL POINTS OF INTEREST

- ‘Meet’ our leadership!
- How did we adapt in 2020?
- Virtual Outreach
- Conference 2020
- How can you participate?

Over the past 10 years SOSA has been driven by a dedicated Board of Directors (BOD). With the goal of continued growth and an ongoing quest for excellence, SOSA has expanded its leadership team with a diverse group of talented, driven individuals comprising a management team who will support the BOD.

Let us take a moment to introduce/re-introduce you to some of these individuals who have made it a part of their life's work to nurture and guide youth from underserved communities towards their life goals.

BOARD OF DIRECTORS

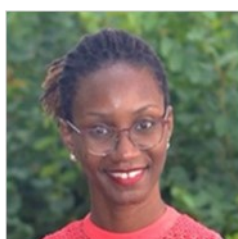


Keriayn Smith, PhD - Chair

Dr. Keriayn Smith is an Assistant Professor at the University of North Carolina (UNC) at Chapel Hill. Her research focus is in molecular and cellular biology to better understand the genome, with an eye towards translational research. Her service-oriented nature, her knack for entrepreneurship, program conceptualization and execution, and her passion for building communities led her to start SOSA. She is centered by our mission to facilitate knowledge exchange, and to improve the participation of underserved and underrepresented groups in STEM education and research.

Danielle M. Webster, PhD - Vice Chair

Dr. Danielle Webster is a Lecturer at the University of Central Florida. She co-founded SOSA to expand her community service outside of her local community and promote science education in the Caribbean where she originates. Through SOSA, she conceptualizes, organizes and delivers workshops to promote STEM disciplines for students, scientists and health care providers.



JeAnn Watson, MPhil - Secretary

JeAnn Watson is a Project Management Professional (PMP) currently pursuing the Project Management continuing education certificate at Ryerson University. JeAnn has researched medicinal plant extracts and natural and synthetic compounds with anti-cancer and chemo-preventive potential to identify potential molecules for investigation for drug development from Jamaica's rich biodiversity. JeAnn has been a volunteer and supporter of SOSA for 7 years, particularly in areas that promote the STEM field to youth.

Neley Morales, PA-C - Treasurer

Neley Morales is a Surgical Certified Physician Assistant, specializing in Urologic Oncology in Central Florida. Neley has a keen interest in helping others and has done so through various outreach programs. Having been a member of the SOSA community for the past 7 years, Neley currently functions as our Treasurer while continuing to guide undergraduate students as they volunteer with SOSA's outreach programs.

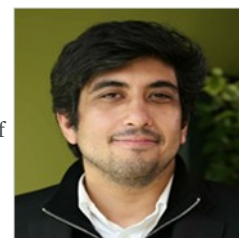


Icolyn Amarakoon, MPhil, PhD

Dr. Icolyn Amarakoon is a Lecturer at The University of the West Indies (UWI) in the Department of Basic Medical Sciences, whose current research includes viral infections and the molecular biology of prostate cancer in the Caribbean. She earned a PhD in Biotechnology through a split-site Doctoral Commonwealth Scholarship Program between The UWI and the John Innes Center in Norwich, England, and later received a Fulbright Scholarship to characterize the HIV virus at the University of Maryland, Institute of Human Virology.

Alen Amini, MBA

Alen Amini is a management consultant at the Bridgespan Group, a non-profit firm that provides advisory services to philanthropies and non-profit organizations. A former Fulbright scholar, he is a Zuckerman Fellow and Master of Education candidate at the Harvard Graduate School of Education. He is an alumnus of the Harvard Kennedy School of Government, where he was the editor-in-chief of the newspaper and the interim student body president. He also graduated from the Dartmouth College Tuck School of Business with an MBA.



Joshua Starmer, PhD

Dr. Joshua Starmer is the Founder and CEO of *StatQuest*, a YouTube channel that teaches data science topics such as statistics and machine learning. Prior to *StatQuest*, Dr. Starmer was an Assistant Professor at UNC at Chapel Hill, where he researched high-throughput sequencing analysis techniques. Josh created his YouTube channel to teach statistics to friends and loved ones. At *StatQuest*, Josh tries to bring clarity to data science topics. Bam!

Bukola Orekha, BA

Bukola Fagbemi Orekha, an engineer by training, is the managing director of Ace United, LLC, a full-service construction and renovation company with clients that include government and private sector entities, and ranging from residential properties to commercial real estate throughout the state of Texas. She has a passion for child literacy and she seeks out mentorship opportunities at the intersection of education and entrepreneurship.



