



Lichfield Science & Engineering Society

LICHFIELD **GARRICK**
Theatre & Studio

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8:00 pm on Tuesday, 9th October 2018
in the Studio Theatre of the Lichfield Garrick, Lichfield, WS13 6HR

The Paul Bettson Lecture
**GLOBAL FOOD SECURITY:
Food, Famine and Fungi**

**Professor Sarah Gurr BSc, ARCS, DIC, PhD, MA (Oxon),
Chair in Food Security,
University of Exeter**

Prof. Sarah Gurr studied at Imperial College of Science, Technology and Medicine, where she was awarded The Huxley Medal for her outstanding record of achievement. She held an independent Royal Society University Research Fellowship and was appointed, firstly as Lecturer, then Professor at Oxford (Fellow of Somerville College), where she held a Leverhulme Trust Royal Society Senior Research and a NESTA Fellowship. Sarah was appointed to the Chair in Food Security, at Exeter University in 2013. She was formerly President of The British Society of Plant Pathology and currently sits on BBSRC Council. She has authored over 130 publications, including a contribution to the recent Government Foresight report on "Biological Hazards". Sarah holds Honorary Professorships at Utrecht and Pretoria Universities and was awarded the President's medal by the British Mycological Society in 2018.

Over the past centuries, crop diseases have led to the starvation of the people, the ruination of economies and the downfall of governments. Of the various challenges, the threat to plants of fungal infection outstrips that posed by bacterial and viral diseases combined. Indeed, fungal diseases have been increasing in severity and scale since the mid 20th Century and now pose a serious threat to global food security and ecosystem health. We face a future blighted by known adversaries, by new variants of old foes and by new diseases. Modern agricultural intensification practices have heightened the challenge - the planting of vast swathes of genetically uniform crops, guarded by one or two inbred resistance genes, and use of single target site antifungals has hastened emergence of new virulent and fungicide-resistant strains. Climate change compounds the saga as we see altered disease demographics - pathogens are on the move poleward in a warming world. This presentation will highlight some current notable and persistent fungal diseases. It will consider the "drivers" and manmade "accelerators" of spread. and will conclude with some thoughts on future threats and challenges, on fungal disease mitigation and of ways of enhancing global food security.

For further information, please see our website at www.LSES.org.uk
Students and Members Free.

Visitors £5.00. Tickets are not issued in advance, please pay at the door.

Members must sign in. Those signing in before 7:50 pm will have precedence over all visitors.

This lecture is expected to finish by 10.00 pm.