

# CONFERENCE Programme



Sponsored by



**New CONNECTIONS: plant pathology, entomology and the road ahead**

**28 June – 30 June 2022 (ONLINE)**

Please note carefully: All times stated are British Summer Time (BST, which is GMT +1)

## Tuesday, 28th of June

8:00am –  
9:00am

Joint chair: **Dr Sylvester Dickson Baguma**, Director of Research, Bulindi Zonal Agricultural Research and Development Institute, National Agricultural Research Organisation (NARO), Uganda

Joint chair: **Prof. Neil Boonham**, CONNECTED Network Co-Director, Newcastle University, UK

**Welcoming remarks from the chairs**

**Opening Presentation**

**Prof Mamokgethi Phakeng**, Vice-Chancellor of the University of Cape Town, South Africa and first University of Bristol Illustrious Visiting Professor, UK

**Plenary presentation**

**Dr Taro Takahashi**, Senior Lecturer in Sustainable Livestock Systems and Food Security, and Joint Food Security Theme Research Lead at Cabot Institute for the Environment, University of Bristol, UK

Chair for all further sessions: **Dr Sylvester Dickson Baguma**

9:00am –  
10:00am

**Plenary presentation**

**Dr Stephan Winter**, Leibniz Institute DSMZ, Germany

10:00 –  
11:00am

**Plenary presentation**

**Prof Toby Bruce**, Insect Chemical Ecology, Keele University, UK



11:30am –  
1:00pm

### Networking activity 1: Topic-based peer support networks

Supported by funding from the Cabot Institute and Policy Bristol, facilitated by Creative Connections. Involving: **Nay Dia**, formerly at ETH Zurich, Switzerland. Additional facilitation: **Dr Vicky Jones**, Cabot Institute, Bristol.

1:30pm –  
3:00pm

### Presentations 4 X 20 minute slots - 15 min talk + Q&A

**Dr Zhimin Yin**, Plant Breeding and Acclimatization Institute, National Research Institute, Poland

**Dr Adrian Fox**, Principal Plant Virologist at Fera Ltd, UK

**Dr Oluwatosin Aregbesola**, formerly of Wesley University, Ondo, Nigeria

**Dr Joseph Daron**, Science Manager in International Climate Services, Met Office, UK and Senior Research Fellow, University of Bristol, UK

3:00pm –  
4:00pm

### Plenary presentation

**Prof Shirley Luckhart**, Co-Director of Institute for Health in the Human Ecosystem, University of Idaho, USA

## Wednesday, 29th of June

8:00am-  
9:00am

### Plenary presentation

**Dr Kolade Olufisayo**, International Institute of Tropical Agriculture (IITA), Ibadan, Nigeria

9:00am-  
10:00am

### Plenary presentation

**Dr Saliou Niassy**, Head of Agricultural Technology Transfer Unit, International Centre of Insect Physiology and Ecology (ICIPE), Kenya

10:00am-  
11:00am

### Plenary presentation

**Dr Adrian Valli**, Principal Investigator, Spanish National Center for Biotechnology (CNB-CSIC), Spain

11:30am –  
1:00pm

### Networking activity 2: Interdisciplinary challenges

Additional facilitation: **Dr Vicky Jones**, Cabot Institute, Bristol



1:30pm –  
4:00pm

**Presentations offered by CONNECTED, BSPP & RES members:**

7 X 15 minute slots - 10 mins talk + Q&A

**Dr Samar Sheat**, Leibniz-Institute DSMZ, Germany

**Abdulrahman Musa**, Ahmadu Bello University, Nigeria

**Ruth Festus**, Natural Resources Institute, University of Greenwich, UK

**Mary Emeraghi**, International Institute of Tropical Agriculture (IITA), Benin

**Dr Mercy Ejechi**, National Root Crops Research Institute, Nigeria

**Anthony Mabele**, Masinde Muliro University of Science and Technology (MMUST), Kenya

**Aimee Fowkes**, Fera Ltd, UK

**Thursday, 30th of June**

8:30am –  
11:00am

**Workshop 1: Innovation in plant vector-borne disease**

Involving:

**Dr Saliou Niassy**, Head of Agricultural Technology Transfer Unit, International Centre of Insect Physiology and Ecology (ICIPE), Kenya