Alexis Thompson MMS, MPH

Alexis Thompson is a public health scientist at the Department of Health - Sarasota County. With a passion for helping her community, Alexis has worked with multiple non-profit organizations globally, promoting healthcare access and literacy, specializing in reproductive health. As a health educator with degrees from the University of Central Florida, the University of South Florida, and George Washington University, she focusses on sexual health and communicable diseases.

Visit our website for more info on our Board and Management Team!

MANAGEMENT TEAM



Amber Okoye, MBA, SSBB, PMP, CPSM – Executive Director

A veteran in Supply Chain and Operations Management, Amber Okoye has over 20 years of experience across various industries including aerospace, healthcare, medical devices, climate control, and telecommunications. She currently serves as the Vice President of Supply Chain & CPO at General Dynamics.

Amber's desire to support future STEM leaders has led to Board positions and work in areas of mentorship, coaching, diversity and inclusion, and women in leadership initiatives, among others. She has been awarded with the *Diversity Leadership Award* from Motorola and was named among the *100 Most Influential Women in Supply Chain* for 2020.



Colin Phillips, MS – Programs Director

Colin Phillips is a leader focused on non-profit education with experience in international education exchange and public charter school education.

Colin currently serves as Senior Manager of Operations for Astravo, an education technology company that specializes in public charter school online education.

Colin graduated with a BSc in Biology (Hons) from Stonehill College and earned his Master of Science in Organizational Leadership from Colorado State University.

Although his professional focus is strategic education leadership, Colin's passion for environmental conservation and science education brought him to SOSA where he can serve others outside of his immediate, local community.



Natricha Levy McFarlane, MPhil – Content and Publications Director

Natricha Levy McFarlane is a Medical Researcher and Medical Writer. She holds a BSc in Biochemistry and Zoology (Hons) and an MPhil in Biochemistry from The UWI. She graduated with academic excellence in Applied Clinical Research from the McMaster University Centre for Continuing Education.

Natricha worked as a public health scientist with the Ministry of Health, Jamaica, where she led the research unit, wrote the *Epidemiological Profile of Selected Health Conditions and Services in Jamaica, 2003-2007* and helped to institute an Annual National Health Research Conference.

Natricha is the Founder and CEO of ACE Health Content, providing quality health content.



Laura Wright, BA (Hons) – Partnership Director

Laura Wright has been in the non-profit/association management industry for over 10 years. She specializes in Resource Mobilization, Program Planning and Development, Capacity Building and Strategic Partnership. Laura has worked globally and locally with international non-profit organizations including the American Red Cross, Catholic Charities and AACSB International.

Laura is originally from Kenya and has lived and worked in 4 continents. She considers herself a "third-culture kid" and enjoys travelling and learning new cultures. She holds a bachelor's degree in Global Business Management from Bournemouth University in England and is currently pursuing her master's in International Policy and Diplomacy.

Current openings!

Do you have expertise or interests in:

- ⇒ Social media management?
- ⇒ Marketing?
- ⇒ Grant-writing?
- ⇒ Fundraising?

Email info@thesosa.org to join us today!!



For more background on our Board of Directors, and our Management Team, visit our website at www.thesosa.org.
Keep an eye out for our next issue for an introduction to our Board of Advisors!

STEPS 2020 – A VIRTUAL FIELD TRIP

Annually during November, SOSA hosts STEPS workshops to introduce students to real-world applications of scientific concepts using interactive, fun activities. Last November, we conducted STEPS under the theme “Do good for yourself, do good for the world,” with an overarching focus on climate change.

A total of 154 students from 19 schools across Jamaica, Trinidad and the United States attended the workshop. They were exposed to how agriculture, nutrition and technology can be used to improve the climate crisis by adding time to the climate clock.

Through videos and interactive games, students were shown how technology, agriculture and food choices can either benefit or harm the environment. For example, students learnt that eating organic vegetables and limiting the use of pesticides can reduce the run-off of pesticides into neighbourhood water sources.

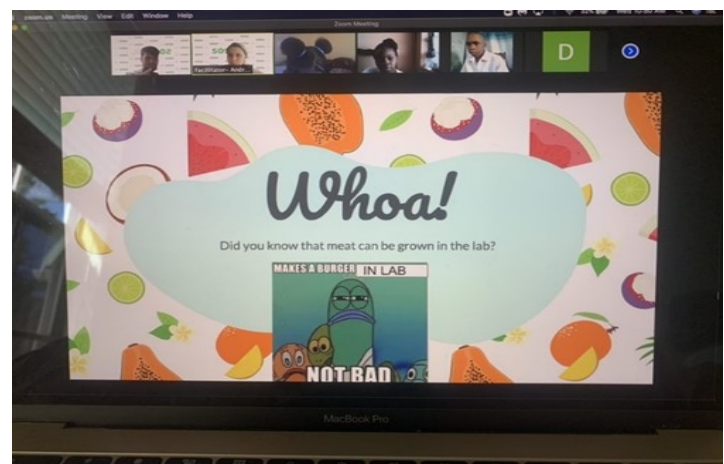
Other topics discussed include:

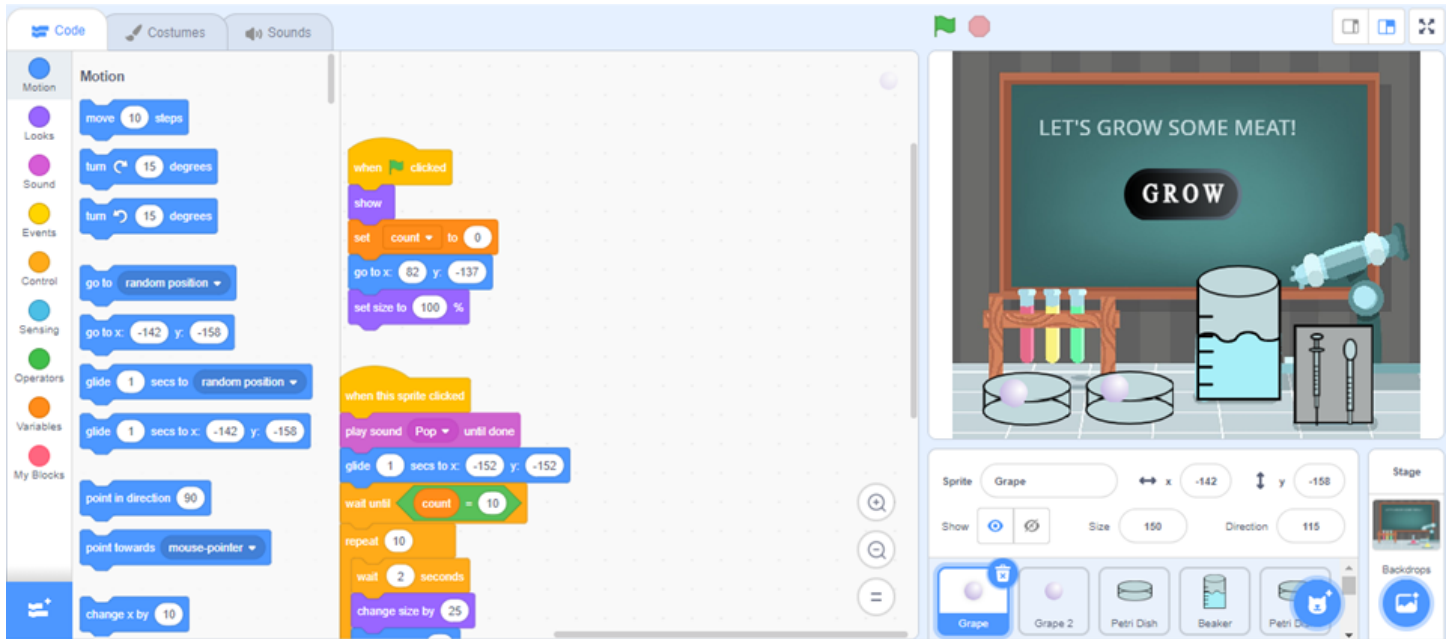
- How cow farming leads to excessive water consumption and that cows release methane gas that is more toxic for the environment than carbon dioxide (CO₂). An abundance of cow farming thus increases methane gas production, which is harmful to the environment.
- How to make their diet more eco-friendly. Certain foods grow during specific seasons, so they must be imported from other countries or regions to keep grocery stores stocked all year round. This transportation increases CO₂ production.
- How meat can be produced in a lab as an alternative to farming cows.

“I have never attended one of these workshops before, but it was absolutely AMAZING! I LOVED IT!!”



Learning about our impact on the environment - via Zoom!





*Students were also given a chance to learn how to code some of the interactive games that they played.
Can our students learn to code - in short order? Yes, they can!*

STEPS 2020 – A VIRTUAL FIELD TRIP – OUR TAKEAWAYS...

We are very pleased that the workshop had such a positive influence on the students.

One teacher commented, “The students had a wonderful time. From the feedback received, the students found the sessions informative, interesting and fun. Many are anticipating another invitation.”

Thanks to all our volunteers and donors who made this happen!

Job well done Team SOSA!

WHAT DID STUDENTS THINK?

