



University  
of Glasgow

Thursday, 02 June 2022

To: Dr Cat Ball, cball@sfc.ac.uk

**Re: SFC Alliances for Research Challenges (ARCs) – Call for Expressions of Interest**

Dear Dr Ball,

Please find attached our expression of interest for the SFC Alliances for Research Challenge. Our proposal is for a **Scottish Alliance for Food (SCAF) to address the major health, equity and sustainability challenges, linked to food and diet**, faced by the Scottish nation, in a global context.

SCAF is the result of several weeks of consultation with academic colleagues across ten academic institutions, namely the University of Glasgow, Heriot-Watt University, Stirling University, the James Hutton Institute, the Scottish Universities Environment Research Centre, the Scottish Rural College, Queen Margaret University, the University of Aberdeen, the Glasgow School of Art, the University of Edinburgh.

We will build on existing links within our networks, as well as new connections, to develop a future-focused programme of interdisciplinary research focused on the health, equity and sustainability impacts of the Scottish food system, which we believe to be and one of the most challenging research agendas facing our nation. Non-academic partners will also be central to SCAF delivering on this ambition, and all SCAF members maintain close relationships with consumer and public health organisations, as well as SME and national/international companies, who have a strong appetite to join such an alliance.

The disciplines involved in SCAF represent the breadth required to address the pressing research challenges presented by the Scottish food system, and include nutrition, obesity research, food science/technology, arts and social sciences (including citizen partnerships), business, mathematical/computational modelling, soil science, farming and aquaculture, public health and clinical sciences, (bio)medical sciences, systems science, retail marketing, wellbeing economy, law, and design innovation.

The point of contact for SCAF is:

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We look forward to hearing from you

With best wishes

Prof Emilie Combet,  
*on behalf of the SCAF cross-institutional, cross-disciplinary leadership group*

## Scottish Alliance for Food: health, equity and sustainability (SCAF)

The proposed challenge area focuses on radically re-imagining the Scottish food landscape to deliver unmet direct benefits for people (producers, retailers, citizens/consumers) and the environment, thereby linking directly to the six Scottish Government priority areas, outlined below. Our vision for this challenge is future-focused, interdisciplinary research driving a reimagined food landscape, which is healthful, equitable and sustainable. The new landscape needs to reflect both traditional and evolving local food cultures (similar to the Nordic food culture and the New Nordic Diet); the role of food in the Scottish identity; how food influences health trajectories; and the need to transform our food system to be fit for the future in the face of the climate emergency. This transformation of the food system requires both changes in individual choices and behaviours, and changes in the organisational and industry practices and the government policies that shape the context for those choices and behaviours.

Increased agility in the retail sector (e.g., meat-free/reduced, plant-based, gluten-free foods), combined with visible healthy eating campaigns (e.g., Scottish Dietary Goals, Eat Well Guide, 5-a-day campaign, food labelling with Traffic Light System, VegPower) have yielded small changes in consumer behaviour without achieving deeper transformational change. There continue to be high rates of obesity and associated non-communicable diseases, overconsumption of foods with high health and environmental impacts, reliance on out-of-home food consumption, loss of cooking, growing and household planning skills and a high dependence on food manufacturers and industries. However, both Covid-19 and the emerging climate and food crises are challenging global food systems and related purchasing /cooking behaviours, highlighting the lack of resilience and over-reliance on complex supply chains, and representing a significant trigger point for positive disruption and transformation at organisational, community and individual levels.

The Scottish Alliance for Food (SCAF) will bring together areas of research excellence across the different discipline areas, to deliver focused, concerted actions to grow our capacity to facilitate genuine systems thinking and deliver excellent transformative research to support the emergence of a sustainable food and diet system, and sustainable food and diet practices and behaviours in Scotland.

## A healthy, equitable and sustainable diet and Scottish Government priorities

SCAF activities will be geared to generate excellent innovative research to positively impact the health of ALL the population, through increased consumption of a diet that aligns with the revised Scottish Dietary Goals (2016), is sustainable and contributes to achieving Scotland's Net Zero Nation 2045 target, whilst being accessible, affordable and appealing to consumers. Food as a critical factor for health, equity and sustainability is central to the six priorities of the 2021-22 report "[A fairer, greener Scotland](#)"<sup>1</sup>.

