



QUEEN ELIZABETH SCHOLARSHIP ADVANCED SCHOLARS PROGRAM

FINAL REPORT

2017-2021



Photo Credit: City of Ottawa



Photo Credit: City of Ottawa



PI'S MESSAGE

I want to thank everyone who has been involved in the Carleton - Queen Elizabeth Advanced Scholars Program - Societal Transformation and Climate Change. This 4 year program (2017-2021) was run in concert with Mzuzu University (Mzuzu, Malawi), Nelson Mandela African Institute of Science and Technology (NM-AIST; Arusha, Tanzania) and the University of Ghana (Accra, Ghana).

Our project's overarching goals embodied the spirit of Carleton's Strategic Integrated Plan to "Share Knowledge, Shape the Future". Through this program we provided advanced training for emerging scholars on interfacing respectfully with multiple levels in society as well as examining the multi-faceted challenges of climate change research, all while striving to build an interdisciplinary research network across Canada and Sub-Saharan Africa. Through this program, we have been able to provide exchange opportunities for 44 PhD students and/or Early Career Researchers, including 5 Carleton PhD students. Each exchange consisted of a 90+ day mobility period where the scholars participated in climate change related workshops; obtained support for their specific area of research; participated in various networking and research capacity building activities; and participated in a research placement with one of our 27 community placement partners. Our project has benefitted from substantial financial and in-kind support from OVPRI, the 5 Faculties, FGPA and our partner institutions.

In this brief, you will find a summary highlighting the many successful outcomes achieved by the participants, including an extensive opportunity for speaking events and public engagement, and the generation of over 30 peer reviewed publications. Additionally, from this program, Carleton will now be running an annual QE Seminar Series to maintain connections and highlight the excellent research outcomes from all QE scholars on an ongoing basis. We are further excited to note that Carleton is now hosting the QE-WEST program under the stewardship of Professor Nduka Otiono, and I look forward to continuing to assist with the overall programming. Thank-you again for everyone's dedication, involvement and interest in our project.

Sincerely,



Onita Basu , Ph.D., P.Eng

Professor, Environmental Engineering

Associate Dean, Faculty of Graduate and Post-graduate Affairs

Principal Investigator, Carleton University's QES-AS Project

QES-AS is made possible through the Canadian Queen Elizabeth II Diamond Jubilee Scholarship program and funded by Canada's International Development Research Centre [IDRC], the Social Science and Humanities Research Council of Canada [SSHRC], and is managed through a unique partnership of the Rideau Hall Foundation, Community Foundations of Canada, and Universities Canada.

The QES-AS Societal Transformation and Climate Project Leadership Team

Canada



Dr. Pius Adesanmi (Carleton, Co-PI March 2017 - March 2019)



Dr. Onita Basu (Carleton, Co-PI Mar 2017 to Oct 2018, PI Nov 2018 to Dec 2021)



Dr. Mike Brklacich (Carleton, Co-PI Nov 2018 to Dec 2020, PI Mar 2017 to Oct 2018)



Heloise Emdon (Carleton, Leadership Team member)



Dr. Diane Isabelle (Carleton, Co-PI)



Dr. Paul Mkandawire (Carleton, Co-PI)



Stephanie Pineau (Carleton, Project Coordinator)



Dr. Michel Rod (Carleton, Co-PI Mar 2017 - July 2019)

Ghana



Dr. Albert Ahenkan (Ghana, Leadership Team member)



Dr. Henaku Erasmus Owusu (Ghana, Co-PI)

Malawi



Dr. Wales Singini (Mzuzu, Co-PI)

Tanzania



Dr. Karoli Njau (NM-AIST, Co-PI)



Dr. Mwemezi Rwiza (NM-AIST, Project Manager)

This QES-AS projects lead team, really stands out as one who has rallied strong human and financial support from across [Carleton] faculties, departments, and units. The sense I get from the project is that really, team Carleton, has been coming together to offer as best an experience as possible to your visiting scholars. - Luc Mugeot, IDRC, QES NextGen Seminar Series

