AN INTRODUCTION TO COST

Judith Litjens
Policy Officer at the COST Association
Chapter 1

About COST & Strategic Priorities
European Cooperation in Science & Technology

COST provides networking opportunities for researchers and innovators in order to strengthen Europe’s capacity to address scientific, technological and societal challenges.

- **ALL FIELDS OF S&T**
  - (mono- or interdisciplinary, new and emerging fields)

- **ALL CAREER STAGES**
  - (young and experienced researchers)

- **ALL PARTNERS**
  - (academia, public organisation, industry, NGO, International Organisations)

- **ALL COUNTRIES**
  - 41 COST Members
  - 1 Cooperating Member
  - 16 Near Neighbour Countries
  - Global cooperation

- **BOTTOM-UP APPROACH**

- **OPEN BY NATURE**
COST Membership

41 Members
- Albania
- Armenia
- Austria
- Belgium
- Bosnia and Herzegovina
- Bulgaria
- Croatia
- Cyprus
- Czech Republic
- Denmark
- Estonia
- Finland
- France
- Georgia
- Germany
- Greece
- Hungary
- Iceland
- Ireland
- Italy
- Latvia
- Lithuania
- Luxembourg
- Malta
- The Republic of Moldova
- Montenegro
- The Netherlands
- The Republic of North Macedonia
- Norway
- Poland
- Portugal
- Romania
- Serbia
- Slovakia
- Slovenia
- Spain
- Sweden
- Switzerland
- Turkey
- Ukraine
- United Kingdom

1 Cooperating Member
- Israel

1 Partner Member
- South Africa

- COST Members non-ITCs (Inclusiveness Target Countries)
- COST Members ITCs
- COST Cooperating Member
- COST Partner Member
COST Actions: how do they work?
How it works?

Main proposer

Secondary proposers

Country representatives nominated by COST National Coordinators
COST Actions
AN EFFICIENT NETWORKING TOOL

COST provides funding for research coordination and capacity building activities.

COST is not funding research itself, but pooling resources and research results by networking.

Memorandum of Understanding

4 years

Min 7 countries, average participation 30 countries

Research coordination and capacity building activities

~ €600,000 over lifetime
COST Action structure and leadership positions

**MANAGEMENT COMMITTEE (MC)**
- Action Chair
- Vice-Chair

**HORIZONTAL GROUPS**
- WG1
- WG2
- WG3

**GRANT HOLDER (GH)**
- GH scientific rep.

**COST ASSOCIATION ADMINISTRATION**
- Grant Awarding Coordinator
- Science Comm. Coordinator

**WG4**
- WG5
- WG6

**WG leaders**
Networking tools

- Management committee meetings
- Working group meetings
- Conferences/workshops
- Training schools
- Short-term scientific missions
- Dissemination
- Virtual networking grants
Key figures

292 Running Actions

203 Trainings schools

€150,000 Average annual budget of a COST Action

2,320 Short-term scientific missions

45,000 Researchers involved in COST Actions

€153 million COST budget (in Horizon Europe for a 3-year period)
UK participation in COST: key figures 2022

COUNTRY REPRESENTATION IN COST ACTIONS

LEADERSHIP POSITIONS IN COST ACTIONS

NETWORKING ACTIVITIES IN UNITED KINGDOM

BUDGET RECEIVED

1,113,557.74 €

INDIVIDUAL PARTICIPATION IN ALL ACTION ACTIVITIES

PARTICIPATION IN NETWORKING ACTIVITIES

69
Short-term scientific missions

157
Trainees

85
Trainers
Impact

Scientific and societal impact
- Scientific discoveries and breakthroughs, development of new research infrastructures, adoption of common standards, technological applications in the form of products and services, etc.

Research careers
- 95% of researchers participating in COST Actions indicate that participation has led to career advancement

Follow-up funding
- Horizon 2020 reported success rate: 39% (on a yearly basis, around €390 million of approved common research projects spin off from ending Actions)
Travel Reimbursement rules

Daily allowance (DA) covers:

- Hotel
- Meals
- Local travel in meeting country

Based on:

- Meeting country
- Traveltimes

Long distance travel (≥101 km) covers total travel expenses up to 1500 EUR

- Meeting country €160-200
- Traveltimes
- Meals offered by LocalOrganiser (-10% deducted per provided meal)

Others:

- Visa costs
- Travel cancellation insurance
What is the maximum grant amount for each type?

• STSM
  ✓ Up to 4000 EUR
  - request to prepay 50% is possible but decision lies with GH Institution

• Virtual Mobility Grant
  ✓ Up to 1500 EUR

• ITC Conference Grants and Dissemination Conference Grants
  ✓ Up to 2000 EUR per grant for face to face conferences OR
  ✓ Up to 500 EUR for virtual conferences
How to engage with COST?
How to engage with COST?