**Dr Andy Evans & Dr Jemma Taylor**, Crop Health and Protection Limited (CHAP) UK

Additional facilitation: **Dr Vicky Jones**, Cabot Institute, University of Bristol, UK

11:30am –  
1:00pm

**Networking activity 3: Interdisciplinary challenges**

Additional facilitation: **Dr Vicky Jones**, Cabot Institute, University of Bristol, UK

1:30pm –  
3:30pm

**Workshop 2: Current and emerging issues in plant vector-borne disease**

Additional facilitation: **Dr Vicky Jones**, Cabot Institute, University of Bristol, UK

3:30pm –  
4:00pm

**Summary and closing remarks from our chair and Network Managers**

**Dr Sylvester Dickson Baguma, Dr Diane Hird, Dr Nina Ockendon-Powell**

ONLINE poster session will be held on Slack throughout the event



CONNECTED

# SPEAKER BIOGRAPHIES

## CHAIRS

**Dr Sylvester Dickson Baguma**, Director of Research, Bulindi Zonal Agricultural Research and Development Institute, National Agricultural Research Organisation (NARO), Uganda

**Prof. Neil Boonham**, CONNECTED Network Co-Director, Newcastle University, UK

## TUESDAY 28th JUNE

**Prof Mamokgethi Phakeng**, Vice-Chancellor of the University of Cape Town, South Africa and first University of Bristol Illustrious Visiting Professor, UK. PhD(Wits), Hon DSc (Bristol), GCOB(Silver), MASSAf, FAAS, FTWAS

Mamokgethi Phakeng (formerly Setati) began her term of office as Vice-Chancellor of the University of Cape Town on 1 July 2018, where she had been serving as Deputy Vice-Chancellor for Research and Internationalisation since January 2017. Before this appointment she served as Vice Principal for Research and Innovation at the University of South Africa (Unisa) for five years, after serving three years as Executive Dean of the College of Science, Engineering and Technology at the same university. She holds a PhD in Mathematics Education from the University of the Witwatersrand and one of the leading scholars in mathematics education globally. She has been invited to deliver over 60 keynote/plenary talks at international conferences, and as a visiting professor in universities around the world. She has won numerous awards for her research and community work, including the Order of the Baobab (Silver) conferred on her by the President of South Africa in April 2016. In August 2014 CEO magazine named her the most influential woman academic in Africa, in 2020 she was included in Forbes' inaugural list of the 50 Most Powerful Women in Africa. In July 2019 the University of Bristol conferred on her an Honorary Doctorate in Science in recognition of her leadership role in mathematics education in South Africa.

Kgethi, as she is popularly known, was elected as a member of the Academy of Science of South Africa (ASSAf) in November 2007; an honorary member of the Golden Key International Honour Society in May 2009, an honorary life member of the Association for Mathematics Education of South Africa (AMESA) in July 2009; Fellow of the African Academy of Sciences (AAS) in 2018 and fellow of The World Academy of Sciences (TWAS) in 2021.

She serves as a member of high-profile international boards: The Geneva Science and Diplomacy Anticipator (GESDA) and the Oprah Winfrey Leadership Academy for Girls (OWLAG). She is trustee of the South African Student Solidarity Foundation for Education (SASSFE) and was a member of the FirstRand Foundation till December 2021. She served as member of the board of the Council for Scientific and Industrial Research (CSIR) and chaired its Research Development and Innovation Committee from January 2015 till September 2017. She served as the first woman President of the Convocation of the University of the Witwatersrand from 2011 to 2016. She led the Association for Mathematics Education of South Africa (AMESA) as its first woman National President from 2002 to 2006, served as founding chairperson of the Board of the South African Mathematics Foundation (SAMF) from 2004 to 2006 and secretary and member of the executive committee of the International Group for the Psychology of Mathematics Education (PME) from 2003 to 2007.

Kgethi is an academic with a sharp social conscience and a philanthropist who among her initiatives founded the Adopt-a-learner Foundation in 2004 which provides financial and educational support to South African students from township and rural areas to acquire higher education qualifications. When she took office in July 2018, she requested that the funds budgeted for her inauguration ceremony be set aside to pay off outstanding debt for students who had completed their studies in 2015 – 2017 but were not able to graduate. Since then she donates 20% of her monthly salary to a scholarship fund to support poor students, particularly women registered for postgraduate study at the University of Cape Town.