Our Impact

- 3 cohorts of PhD and early career scholars - bringing together multidisciplinary groups spanning 4 countries and 2 continents
- 3-4 month long research acceleration program; mentoring by Carleton professors; research capacity workshops offered through Macodrum Library, Teaching and Learning Services, and Carleton faculty/staff.
- Experiential learning placements with community partners
- Enhanced networking, community engagement, and cultural awareness opportunities
- Inclusion of a monitoring and evaluation process put in place to continually expand and improve the program
- Launch of the annual NextGen seminar series reaching out to all universities across Canada with a QES-AS or QES-AS-WA program
- Launch of a new QES-AS West Africa project which will run from 2021-2024



44

**AFRICAN AND
CANADIAN SCHOLARS
HOSTED**

27

**COMMUNITY
PLACEMENT PARTNERS**

34

**PEER-REVIEWED
PUBLICATIONS**

54

**POSTERS &
PRESENTATIONS**

2017-2018

The Carleton QES-AS program officially launched in April, 2017

<https://carleton.ca/qes/2017/sample-news-post/>. With a team of faculty members and staff representing FED, FASS, OVPRI, and Sprott, a Project Coordinator (funded by OVPRI) was hired to oversee the logistics of the program. By August 2017, our webpage, <https://carleton.ca/qes> and Twitter feed, https://twitter.com/Carleton_QES, were up and running. In collaboration with our partners in Ghana, Malawi, and Tanzania, the program structure was implemented and our first group of 9 scholars (8 African, 1 Canadian) was selected.

On a snowy day in March 2018, Carleton's faculty team members Paul Mkandawire and Onita Basu collected the scholars from Malawi & Tanzania from the Ottawa Airport with the Ghanaian scholars arriving shortly thereafter.



With the arrival of all 8 scholars from Africa, our programming began with an Orientation and Welcome Workshop. Through the generous support of the 5 Faculties at Carleton, we were able to host 2 of our 3 partner Co-Principal Investigators for our first workshop thereby strengthening the possibilities for collaboration.



2018 Cohort

Over the course of the scholars' 4-month stay they participated in a number of activities including:

- 10-week Journal Writing workshop, Merridee Bujaki
- Climate Change workshops, Chris Burns
- Design Thinking workshop, Cathy Edwards
- Foster an Active Classroom workshop, Morgan Rooney
- 6-week placement with one of our placement partners



Queen Elizabeth Scholars - African Exchange Fuels Innovation: <https://newsroom.carleton.ca/story/queen-elizabeth-scholars/>

SCHOLAR SUCCESS STORY

Judith Leo

Judith participated in the QE program as a PhD candidate from NM-AIST.

Through the writing workshop she completed 2 papers later published in 2019. This achievement helped her complete the requirements for obtaining her PhD (2020). Judith is currently a full-time lecturer at NM-AIST and the Outreach and Industrial Coordinator for the Centre of Excellence for Information and Communication Technologies in East Africa, a regional innovation hub offering skills for the digital transformation in the East Africa Community.

During her time in Ottawa, Judith participated in her first speaking event as a panelist in a panel on, "Water, Sanitation and Hygiene – A Pathway to Realizing Gender Equality and Empowerment", at the Results Canada – 2018 Conference Grassroots to Global: A Movement for Change.



PARTNER TESIMONIAL - OTTAWA BIOSPHERE ECO-CITY

The scholars who worked with us played key roles in pilot testing Ottawa's first community sustainability plan. They also advanced OBEC's ability to do project evaluations, which is an important near-term goal.

By working closely with all of our partner organizations, I was able to obtain more data than originally anticipated, and build even stronger relationships. With additional funding from other sources, this program has allowed me to distribute more than 120 filters to various community hubs and individuals, as well as run workshops and education programs in the native language for more than 200 participants. - Robbie Venis, Carleton QEScholar 2018/2021

Robbie Venis

Carleton PhD student, Robbie Venis, travelled to Tanzania in the summer of 2018 and participated in the virtual program in 2021. Robbie is working with local partner, Tanzania Education and Micro-Business Opportunity (TEMBO) in the rural community of Longido, and a U.S. based non-profit Wine to Water to optimize the design of a ceramic water filter and improve access to and education around safe drinking water.