1. As a participant of a running Action
2. As a proposer of a new COST Action
3. As an expert to evaluate submitted proposals

NEXT COLLECTION DATE: 25 OCTOBER 2023
1. As a participant in a running Action (1/2)

- **FIND THE ACTION IN YOUR FIELD**
  of interest on the COST website

- **READ THE PROJECT PLAN**
  (MoU) – identify your potential contribution

- **BROWSE THE ACTION’S OWN WEBSITE**
  – check their activities

- **IDENTIFY THE OPPORTUNITIES**
  to join the Action and your contact person
1. As a participant in a running Action (2/2)

- **AS A MANAGEMENT COMMITTEE (MC) MEMBER**
  (contact the COST National Coordinator)

- **AS A WORKING GROUP (WG) PARTICIPANT**
  (contact the WG leader)

- **AS AD-HOC PARTICIPANT IN ACTION ACTIVITIES**
  short-term scientific mission, ITC conference grant, training school, workshop/conference,…
  (check the Action’s website, contact the chair or the national MC member)
JOIN 70 NEW COST ACTIONS FROM 9 JUNE 2023

Find out more about how to join a new COST Action here:
70 new COST Actions now online: apply to join
2. As proposer of a new COST Action

COST OPEN CALL

- One-stage online submission of proposals (eCOST)
- Proposal should focus on S&T Excellence, Networking Excellence, Impact and Implementation
- 70 COST Actions approved per collection

- Main proposer + secondary proposer
- Collection date: 25 October 2023 12:00 CET
- www.COST.eu opencall@cost.eu
Open Call for proposals—how to apply

E-COST

1. Create a COST account:
   https://www.cost.eu/ecost

2. > Open Call
   - Open Call
   - COST Actions

   > Proposals
   - Calendar
   - Proposals
   - Evaluations

3. > Create new proposal
   Create New Proposal

Online registration and submission:
General information + Technical Annex
GENERAL FEATURES

1. S&T Excellence
2. Networking Excellence
3. Impact
4. Implementation

TECHNICAL ANNEX
(www.cost.eu)

COST EXCELLENCE AND INCLUSIVENESS POLICY SPECIFIC OBJECTIVES

NETWORK OF PROPOSERS
COST Excellence and Inclusiveness Policy

**OBJECTIVES**

1. Identifying excellence in science and technology across Europe
2. Increasing research communities’ access to funding and infrastructures
3. Triggering structural changes in COST Members' national research systems

**PROMOTING**

- GEOGRAPHICAL BALANCE (ITC)
- AGE BALANCE (young researchers)
- GENDER BALANCE throughout its activities
Evaluation

SESA

ELIGIBILITY!
- Anonymous
- Minimum 50% ITC
- Peaceful purpose
- Format
- English

STEP 1
EXTERNAL REMOTE EVALUATION
- 3 Independent External Experts
- Technical Annex

STEP 2
REVISION AND QUALITY CHECK BY REVIEW PANELS

STEP 3
SELECTION BY THE SCIENTIFIC COMMITTEE
COST policy and objectives

STEP 4
APPROVAL BY COST COMMITTEE OF SENIOR OFFICIALS
Results 7-8 months after submission
Evaluation criteria

**S&T EXCELLENCE**
- Soundness of the challenge
- Progress beyond the state-of-the-art

3 QUESTIONS
Total marks for the section = 15 points

**NETWORKING EXCELLENCE**
- Added value of networking in S&T excellence
- Added value of networking in Impact

3 QUESTIONS
Total marks for the section = 15 points

**IMPACT**
- Impact to science, society and competitiveness, and potential for innovation/breakthroughs
- Measures to maximise impact

3 QUESTIONS
Total marks for the section = 15 points

**IMPLEMENTATION**
- Coherence and effectiveness of the work plan

1 QUESTION
Total marks for the section = 5 points

TOTAL MARKS AWARDED = 50 points
OVERALL THRESHOLD = 34 points
How to apply in a nutshell

- Read the official announcement
- Online registration and submission (e-COST)
- Helpdesk: opencall@cost.eu

- Read the SESA Guidelines
- Technical Annex template (Documents and Guidelines repository on the COST website)

70 new COST Actions:
- News article on 70 approved COST Actions – May 2023
Tips for submitting a winning COST Action proposal

Tips for submitting a winning COST Action proposal on YouTube
3. As external expert

As a COST Expert, you will have the opportunity to

Contribute to the evaluation of COST Open Call proposals

Participate in the assessment of Action results and outcomes
THANK YOU!
COST Action CA21149: ACRYRED

Reducing acrylamide exposure of consumers by a cereals supply-chain approach targeting asparagine

Presentation Title

Nigel G. Halford, Rothamsted Research

Action Chair
The challenge

The problem of acrylamide in common food products has implications for the whole food supply chain, from plant breeders through farmers, food processors and retailers to consumers and regulators.

We have to stay ahead of the game, by making sure that cereal products can comply with current and future regulations on acrylamide.