“It’s fun to know there is a way to make meat without killing or hurting animals.”



“It influenced me to stop wasting food.”



“I used to think STEM was boring, but now I think it is extremely fun.”

“Now I want to be a scientist, this workshop is so inspirational. I had so much fun.”

ANNUAL SOSA CONFERENCE

2020 was a year of firsts for SOSA. The COVID-19 pandemic caused SOSA to switch its conference to a virtual format. This was positive for SOSA however, as we were able to hold the conference over 2 days for the first time! The virtual format also enabled us to engage speakers who may not have been able to appear in-person. We had speakers from all over the US, Europe and the Caribbean. We even had speakers presenting in between seeing patients and performing surgery!

The theme of the conference was **“Towards Health Equity: Translational and Sociomedical Advances.”** This theme was borne out through a wide range of presentation topics from human diseases (such as COVID-19, cardiovascular disease, cancer and diabetes) to community service. A mix of junior and senior scientists shared the stage to bring us 19 platform presentations, 15 poster presentations and a machine learning workshop.

Over 500 persons registered for the conference, the highest number of registrants that a SOSA conference has ever attracted! We know this was due in large part to the virtual format.

The smooth transition between presentations for the keynote speakers, platform speakers, and poster presenters would not have been possible without our amazing team of session chairs and breakout room moderators.

A huge thank you to all speakers, volunteers and attendees for making this conference one of a kind.

See gallery for a look at our speakers, chairs and moderators.



Jeremy Faust

Dr. Jeremy Faust - Attending Physician at Brigham and Women’s Hospital Department of Emergency Medicine in Boston, USA presenting on **Conceptualizing the Pandemic: What Can We Know and How Can We Know It?**



Grace Byfield

Dr. Grace Byfield – Program Manager of the Center for Outreach in Alzheimer’s, Aging and Community Health – COACH, USA presenting on **Alzheimer’s Disease; The Race Towards A Cure.**



Dr. Sherry-Ann Bro...

Dr. Sherry-Ann Brown - Director of Cardio-Oncology, Assistant Professor at the Medical College of Wisconsin, USA, presenting on the **Innovations in Precision Cardiovascular Medicine.**



Kim Quimby - imple...

Dr. Kim Quimby - Senior Lecturer at The University of the West Indies, Cave Hill, Barbados, presenting on **Equipping Patients During COVID-19: Adjustments to the Barbados Diabetes Reversal Study-2 Protocol.**

I liked the “scientific rigor, breadth of topics, FREE content, Josh Starmer’s talk was wonderful, diversity of speakers, the days went so smoothly - you could tell everything was well planned. I liked it so much that I donated to SOSA .”



Dr. Josh Starmer - Founder and CEO of StatQuest, hosting a working-lunch machine learning workshop, titled **Using Machine Learning as a Microscope for the Genome.**



Joshua Joseph

Dr. Joshua Joseph - Assistant Professor, The Ohio State University, USA, presenting on **Advancing Cardiometabolic Health Equity from the Lens of Epidemiology Population Health and Community-Based Research.**

Not pictured:

Mr. Tyrone Knight - MSc Student at the Northern Caribbean University, Jamaica, presenting on how the **Azadirachta indica Leaf Extract Up-Regulates the Production of Insulin and GLUT2 Proteins in Streptozotocin-Induced Diabetic Rats.**

Ms. Alexis Thompson - Health Educator, Florida Department of Health, USA, presenting on **Health Disparities in Young Adult Sexual Health.**

Ms Kimberley Foster - PhD Candidate at The University of the West Indies, Jamaica, presenting on **The Potential of A. muricata Bark Extract and Annonacin in Improving Prostate Cancer Outcomes: In Vitro Evaluations.**



Taneisha Scheuerma...

Dr. Taneisha Scheuermann - Assistant Professor at the University of Kansas Medical Center, USA, presenting on **Health Behavior, Health Disparities, and Preventable Disease and Mortality.**



Diamond Cunningha...