Canadian engineering talent helps develop water filters in Africa | CBC Radio

A young Canadian researcher is helping to develop a cost effective system in Tanzania



Chimwemwe Soko

Chimwemwe or Chims as he was better known, was a PhD student from Mzuzu University. He was also the Executive Director of Find Your Feet Malawi (FYF), a non-profit seeking to help small shareholder farmers feed their families all year round. Through this connection with Chims, FYF became a very important placement partner in Malawi.



Sadly, Chimwemwe passed away in 2020. He will always be remembered for his commitment to working today for a better tomorrow. In memory of Chimwemwe, Carleton QEScholar (2019/2021) Andy Kusi-Appiah, in partnership with FYF, launched the non-profit ISantiZe in Malawi, a community led initiative aimed at inspiring the community to take responsibility for their surroundings and clean-up garbage from the streets of Mzuzu city.

2019 Cohort

Based on feedback obtained through the monitoring and evaluation strategies we employed, the QES team decided to reduce the award period to 3 months thereby decreasing the burden on parents of small children and particularly the women scholars. Our program design remained fairly consistent with the addition of various community engagement events including Climate Conversations with an African Focus Speakers Series held at the Sunnyside branch of the Ottawa Public Library. We were particularly proud to meet with the Honourable Mayor Jim Watson at a proclamation of Carleton University Queen Elizabeth Scholar Day (May 24, 2019).



Photos left to right: 1) Climate Conversations community engagement event & poster presentation; 2) Georgette Atakorah & Ramadhani Bakari are featured in Carleton Newsroom; 3) 2019 scholars QEScholars Day - Photo credit: City of Ottawa

- 10-week Journal Writing workshop, Melissa Edwards
- Climate Change workshops, Chris Burns & Michael Brklacich
- Design Thinking workshop, Cathy Edwards
- Foster an Active Classroom workshop, Morgan Rooney
- 6-week placement with one of our placement partners
- [Newsroom - Climate Change Warriors](#)
- [Newsroom - Mayor Jim Watson Declares Carleton University – QES Day](#)
- [Newsroom - Climate Change Conversations Highlight African Scholars](#)

SCHOLAR SUCCESS STORY



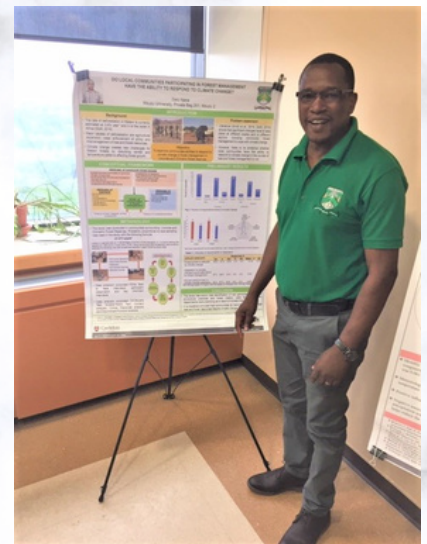
Theodora Aryee

Theodora Aryee, a student of Accounting from the University of Ghana, aims to demonstrate the role of accountants in the achievement of the UN's Sustainable Development Goals. In September of 2019 Theodora won Best Doctoral Paper at the Africa Accounting and Finance Association conference (Dar es Salaam, TZ) giving credit to the

skills she acquired in the 12-week writing workshop. Theodora was invited to present at Carleton's International Research Mobility Symposium in March 2021 and at Carleton's inaugural QES NextGen Seminar Series. We were delighted to hear in January 2022, Theodora served as valedictorian at her PhD convocation.