At the heart of the government priority "**A caring society**", the focus on food and diet aims to alleviate the negative impact of deficient and / or unhealthy diets on the health and wellbeing of the nation, tackling food deserts, unhealthy and discretionary food promotions, out of home eating and the loss of cooking skills, and related inequalities. "**Scotland as a land of opportunity**" positions food as a vector for attainment, focusing on the right to good food for all, with emphasis on early life intervention and actions to foster equality. Food is also built into "**A net zero nation**", through the opportunity to develop innovation to prioritise healthy, local, sustainable food, supported by the creation of a new "sustainable Scottish" food brand. In addition, "**An economy that works for all of Scotland's people and places**", recognises the key part that agriculture (and food production) plays in Scottish tourism and Scottish culture. Fishing, aquaculture and vertical farming are outlined, as well as the need for technology, science and innovation to make farming more climate and environment friendly. Finally, strengthened food supply chains are supported through the Food and Drink Sector recovery plan. Priorities "**Living better**" and "**Scotland in the world**" are intrinsically linked with food as a vector of wellbeing and identity. For example, local community food growing can form part of liveable neighbourhoods and contribute to equitable access to fresh foods, increased social connectedness within communities, improved mental health, and local food system resilience.

A key policy driver is the Good Food Nation bill for Scotland<sup>2</sup>, specifically commitments toward the food landscape (sustainable, local, with availability of healthful foods supporting the needs of individuals; managed impact on the environment), consumers/citizens (knowledge, desire and access to "good food" for all communities; decline of diet-related ill-health), food providers (selecting, processing and supplying "good food" knowing it is sustainable for the health of the nation and the environment; food industry as a key industry and employment of choice; playing a critical role in Scotland's identity).

<sup>1</sup> [A Fairer, Greener Scotland: Programme for Government 2021-22 - gov.scot \(www.gov.scot\)](#)

<sup>2</sup> <https://www.gov.scot/policies/food-and-drink/good-food-nation/>

### SCAF: A multidisciplinary response bringing together key areas of research excellence

The food system vision required to address the research challenge needs cross-sector collaboration with input and expertise from a broad range of academic disciplines and non-academic partners and stakeholders to tackle its health, societal, economic and environmental dimensions. A critical research gap is how to elicit a shift in food and dietary practices that will not only lead to a significant positive impact on the health of the Scottish people and environment, but also deliver beneficial economic impacts to food system actors. We propose an alliance built on a pragmatic approach, responding to the differing needs and priorities of multiple stakeholders through co-production. Using a broad collaborative approach, SCAF aims to benefit from the “Medici Effect” where “breakthrough insights” occur “at the intersection of ideas, concepts, and cultures”.

To tackle the food – health – equity – sustainability challenge, SCAF must bring together connected disciplines across the natural and social sciences, delivering a true food systems approach anchored in business / commercial reality. Alliance members will bring expertise and recognised Scottish research strength in the fields of nutrition, obesity, food science/technology, arts and social sciences, business, mathematical/computational modelling, soil science, farming and aquaculture, public health and clinical sciences, (bio)medical sciences, systems science, retail marketing, wellbeing economy, law, and design innovation. The alliance will also involve non-academic partners experienced in delivering applied translational research with high societal impact delivery through multi-disciplinary projects, as well as policymakers and consumer organisations.

SCAF builds on proven research excellence in the disciplines above, through:

- ◆ leading major collaborative projects from **EU** (e.g. INFABIO *Effect of diet and lifestyle on risk of gastrointestinal infection and allergy in early life*; consumer knowledge, attitudes and needs, MARISURF *Novel, Sustainable Marine Bio-Surfactant*, DEVELONUTRI *Development of High Throughput Approaches to Optimise the Nutritional Value of Crops and Crop-Based Foods*), **UKRI** (e.g. ASSIST *Achieving Sustainable Agricultural Systems*, GALLANT *Glasgow as a Living Lab Accelerating Novel Transformation*, UKRI Diet Research Industry Research Club (DRINC) projects and Innovate UK projects), **NIHR** trials (e.g. ReDIRECT *Remote Diet Intervention to reduce Long Covid symptoms*, iPREVENT *Increased colonic propionate as a method of preventing weight gain in young adults*, FFIT *Football Fans in Training men’s weight loss programme*), and charities (e.g. Diabetes UK DiRECT *Diabetes remission trial*);
  - ◆ leadership roles within major groups, associations and learned societies (e.g. ILSI Europe expert groups, European Nutrition Leadership Platform, Association for the Study of Obesity, RSE Young Academy of Scotland),
  - ◆ leading partnership in the World Economic forum European Carbon+ Farming Coalition;
  - ◆ invited participation in the new UKRI Diet and Health Open Innovation Research Club hubs,
  - ◆ establishing the UK Government’s centre of excellence in agricultural big data,
  - ◆ championing for the successful bids “Transforming Food Production programme” (Government’s Industry Strategy Challenge Fund), International Barley Hub, Advanced Plant Growth Centre, The Centre AgriTech Sustainable Innovation.
- ➔ We will springboard on these areas of excellence to generate new initiatives that will bridge our collective expertise to form an integrated systems approach.