**Dr Stephan Winter**, Leibniz Institute DSMZ, Germany

Stephan Winter is Head of the Plant Virus Department and Chief Plant Virologist at the Leibniz Institute DSMZ, German Collection of Microorganisms and Cell Cultures. DSMZ is a German research institute and biological resource center to provide services to science as well as specimen of microorganisms, plant viruses and human & animal cell lines. The DSMZ plant virus department holds the most comprehensive collection of plant virus isolates and antisera for reference and diagnostic purposes and provides diagnostic services for virus identification; from

# SPEAKER BIOGRAPHIES

bioassays to next generation sequencing <https://www.dsmz.de/research/plant-viruses>.

Stephan Winter's research is the characterization of plant diseases caused by viruses. His particular competence lies in virus diseases of tropical root & tuber crops and on viruses transmitted by *Bemisia tabaci*. Since more than 25 years, he is involved in translational research projects linking fundamental studies on virus discovery, gene function analysis and identification of virus resistance with field research on virus epidemiology and ecology in Africa. He has more than 25 years of research experience with cassava viruses and the identification of viruses and virus resistance. His group has recently discovered new virus resistance against the severe cassava brown streak viruses from Africa in cassava germplasm from South America.

---

**Prof Toby Bruce**, Insect Chemical Ecology, Keele University, UK

### ***How to reduce insect pests in crops***

I studied B.Sc. Biology at University College London and then completed an M.Sc. in Applied Entomology at Silwood Park, Imperial College London and a Ph.D. in Chemical Ecology at the Natural Resources Institute, University of Greenwich. I joined Rothamsted Research, as a Research Scientist in 2000. My role was to study agriculturally important insects, their interactions with their host plants and their natural enemies; seeking novel interventions that could improve pest management. In 2017, I was recruited by Keele University as Professor of Insect Chemical Ecology and now lead research on plant-insect interactions with recent collaborative projects focussing on aphids and fall armyworm.

---

**Nay Dia**, formerly at ETH Zurich, Switzerland

Nay has a doctoral degree in phytobacteriology, with a focus on genomics-based diagnostics (ETHZ, Switzerland). She worked with phytopathogen *Xanthomonas*. Nay also has a background in soil chemistry and microbiology (Masters, University of Helsinki, Finland) and agriculture engineering (Bachelors, American University of Beirut, Lebanon). Her main research interests are the use of genomics data for diagnostics, pathogen taxonomy and plant health. She has also taken a keen interest in support networks as means to advance plant health. In her spare time, she enjoys listening to music and macro-nature photography. Let's CONNECT: LinkedIn, on Twitter or by email on [nayoushkatATprotonmailDOTcom](mailto:nayoushkatATprotonmailDOTcom).

---

**Dr Adrian Fox** BSc (Hons) PhD CBiol SPHP MRSB, Principal Plant Virologist at Fera Ltd, UK

### ***CALIBER – Using interdisciplinary approaches to assess the risk of vector borne plant pathogens***

Dr Adrian Fox is the Senior Plant Virologist at Fera Science Ltd, the National Reference Laboratory for Plant Health in England and Wales, UK. He has over 25 years professional experience in diagnostics in support of plant health regulation. As well as providing a diagnostic service supporting the UK plant health services, his team investigates a range of viruses and virus-like pathogens affecting crops and the wider environment. Adrian's research includes applying novel diagnostic techniques to improve the detection and diagnosis of plant viruses and investigating the epidemiology of plant viruses, viroids and phytoplasmas of regulatory importance.

He is a member of the International Committee on Plant Virus Epidemiology, the EPPO panel on diagnostics in virology, and is the current chair of the virology section of the European association for Potato Research.

---

**Dr. Oluwatosin Aregbesola**, formerly of Wesley University, Ondo, Nigeria

### ***The potential impact of climate change on the behavior and physiology of whiteflies***

Dr Oluwatosin Zacheus Aregbesola is a lecturer and early career researcher with close to 10 years of experience in teaching and research. He holds a double degree PhD in Entomology (the University of Copenhagen), and Agriculture Food and Environment (the University of Catania (Italy)). His areas of expertise are climate-insect interactions, insect biological control, virus-insect interaction and forest Entomology. Dr Aregbesola's recent research projects include the development of Biopesticides for cassava whiteflies, the abundance and diversity of



# SPEAKER BIOGRAPHIES

wood-boring insects in Ala Forest, Akure, Nigeria, and Understanding the potential impact of climate change on cassava whiteflies. He has a growing number of peer-reviewed publications.