Dalo Njera

Dalo Njera joined us from Mzuzu University, Malawi where he works as a full-time lecturer in the Forestry Department. During his time in Ottawa Dalo took every opportunity to further develop his capacity in a leadership role. Dalo presented, 'Leadership for Mitigation and Adaptation to Climate Change' at the community engagement event Climate Conversations with an African Focus. He also led a panel discussion titled, 'Cultivating leaders - skills for a successful career in research', during the 2019 QES-AS Projects Workshop hosted by Universities Canada in Toronto.



QES-AS Projects Workshop

Abraham Bugre, Theodora Aryee, Onita Basu (project PI), Stephanie Pineau (Project Coordinator, and Dalo Njera represented Carleton's QES-AS program in Toronto, May 2019. Onita Basu shared the many advantages to using the cohort model.

PARTNER TESIMONIAL - MAISON TUCKER HOUSE

QEScholar Memuna Mattah's work on a paper for us on recycling was well written and helped us with the research we needed to move forward with the development of a workshop and public awareness campaign.

Alicia Gal



Alicia Gal is a Carleton PhD student in the Department of Systems and Computer Engineering. She uses technology such as motion capture, force plates, surface electromyography (sEMG), and inertial measurement units (IMUs) to investigate the skating motion in para ice hockey. Alicia travelled to Mzuzu, Malawi in October 2019. During her time there she participated in the QES Climate Exchange Seminar, worked with Chimwemwe Soko at Find Your Feet, and hosted multiple fitness sessions with Mzuzu locals.

QES Climate Exchange Seminar

In October of 2019 Carleton professor Paul Mkandawire travelled to Mzuzu, Malawi and professors Onita Basu & Diane Isabelle travelled to Arusha, Tanzania to take part in a knowledge mobilization and dissemination activity with the 2018/19 scholar cohorts and prospective 2020 scholars.



2021 Cohort

The 2020 QES cohort was set to arrive April 01, 2020. By March 2020 it became abundantly clear we had to postpone all travel and programming. Through the dedication of the QES Leadership team at Carleton and our partner institutions, we designed a unique 3-month long virtual experience delivered in the summer of 2021 to a group of 16 African and 4 Canadian scholars. The program included weekly team meetings, giving the scholars the opportunity to present and receive feedback on their research, 12 research capacity workshops, and a community engagement webinar.



Specific program features included:

- 12-week Journal Writing workshop, co-hosted by Melissa Edwards & Merridee Bujaki
- Climate Change workshops, Michael Brklacich
- A series of workshops on R and Big Data tools and techniques hosted by PhD and Msc students of Shirley Mills
- Research presentations by Onita Basu, Diane Isabelle, Shireen Hassim, and Paul Mkandawire
- Climate Conversations with an Africa Focus - Webinar
- Virtual placements and in-person placements where permissible



Photos left to right: 1) Elizabeth Makauki with her placement partner TEMBO 2) Chizamsoka Nyirongo visiting a banana plantation in Malawi during fieldwork; 3) Godfrey Kalenga at a community meeting with his placement partner Vwaza Wildlife Conservation

PARTNER TESIMONIAL - ECOLOGY OTTAWA

QEScholar Alice Aboagye elaborated on the impact of natural gas plant usage in Ottawa. She produced an excellent policy brief on phasing out natural gas plant usage, which was presented to Ottawa City Council.

SCHOLAR SUCCESS STORY

Andy Kusi-Appiah

Andy Kusi-Appiah is a Carleton PhD student in Geography and Environmental Studies. Through the QE scholarship Andy travelled to Mzuzu, Malawi in 2019. In 2021, via the networks he built in 2019, he used QE funding to hire research assistants in Mzuzu. This allowed him to gather the data he needed to explore the ways through which peri-urban residents, increasingly severed from municipal water supply systems, gain access to alternative water sources that nourish their homes. Through his placement partner, Find Your Feet Malawi, Andy helped launch the

non-profit ISantiZe in Malawi in memory of QEScholar Chimwemwe Soko. A video of the launch can be found here: ISantiZe Inauguration ceremony