This requires a farm-to-fork understanding of acrylamide mitigation in foods produced from grains.
Who is involved?

- Plant breeders
- Agricultural grain farming community
- Global grain traders
- EU food processors
- Toxicologists
- Academic researchers from relevant disciplines
- Public regulators
- Relevant consumer groups
- Health interest groups
Key objectives

• Co-ordinate research.
• Facilitate knowledge exchange between scientific disciplines.
• Stimulate research in supply chain management.
• Stimulate research efforts in cereal farming practices.
• Build capacity.
• Create interdisciplinary training.
• Develop academic/industrial collaboration programmes to reduce barriers between knowledge and implementation.
• Support researchers from Target Countries to extend knowledge network.
What we hope to achieve

Scientific progress

- Cross-disciplinary exchange of knowledge that will inspire new research efforts in scientific fields that have not been involved in the challenge to reduce acrylamide levels in food so far.
- Holistic understanding of the cereal supply chain that will support improvement of quality and food safety management.
- An overview of the relative risks and consequences of changes in crop composition and processing for the Maillard Reaction, product quality and food safety for cereal-derived products.
- A better understanding of the underlying genetics controlling asparagine metabolism in cereals that can underpin the development of genetic tools for breeders.
- Development and dissemination of ‘best practice’ for crop management to produce cereal grains with consistently low acrylamide-forming potential, including crop nutrition and protection.
- Discussions on rapid testing parameters and criteria that will help to define standards for the development of accurate rapid testing tools for asparagine levels.
What we hope to achieve

Economic progress

• Discussions involving the full supply chain on the economic impact that measures to lower acrylamide levels will have on the value chain and on consumer prices, and how costs and benefits may be distributed along the value-chain.

• Increased availability of raw materials at lower and more consistent free asparagine levels.

• Discussion on technical and economic requirements that will inform the development and commercialisation of rapid measurement tools for asparagine levels.

• Enabling of grain buyers to select what they buy based on free asparagine levels using a rapid asparagine testing tool.
What we hope to achieve

Societal progress

• Facilitate and accelerate the reduction in acrylamide levels in cereal products.

• Promote dialogue on and encourage the inclusion of information on free asparagine levels in crop variety descriptions.

• Promote the development and validation of analytical tools to measure free asparagine and acrylamide.

• Provide a source of information for policy-makers about what the scientific community and the industrial supply chain are developing to reduce the risk of acrylamide formation in products.

• Contribute to the continuous improvement of the FoodDrinkEurope Toolbox.
Structure of the COST Action

Core Group

Management Committee

Grant Holder
International Life Sciences Institute (ILSI) Europe

Working Groups
The structure of the COST Action

Core Group

• Action Chair: Nigel Halford
• Vice Chair: Neil Buck
• Grant Holder Scientific Rep.: Andrea Colafranceschi
• Grant Awarding Coordinator: Kristína Kukurová
• Science Communication Coordinator: Małgorzata Starowicz
• Working Group leaders and co-leaders.
The structure of the COST Action

Five working groups:

- **WG1**: Exchange of knowledge, communication, dissemination
- **WG2**: Agronomy and cereal breeding
- **WG3**: Food chemistry and processing
- **WG4**: Cereal Supply Chain, from Producers to Consumers
- **WG5**: Risk Benefit analysis of acrylamide and its mitigation measures
Working Group 1

Leader: Nigel Halford (UK)
Co-leader: Małgorzata Starowicz (PL)

Exchange of knowledge, communication, dissemination
Leader: Marianne Rakszegi (HU)
Co-leader: Viktor Korzun (DE)

Agronomy and cereal breeding
Working Group 3

Leader: Jane Parker (UK)
Co-leader: Christine Nowakowski (US)
Cereal Supply Chain, from Producers to Consumers

Leader: Tanya Curtis (UK)
Co-leader: TBC
Working Group 5

Risk Benefit analysis of acrylamide and its mitigation measures

Leader: Zuzana Ciesarová (SK)
Co-leader: Vural Gökmen (TR)
Working together

• There must be interactions between as well as within working groups.

• Dialogue between researchers, breeders and food businesses is crucial: what food businesses need, what plant breeders can realistically deliver, how research scientists can support, how it impacts on the cereal supply chain.

• Free asparagine accumulation in grains is affected by many factors, meaning that many researchers may not realise the significance of their work for the acrylamide issue: we need to bring those people into the COST Action.
Other benefits of the COST Action

• Being chair of a COST Action opens some doors and gets people’s attention.
• The COST Action raises awareness of the issue amongst scientists. Grants for scientists to visit other labs may bring people into this research area, particularly ECRs.
• The COST Action participants have a lot of expertise on the acrylamide issue: we aim to become a recognised, reliable and trusted source of information.
• We can bring people together from very different sectors, from plant breeders and farmers, through to food businesses and consumer groups.
The ACRYRED website

https://acryred.eu/?cmp_bypass=btk
Thankyou!