

**STFC
Food
Network+**

Sarah Bridle

University of Manchester

PI of the STFC Food Network+

Science & Technology Facilities Council

- One of the 7 UK Research Councils
- Runs major facilities underpinning UK science
 - Massive synchrotrons, lasers (e.g. Diamond, CLF...)
 - Neutron, muon sources (ISIS, ...)
 - Computing facilities (SCD, Hartree)
 - Precision equipment (ATC, Boulby, Chilbolton) + Higgs
- Funds fundamental research
 - Astronomy, particle physics, nuclear physics, space science

Objectives of the SFN

- To build an inclusive, dynamic, **interdisciplinary network** of researchers focused on innovative ways to use the skills and facilities funded by STFC.
- To **kickstart inter-disciplinary collaborations** and research projects working towards safe sustainable food systems both in the UK and developing countries.
- To enhance the impact of STFC/food multidisciplinary collaborations by encouraging **codesign with the non-academic sector**.

SFN Co-Investigators



Sarah Bridle (PI)
Manchester, astrophysics



Katherine Denby
York, plant systems biology



Kieran Flanagan
Manchester, nuclear, spectrometry



Bruce Grieve
Manchester, agrifood sensors



Jason Halford
Liverpool, psychobiology, obesity



Lenny Koh
Sheffield, supply chain



Mark Reed
Newcastle, impact, ecosystem services



Alison Fletcher
(Project Manager)

SFN Steering Committee



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Alastair Taylor (Chair)
CEO IAgre



Peter Allan
Head of Strategy, RAL
Space



Peter Atkinson
Lancaster University



Myles Bremner
Consultant to Jamie Oliver
Foundation



David Flanders
CEO Agrimetrics Centre



Peter Lee
Acting Director, Research
Complex at Harwell



Hywel Owen
University of Manchester



Robin Pinning
Chief Technology Officer,
Hartree



**Ernesto Santibanez
Gonzalez**
UFSB, Brazil; Talca, Chile



Stefan Seuring
University of Kassel,
Germany



Tim Williams
Project Coordinator,
Farming Futures



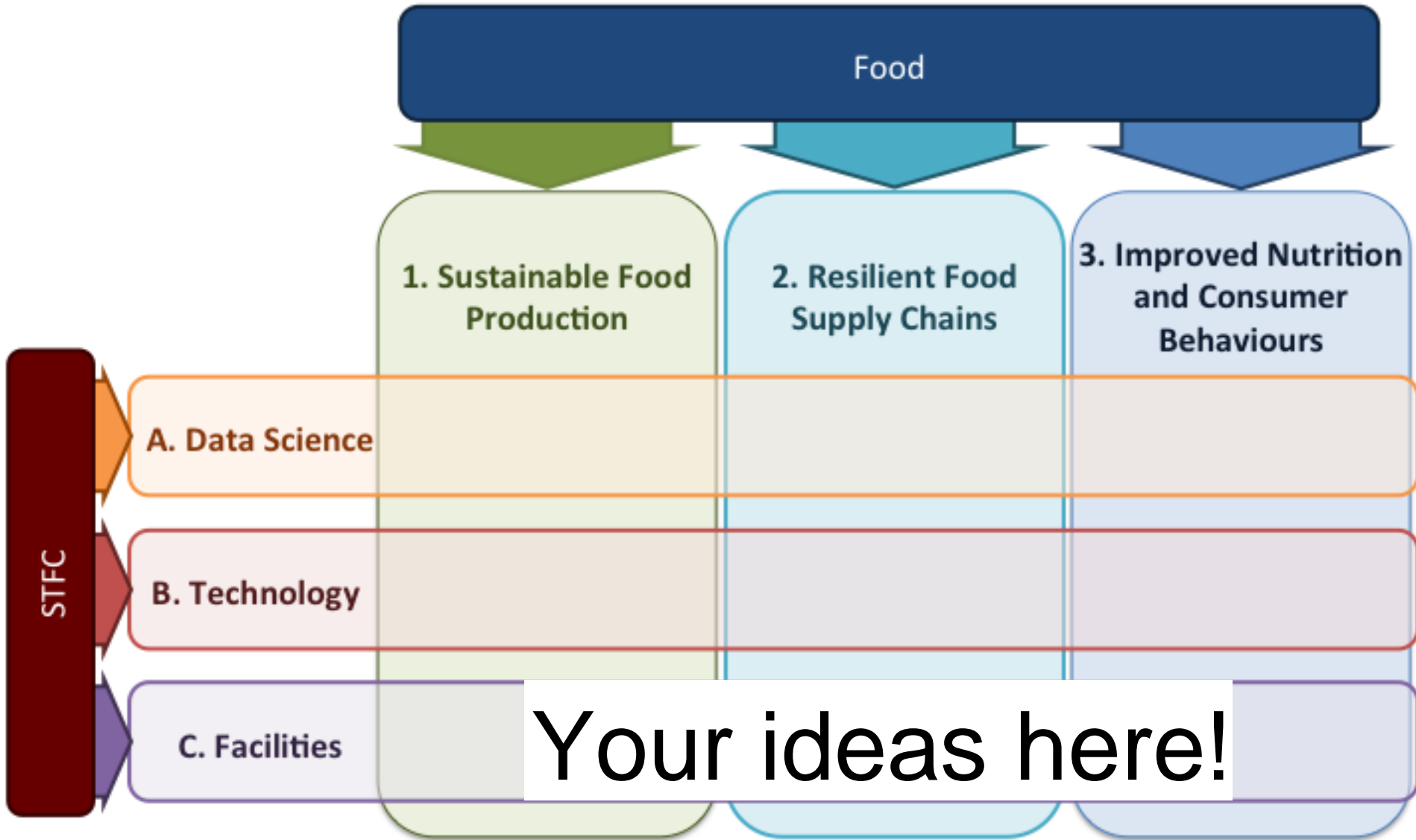
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What would “success” look like?