Amber Warnat



Amber Warnat is a Carleton PhD student with the Norman Patterson School of International Affairs. Amber's research looks at the intersection between formal and informal institutions, and why sexual and gender-based violence has been occurring despite formal protections against it. Amber partnered with OUT, a non-profit located in South Africa that provides stigma-free HIV, sexual health and other services to gay, bisexual and MSM communities. Since participating in the QES program Amber has applied for a Grand Challenges Canada grant to continue her work with OUT. We are looking forward to hearing the results in the coming months!



QES NextGen Seminar Series

In October 2021, leveraging the transition to on-line work, project PI, Onita Basu and coordinator, Stephanie Pineau, hosted the inaugural QES NextGen Seminar Series. The event brought together QES Advanced Scholars from 13 different countries to present their research in climate change impacts around the globe. We would like to say thank-you to all of our panelists and guest speakers and a special thanks to IDRCs Luc Mugeot for his presentation, 'Queen Elizabeth Advanced Scholars: So What?'

A link to the seminar playlist can be found here: [QES-AS NextGen Seminar Series](#)

PowerPoint Slide Show - QES Seminar Opening Slide - PowerPoint

QES-AS NextGen Seminar Series

Bringing together Queen Elizabeth Advanced Scholars from across the globe to share information on research experiences and expertise.


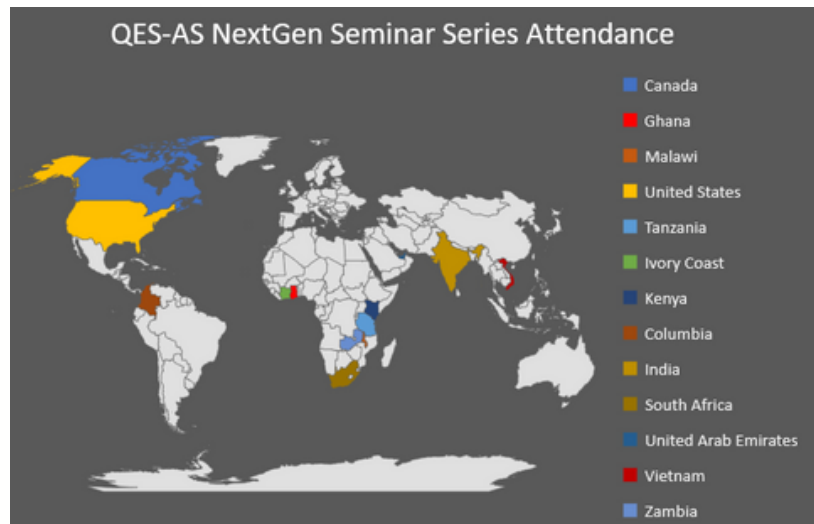
Theme:
Climate Change & Society

October 27 & 28, 2021

Carleton University



Slide 1 of 3



Exploring the Impacts of Urban Expansion on Green Spaces Availability and Delivery of Ecosystem Services in the Accra Metropolis

Yaw Aggrey Bofo (Ph.D.)
Centre for Climate Change and Sustainability Studies,
University of Ghana

Presented at
QES-AS NextGen Seminar
30/10/2021

Chaitanya Luhar


Enock Dankyi

CHALLENGES TO LIVELIHOOD PRACTICES ON THE BAROTSE FLOOD PLAIN FOLLOWING CLIMATE CHANGE-RELATED SHOCKS.

10/27/2021

Presenter: Douglas Singini is a PhD candidate in the School of Public Health and Health Systems at the University of Waterloo (focused in the picture insert)

Mentor: Craig Janes is a Professor in and Director of the School of Public Health Sciences at the University of Waterloo. His work broadly encompasses research and action on public health issues that emerge in the context of political and economic transition.