Ms. Diamond Cunningham - Epidemiologist, Master’s in Public Health Candidate at Rutgers School of Public Health, USA, presenting on **The Importance of Intersectionality Theory.**

ANNUAL SOSA CONFERENCE



Dr. Oluwadamilola "Lola" Fayanju - Associate Professor of Surgery and Population Health Sciences at Duke University, USA, presenting on **Disparities in Breast Cancer: How We Move Forward.**



Prof. Ralph Baric - Professor at the University of North Carolina at Chapel Hill, USA, presenting on the **Epidemic and Pandemic Coronaviruses of the 21st Century.**



Prof. Faith Osier - Group Leader, Malaria Vaccine Development at the Heidelberg University Hospital, Germany, presenting on **People and Parasites: Learning to Win.**



Dr. Rodney Nash - CSO and Product Manager for Omni International, presenting on **Reducing Cost and Improving Access to COVID-19 Diagnostic Testing with a Direct-to-PCR Workflow.**



Dr. Natalie Medley - Medical Doctor in Obstetrics and Gynaecology at the University Hospital of the West Indies, Jamaica, presenting on **Disparities in Cervical Cancer.**



Dr. Seetharam Bhat - Senior Clinical Fellow at the AdventHealth Global Robotics Institute, USA, presenting on **Prostate Cancer 2020.**

Poster Session Presenters

- Joneshia Bryan-Thomas: **Antimicrobial Resistance: After effect of Covid-19**
- Judy Ramsoondar: **Bioprospecting for Novel Antibiotics from Marine Sponge Bacteria**
- Jacqueline Bryer: **Socks and STI Checks**
- Sarah Eberly: **Yogi Hearts for Change**
- Charisma Naik: **Health Literacy & Lunch**
- Andrea Birkey: **A Trip Around the Sun**
- Taylor Nakashima: **Mile at a Time**
- Shilynne Parker: **The Single Parent Scholar**
- Frederica Whyte: **Covid-19 Pandemic: Predictions, Prognosis and Preparation: Africa, A Continent in Distress**
- Isaac Morrison: **Potential Chemopreventive and Anti-Cancer Properties of a Refined Artocarpin-Rich Wood Extract of *Artocarpus heterophyllus* Lam**
- Morgan Christian: **Ohanti**
- Rebecca Manning: **Chrysalis**
- Ty Monty: **Transitioning and Rehabilitation Assistance to Improve Homeless Livelihoods**
- Therry Christophe: **Hands of Asclepius**
- Brittany Cooper: **Gavin's Garden**
- Meagan Suss: **Caps for Cancer**
- Natalie Ruiz-Sanchez: **Traffick Jam**
- Megan Vidal: **Art for Hope and Healing**
- Jessica Ziadie: **Virtual Study Time**

Thank you Moderators!

- Prof. Marcia Roye - The University of the West Indies, Mona
- Prof. Craig Fletcher - University of North Carolina at Chapel Hill
- Dr. Icolyn Amarakoon - The University of the West Indies, Mona
- Dr. Daniel Kraushaar - Baylor College of Medicine, USA.
- Dr. Cheryl Stewart - The University of the West Indies, Mona
- Laura Wright - Society for Scientific Advancement
- Kayla Ferro - University of North Carolina at Chapel Hill
- Colin Phillips - Society for Scientific Advancement
- Sarah Miller - Johns Hopkins University
- Natricha Levy McFarlane - Society for Scientific Advancement
- Nicholas Keith - Johns Hopkins University

I liked "its inclusivity. The selection of speakers and event organization showed not only a lot of consideration for the sciences but a genuine interest in its development across all distinctions (race, gender, age, nation)."

"The poster presentations done showed a lot of promise and is something I'd like students at my own institution to do more of."

"Explanation of the practical application of machine learning was impressive."

We look forward to what Conference 2021 will bring!

Want to keep updated on what SOSA is doing? Follow us social media:

[LinkedIn](#)
[Facebook](#)
[Twitter](#)
[Instagram](#)

UPCOMING EVENTS

Here are some of the events that SOSA for the 1st two quarters of the year. Come along with us and participate, volunteer and/or recommend to youth you know could benefit from these programs.

- 2nd Virtual Career Fair

The career fair focuses on careers in the medical field and is especially targeted to high school students transitioning to university or college students presently enrolled in undergraduate studies.

Our career fairs focus on interactions, this time with medical doctors and physician assistants sharing about the requirements to get into the medical field, the day-to-day work that it entails and responding to questions.

Data Science Virtual Fair

SOSA will expand its STEM program offering by hosting a data science fair—keep an eye out for the date! This event will provide insight into the world of data science for students and professionals who are interested in this area and want to learn more.

DID YOU KNOW?

SOSA is volunteer driven and is completely funded by donations? We depend on your generous support to provide all the important programming we offer.

JOIN THE MOVEMENT!

WILL YOU HELP SOSA?

Call to Action: Join SOSA on our 10 year anniversary campaign!

10 GOING FOR 100!

- **10 YEARS**
- **10,000 STUDENTS**
- **\$100,000 GOAL**

You can donate securely online through [PayPal](#)

Help SOSA raise \$100,000 to reach 10,000 students for our 10 year anniversary!