“For us, a successful SFN would have

- Instigated **multiple new projects** between STFC research and facilities and food research and industry, that would not have happened without the SFN.
- We would like the seed funding provided by the SFN to **enable these projects to become self-sustaining** beyond the SFN.
- We want the SFN to have **built cross-disciplinary communities** who understand the skill sets and challenges facing each other, and engage to solve agri-food problems”

Intersections



How can the SFN help facilitate these great ideas?

1. Don't do X Y Z
2. Do X Y Z better in ? Way
3. Start doing X Y Z

SFN Champions - New!



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Simon Pearson
SFN Champion for Sustainable
Food Production



Sonal Choudhary
SFN Champion for Resilient Food
Supply Chains



Christian Reynolds
SFN Champion for Improved Nutrition and
Consumer Behaviours



Seb Oliver
SFN Champion for STFC Data
Science



Stephen Serjeant
SFN Champion for STFC
Technology



Sarah Rogers
SFN Champion for STFC Facilities

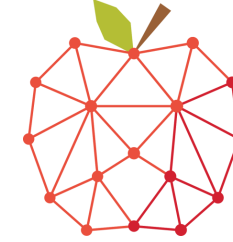
SFN Pre-Launch Survey

Highlights:

- Over 640 responses
- 75% of respondents were from STFC research or facilities
- 285 people said 'I would like to join the SFN mailing list to receive updates every few weeks'
- 82 people said 'I am considering attending the SFN launch meeting on 28/29 June in Manchester'

SFN Planned Activities

- Run a kick-off **Survey** to advertise the network, identify potential active members, identify issues and skills
- Appoint **Champions** to engage their communities in interacting with the Network+
- Write **Factsheets**
 - On food challenges that need solutions
 - On STFC capabilities
- Open **Annual Network+ Meetings**
- **Sandpit** events including Impact Sandpit in final year
- Selection and award (<8k) of travel money and **Small Scale Scoping Studies**



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SFN Seminars / Slides

- Please send us your slides about your food challenges
- Invite us to speak / visit your institution

Agri-food technology
Simon Pearson
• Founding Director of the Lincoln Institute of Agri Food Technology

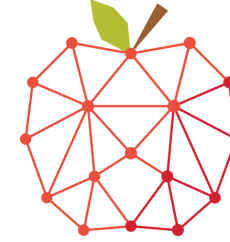
CIEL
Centre for Innovation Excellence in Livestock
• CIEL's vision is to support, promote and deliver innovative, industry-led research for sustainable intensification of the UK livestock sector through a single centre, with the aim of generating wealth and business competitiveness through growth

Dark Energy and gas pressure management
Imperial College
• We developed advanced statistical methods to analyse data about powerful, distant stellar explosions to understand the nature of the mysterious Dark Energy
• The same tools are being used to reduce methane leakage from the gas distribution network and thus fight climate change
• Learn more www.rdschools.co.uk and datafusion-consultants.com and ukenergy.co.uk

Blackgrass from space
• Wheat is one of the biggest crops in the UK
• Blackgrass is becoming the biggest problem
• Selective herbicide resistance
• Spreading from South to North
• Easily visible to the farmer
• Distinctive spectrum – when its too late to act
• Use Sentinel-2 data to monitor spread
Rob Fredkleton (USheffield), Helen Hicks (USheffield), Joe Fennell (UManchester), David Brightman (Brightman Farms), Sarah Bride (UManchester)

IKnow Food
Integrating Knowledge for Food Systems Resilience
Identifying transformative social and technological on-farm innovations
Developing tools to promote resilient food supply chains
Influencing food choice for health and resilience at individual and household level
Integrating knowledge for a more resilient food system

Blackgrass from space
• Information and technology provision, to what of innovations?
• For agri: sensors and automation technology?
• Reap/ripen support under replication of findings?
Krismarieke de Bruin



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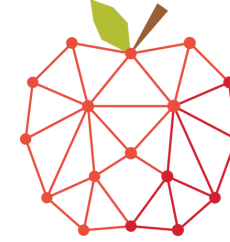
Your name / group name here!

- Your STFC capabilities and/or food interests here!

Your mugshot and/or research pics here!

Email your slides to queries@stfcfoodnetwork.org

SFN Website



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www.stfcfoodnetwork.org