SCAF will also foster and signal the move toward a more distributed social food system that recognises that people participate not only as consumers in the capitalist marketplace, but as empowered agents of change. We will recruit and work closely with an Academy of Citizens, reflecting diverse cultures and ethnicities, and different life stages, including children and young people, adults, elderly. The Academy of Citizens will focus on translation of culture and experiences to younger generations, and on developing a framework of debate and engagement around diet, food culture and the environment. This will include explorations of food as a driver for social cohesion, nutrition/health/culture, economic resilience and sustainability. We will tightly integrate our Academy of Citizens throughout all SCAF activities to ensure all our research is co-produced from inception to output.

### Balancing breadth and specificity

Our vision is to unlock the full innovation potential of Scottish food and diet research to support the adoption of new practices and behaviours to promote the health of the Scottish people and the environment.

The focus is **specific**, on the Scottish food system and landscape, the diet and food practices of individual and organisational actors, and on how changes can positively impact population and environmental health. The alliance of collaborating academic and non-academic partners requires to be **broad and inclusive** to enable SCAF to transcend research siloes and embrace the expertise and diversity of thinking that multi-disciplinary alliances can foster. Understanding and reconciling world views through the co-creation of solutions with all stakeholders is required from the outset. SCAF will therefore connect and empower key stakeholder groups, including local communities across Scotland, to co-create research and develop world-leading solutions cognizant of the current Scottish government priority areas linking food – health – equity – sustainability – economy. Involving industry

and policy actors across the food and diet research spectrum is essential to foster a diverse, multidisciplinary ecosystem which delivers impactful research that kickstarts and continuously supports the much-needed transformation of the Scottish food system. Importantly, adopting a fully inclusive approach will ensure identification of a range of solutions to appropriately benefit food producers, processors and retailers via income diversification, at the same time as meeting health and environment imperatives.

### SCAF funding opportunities

Fulfilment of SCAF's vision will reinforce its position as a leading international player in the challenge area of food – health – equity – sustainability, with the necessary visibility and combined expertise to leverage our prior successes (outlined above) and strong networks within and beyond Scotland to competitively bid for, and win, research funding via (but not limited to) the following opportunities:

- **UKRI** Diet and Health Open Innovation Research Club (£11 million investment – including support for an annual R&D collaborative competition to address key challenges within the diet, health and nutrition sector), **UKRI** UK Food System for Healthy People and a Healthy Environment SPF programme, **UKRI** Doctoral training partnerships
- **ESRC** National Capability in Behavioural Research, **NERC** Pushing the frontiers of environmental science research, **BBSRC** transforming food programme, **Innovate UK** Farming innovation programme and agri-food opportunities
- **Wellcome Trust** Climate Change and Health funding
- Joint Programming Initiative a Healthy Diet for a Healthy Life (**JPI HDHL**) calls
- **Horizon EU Cluster 1** “[Health](#)”<sup>3</sup>, with calls in destination 1 “Staying healthy in a rapidly changing society”, destination 2: “Living and working in a health-promoting environment”, destination 3: “Tackling diseases and reducing disease burden”; **Cluster 6**<sup>4</sup> “[Food, Bioeconomy, Natural Resources, Agriculture and Environment](#)”, with calls in destinations 2: “Fair, healthy and environmentally-friendly food systems from primary production to consumption” linked to the “Farm to Fork” strategy of the European Green Deal, destination 3: “Circular economy and bioeconomy sectors”, destination 4: “Clean environment and zero pollution”, destination 6: “Resilient, inclusive, healthy and green rural, coastal and urban communities”.

### Description of the coalition of academic and non-academic partners

SCAF will draw on a full complement of expertise in fields cogent to the challenge area “**A healthy, equitable and sustainable diet for Scotland**”, initially from 10 universities / institutes: University of Glasgow (UoG), Heriot-Watt University (HWU), Stirling University (SU), James Hutton Institute (JHI), Scottish Universities Environment Research Centre (SUERC), Scottish Rural College (SRUC), Queen Margaret University (QMU), University of Aberdeen (UoA), Glasgow School of Art (GSA) and University of Edinburgh (UoE). Existing synergies with colleagues in the following key disciplines will be leveraged to form the scaffolding for the alliance and expand the consortium further.