He is a recipient of a number of scholarships and fellowships including the Ondo State Government of Nigeria Excellence Scholarship; Alliance for a Green Revolution in Africa Scholarship; European Union Erasmus Mundus Joint Doctorate Fellowship; Agricultural Biosystems International Conference Foundation Canada travel bursary, and the United Kingdom (UK) government-funded V4: Early Career Programme at the University of Bristol, UK. Until October 2021, Dr Aregbesola was the Programme leader for the Top-up and Degree Conversion Programme at Wesley University Ondo (Nigeria) and the co-founder of Bimxcel Agro-Allied Company PLC, Nigeria. Dr Aregbesola is currently an independent researcher in the United Kingdom.

---

**Dr Joseph Daron**, Science Manager in International Climate Services, Met Office, UK and Senior Research Fellow, University of Bristol, UK

### ***Food security challenges in a changing climate: role of climate services***

Joe is an applied climate scientist focusing on climate risk communication and the development of climate information services for decision-makers. He is a Science Manager in the International Climate Services team at the UK Met Office and holds a joint position as a Senior Research Fellow in the Faculty of Science through the Met Office Academic Partnership (MOAP).

His work involves collaborating with organisations across the world to develop climate services and improve the uptake and use of climate information to guide climate change adaptation decisions, primarily in Africa and Asia. Joe's research is interdisciplinary, spanning climate science and social sciences, with a focus on understanding how to best integrate climate information into decision-making and policy. He is particularly interested in the communication of climate uncertainties, assessing interpretation of different types of climate information, and understanding the role of different actors in the development and delivery of climate services.

---

**Prof. Shirley Luckhart**, Co-Director of Institute for Health in the Human Ecosystem, University of Idaho, USA

Direct biological connections among plant, animal and human health as opportunities for innovative, sustainable solutions in complex ecosystems

I have a broad background in vector-borne diseases, having worked on and published nearly 125 referred articles and book chapters on mosquito vectors of filarial nematodes, Lyme disease ecology, and on anopheline mosquito biology and malarial disease pathogenesis and transmission. While most of my work has been lab-based, I have worked with collaborators in Kenya for the past 25 years and have had productive field- and lab-based collaborative projects in Mali and Colombia. I am a founding co-director of the University of Idaho Institute for Health in the Human Ecosystem (IHHE), which is focused on research, training and outreach on the biological parallels and intersections among plant, animal, and human health in complex ecosystems. I'm passionate about exploring the networked edges of biology to develop new hypotheses and to explore the development of innovative solutions to improve health.

---

## WEDNESDAY 29th JUNE

**Dr Kolade Olufisayo**, International Institute of Tropical Agriculture (IITA), Ibadan, Nigeria

### ***Overview of viruses infecting yam in West Africa***

Olufisayo Atinuke Kolade holds a PhD and an MSc in Genetics from the University of Ibadan and a BSc in Botany from the University of Ilorin, Nigeria. She is a Geneticist by training with skills in Molecular Biology, Plant Pathology with special interest in Plant Virology.

She is currently the Yam disease Phenotyping Specialist at the Virology unit of IITA. She coordinates the phenotyping of yam diseases (virus and anthracnose) in breeding populations; she also trains national breeders

# SPEAKER BIOGRAPHIES

in phenotyping methods and associated activities in collaboration with the IITA virologist under the AfricaYam Project.

Her current interest is the development, validation, and adoption of digital Apps for accurate measurement of disease severity.

---

**Dr Adrian Valli**, Principal Investigator, Spanish National Center for Biotechnology (CNB-CSIC), Spain

### ***The paradigm of viral infections in plants of the Euphorbiaceae family***

Adrian Valli was born in Argentina, where he did a degree in Biotechnology in the National University of Littoral in Santa Fe. After that, he moved to Spain to carry out his PhD training in the field of plant viruses in the Spanish National Centre for Biotechnology, located in Madrid. Then, he moved to the UK for a postdoctoral stay in the University of Cambridge, where he studied the evolution of RNA silencing pathways in plants. Finally, he moved back to Madrid with the aim of starting his independent research. Adrian's laboratory is mainly focused in studying the co-evolution of plants and viruses.



CONNECTED

