

Dr Sandra Stringer has worked at the Institute of Food Research in Norwich for over 17 years and is a Senior Research Scientist in the Food Pathogens Division. She has a degree in Food Science and a PhD in Food Microbiology, both from the University of Nottingham, and has previously worked in immunodiagnostic research and was the quality control manager of a meat-processing factory. Her research interests include: the physiology of pathogenic food bacteria and particularly *Clostridium botulinum*, pathogen growth in and spoilage of mild heat-treated food products; the heat resistance of Food pathogens, predictive microbiology and bacterial spores.

Sandra is a member of the world renowned *Clostridium botulinum* research group at IFR and has published 21 research papers.

The talk will include

How bacteria grow in food

- A general overview of bacterial growth
- What is necessary for bacteria food poisoning to occur
 - Distribution of organisms in food
 - Survival, particularly during cooking processes
 - Growth conditions, particularly temperature, pH, aW, preservatives
- The special factors relating to sous-vide products and regulations relating to processed chilled products

How to use computer based modelling tools

The talk will mainly be based on the use of ComBase and will include.

- ComBase on the Internet: Browsing and extracting raw data.
- Using ComBase: Modelling Toolbox.
- Limitations of models: From laboratory media to food.
- Quantifying the confidence in the predictions.
- Specific examples relating to survival or growth in sous-vide type products