Institution	School / Institute	Department / discipline
UoG	School of Medicine	Human Nutrition
	School of Social and Political Sciences	Social Scientists in Health Wellbeing Economy
	School of Psychology and Neuroscience	Psychology of Behaviour Change
	Institute of Cardiovascular and Medical Sciences	Obesity Cardiovascular Sciences
	College of Art	Arts Lab: Scottish Food and Drink Histories; Food Sovereignty
	Adam Smith Business School	Strategy and Technology Management Consumer Research and Ethics
	School of Computing Science	Agriculture and Modelling AI-Driven Sustainability
	Institute of Health and Wellbeing	General Practice Public Health Systems Science
HWU	School of Engineering & Physical Sciences	Food Sciences
SU	Institute of Aquaculture	Aquaculture
	Marketing & Retail	Food Marketing
	Mathematics	Food Security & Sustainability

<sup>3</sup> [Cluster 1: Health | European Commission \(europa.eu\)](#);

<sup>4</sup> [Cluster 6: Food, Bioeconomy, Natural Resources, Agriculture and Environment | European Commission \(europa.eu\)](#)

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JHI	Environmental and Biochemical Sciences Advances Plant Growth Centre	AgriFood business systems
QMU	Media, Communication and Performing Arts	Gastronomy, Food Culture, Communication
SUERC	Isotope Biochemistry laboratory	Food compositional analysis, biomarker researcher
SRUC	Rural Economy, Environment and Society Rural Development & Food Marketing	Food Policy
GSA	Innovation school	Design Innovation
UoA	Interdisciplinary Centre for Health, Wellbeing & Nutrition	Food Systems and Sustainable Diets
UoE	School of Geosciences	Global Academy of Agriculture and Food Systems

Routes to expanding academic buy-in into the alliance will rely on existing networks, but also on collaboration with learned societies (e.g., Nutrition Society and Association for the Study of Obesity Scottish Networks).

Non-academic partners (most of who have not yet been approached formally, but have existing research relationships with the academic partners) will bring expertise in community food interventions and policy shaping (e.g. **Lanarkshire Community Food & Health Partnership, Glasgow Food Policy Partnership**), farming and processing (e.g. **the MORE project, ForFarmers**), meat/fish processing (e.g. **ScotBeef, AquaScot, Scottish Shellfish, International Fish Cannery**), urban farming (e.g. **Liberty Produce**), exploitation of sustainable underused food resources (e.g. **Seaweed&Co, Entocycle**), food innovation, reformulation and distribution (e.g. **EatBalanced Ltd, Quorn**), food literacy (e.g. **Royal Highland Education Trust**), retail (e.g. **Scotmid, Waitrose**), waste management (e.g. **ZeroWaste Scotland**), local government (e.g. **North Lanarkshire Council, Glasgow City Council**), primary care (e.g. **Deep End GPs**), national policy organisations (e.g. **Food Standards Scotland, Public Health Scotland**). To articulate fully the link with small and medium enterprise, partnerships with **Interface** and **Bioscience KTN** will enable greater reach and co-opting into SCAF. SCAF will be primed to rapidly co-opt, befriend, and federate around the challenge area.

The alliance will be led by Prof Combet (UoG, Nutrition) who will act as key contact for coordination, with a core cross-institutional, cross-disciplinary leadership group (Prof Gray, UoG Social Sciences; Dr Papias, UoG Psychology; Prof Euston, HWU Food Sciences; Prof Little, SU Aquaculture; and Prof Stewart, JHI, AgriFood business systems), to be expanded as the consortium is formalised, balancing representation of all institutions.

#### Added benefit from SFC funding

SCAF fills an immediate gap in the Scottish food and diet landscape, which has lacked the core investment needed to enable stakeholders to self-organise and be recognised as a world-leading multi-disciplinary research force. SCAF will facilitate true partnership and engagement with actors / agents across the food system, with SFC funding bridging the investment gap to fuel innovation.

SFC funding will directly support key activities to enable a linked-up collaborative research culture beyond academia, bolstering skills and expertise and federating key stakeholders, to ensure that Scotland is recognised as an international beacon in healthy equitable and sustainable food research and innovation. The funding will afford protected time and RA project management support for the SCAF leadership team to coordinate sustained activities and network-building, initiate responses to emerging opportunities, and actively foster non-traditional interactions built on multidisciplinary, knowledge exchange and skills transfers.

Specific activities will include: identifying opportunities (e.g. mapping industry and community needs, horizon scanning), building capacity (e.g. through showcasing skills and expertise, increasing external visibility to other UK and European partners and funders, supporting key pilot/feasibility projects, inter-disciplinary doctoral exchanges), knowledge exchange and networking (through industry and policy engagement events, match-making events, debates, sandpits), and forward-looking income-generating activities (e.g. grant writing workshops, seeking directed industrial investment into SCAF research efforts). These activities will ensure that SCAF is well-positioned as an agile framework with increased capacity for rapid response, as well as a knowledge hub for policy makers with streamlined access and consultation processes.

Specific four year goals include leading three large grants focusing on healthy, equitable and sustainable food systems; development of SCAF national consultation fora (including and Academy of Citizens) to collectively achieve greater integration of industries and consumers in the research process; development of research skills (e.g. via doctoral training and PGR/ECR methods workshops); and demonstratable food system impacts in terms of health, equity and sustainability.