UNIVERSITY OF WATERLOO | FACULTY OF HEALTH | water INSTITUTE

QUEEN ELIZABETH Scholars

1 of 8

QES-AS-WA

In April 2021, under the leadership of Principal Investigator, Nduka Otiono - Institute of African Studies, Carleton launched the Queen Elizabeth Scholarship Advanced Scholars West Africa program. Our project, philosophically envisioned in our African title Wurin ta na yin rubutu (Hausa language, widely spoken in West Africa, meaning “her own room to write”), is wholly women centered. The project’s overarching goal is to provide a research acceleration program to assist women PhDs, Post-Docs, and early career research scholars to advance their academic training, research capacity, and professional network.

You can read about the launch here: <https://newsroom.carleton.ca/2020/carleton-welcoming-women-researchers-in-qes-advanced-scholars-west-africa-program/>

We are thrilled to have a number of exciting placement partnerships that will provide each scholar with an immersive experiential learning opportunity.



Carleton University

Call for Applicants Research Acceleration Program

Open to West African women early career, Post Doc,
and PhD scholars
Visit <https://carleton.ca/qes/qes-as-wa-2021-2024/>
for more details

Photo: UN Women/Ryan Brown

The logo features the text "REINE ELIZABETH QUEEN ELIZABETH Scholars" in a stylized font, with "REINE" and "QUEEN" in orange and "ELIZABETH" and "Scholars" in black. The background of the banner shows a group of people, with a woman in the foreground holding a notebook and pen.

We held a call for applications in the fall of 2021. We look forward to hosting our first group at Carleton University September 2022!

A BIG THANK-YOU TO ALL OF OUR CONTRIBUTORS

2018 Scholars

Albert Ahenkan
Sophia Bakili
Enock Dankyi
Alinafe Kamagira
Judith Leo
Elisha Ngulube
Felix Tembo
Ramadhani Sinde
Chimwemwe Soko
Robbie Venis

2019 Scholars

Anthony Afful-Dadzie
Theodora Aryee
Georgette Atakorah
Ramadhani Bakari
Abraham Bugre
Alicia Gal
James Kushe
Andy Kusi-Appiah
Memuna Mawusi
Beatrice Mbakaya
Mabel Mensah
Hoyce Mshida
Dalo Njera
Devotha Nyambo
Maud Palm
George Semango

2021 Scholars

Alice Aboagye
Roland Apambilla
Yaw Bofo
Eric Doe
Kurwa Guyashi
Godfrey Kalenga
Elizabeth Makauki
Lawrence Mdegela

2021 Scholars

Joseph Mensah
Rosaliah Mughogho
Godfrey Nkongolo
Sandra Obiri-Yeboah
Michael Sepula
Nii Sowah
Ulemu Tembo
Theodora Thindwa
Amber Warnat

Carleton Faculty/Staff

Aleksandra Blake
Patrick Boily
Francois Brouard
Merridee Bujaki
Chris Burn
Logan Cochrane
Maria DeRosa
Gordon Duval
Cathy Edwards
Shireen Hassim
Xiao Huang
Maryam Firoozi
Mohamed Ibnkahla
Moses Kiggundu
Alex Mallett
Glenn McRae
Shirley Mills
David Milner
Scott Mitchell
Melissa Redmond
Morgan Rooney
Kate Ruff
Chris Shoniker
Stephan Struve
Thomas Walker
Yiqiang Zhao

Placement Partners

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Ottawa Biosphere Eco-City
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Tanzania Education and Micro
Business Opportunity (TEMBO)
BW Global
Canada Africa Agriculture
Summit
Carleton Climate Commons
Working Group
Clarissa Brocklehurst
Ecology Ottawa
Carleton Sustainable Energy
Research Centre
Find Your Feet Malawi
Maison Tucker House
Farm Radio International
Water Aid Canada
CELADA
OUT
African Institute for
Mathematical Sciences (AIMS)
Tanzania Association of the
Deaf
Soils Food and Healthy
Communities Project
Vwaza March Wildlife Reserve
Directorate of Agriculture,
Environment and Natural
Resources