

**BlueHealth**

Linking environment, climate & health



**Seas, Oceans & Public  
Health in Europe**

Linking oceans and health research



**INHERIT**

# Project overviews

## World Water Week, Stockholm

### 28<sup>th</sup> August 2018

**Dr Jo Garrett**

European Centre for Environment and Human Health  
University of Exeter

BlueHealth, SOPHIE and INHERIT are funded by the European Union's Horizon 2020  
Research and innovation programme, grant agreements No 666773, 774567 and 667364



# Background



## Environment and health

- Previous work has shown links between natural environments and positive health and wellbeing outcomes
- But has tended to focus on green spaces
- Much less is known about the effects of **blue spaces on health**
- Unique contribution to health and wellbeing



# Background

## Environment and health

- Previous work has shown links between natural environments and positive health and wellbeing outcomes
- But has tended to focus on green spaces
- Much less is known about the effects of **blue spaces on health**
- Unique contribution to health and wellbeing



**Seas, Oceans & Public Health in Europe**  
Linking oceans and health research

# Aims and objectives



Overall aim



Urban blue  
infrastructure



Human health  
and wellbeing



# Aims and objectives



Overall aim



Urban blue



Health and wellbeing

# Aims and objectives



Overall aim



Urban blue



Health and wellbeing

Research agenda



- Protect the ocean
- Harness health benefits
- Reduce its risks

# Aims and objectives



Overall aim



Urban blue



Health and wellbeing

Research agenda



- Protect the ocean
- Harness health benefits
- Reduce its risks

Policies and interventions



Improved health, health equity and sustainability

# Why living, moving and consuming?



Health and the environment



# Why living, moving and consuming?



Health and the Environment



# Why living, moving and consuming?



Health and the Environment



# Why living, moving and consuming?



Health and the Environment



# Why living, moving and consuming?



Health and the Environment



Carbon emissions

# Why living, moving and consuming?



Health and the Environment



Carbon emissions



Health

# Why living, moving and consuming?



Health and the Environment



Energy efficiency



Green spaces

# Partners



## BlueHealth



National Institute for Public Health  
and the Environment  
*Ministry of Health, Welfare and Sport*



LUND  
UNIVERSITY



World Health  
Organization

REGIONAL OFFICE FOR  
Europe



**Eesti Maaülikool**  
Estonian University of Life Sciences

[www.emu.ee](http://www.emu.ee)

**ISGlobal** **Barcelona**  
Institute for  
Global Health



**cmcc**  
Centro Euro-Mediterraneo  
sui Cambiamenti Climatici



ΑΡΙΣΤΟΤΕΛΕΙΟ  
ΠΑΝΕΠΙΣΤΗΜΙΟ  
ΘΕΣΣΑΛΟΝΙΚΗΣ



# Partners



SOPHIE





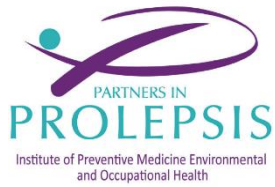
# Partners



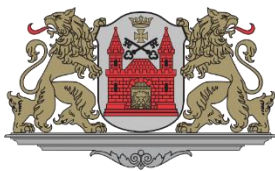
## INHERIT



REVOLVE



PHILIPS



# Activities



Evidence synthesis

# Activities

Evidence synthesis



## Reviews:

- Regeneration projects
- Bluespace and health
- Virtual reality

International Journal of Hygiene and Environmental Health 220 (2017) 1207–1221



Contents lists available at [ScienceDirect](#)

International Journal of Hygiene and Environmental Health

journal homepage: [www.elsevier.com/locate/ijheh](http://www.elsevier.com/locate/ijheh)

## Review

Outdoor blue spaces, human health and well-being: A systematic review of quantitative studies

Mireia Gascon<sup>a,b,c,\*</sup>, Wilma Zijlema<sup>a,b,c</sup>, Cristina Vert<sup>a,b,c</sup>, Mathew P. White<sup>d</sup>, Mark J. Nieuwenhuijsen<sup>a,b,c</sup>

<sup>a</sup> ISGlobal, Barcelona Ctr. Int. Health Res. (CRESIB), Hospital Clínic – Universitat de Barcelona, Barcelona, Spain

<sup>b</sup> Universitat Pompeu Fabra (UPF), Barcelona, Spain

<sup>c</sup> CIBER Epidemiología y Salud Pública (CIBERESP), Barcelona, Spain

<sup>d</sup> European Centre for Environment & Human Health, University of Exeter Medical School, Truro, UK

# Activities



Evidence synthesis



Reviews:

- Regeneration projects
- Bluespace and health
- Virtual reality



Reviews:

- Marine and health policy
- Marine and health data
- Innovative solutions

# Activities



Evidence synthesis



Reviews:

- Regeneration projects
- Bluespace and health
- Virtual reality



**Seas, Oceans & Public  
Health in Europe**

Linking oceans and health research

Reviews:

- Marine and health policy
- Marine and health data
- Innovative solutions



**INHERIT**

Health | Equity | Environment

Baseline review and  
analysis

Promising practices



## Evidence synthesis



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## Baseline review and analysis

- Key environmental stressors
- Their impact on health

<https://inherit.eu/baseline-report/>

# Activities



Survey research

# Activities

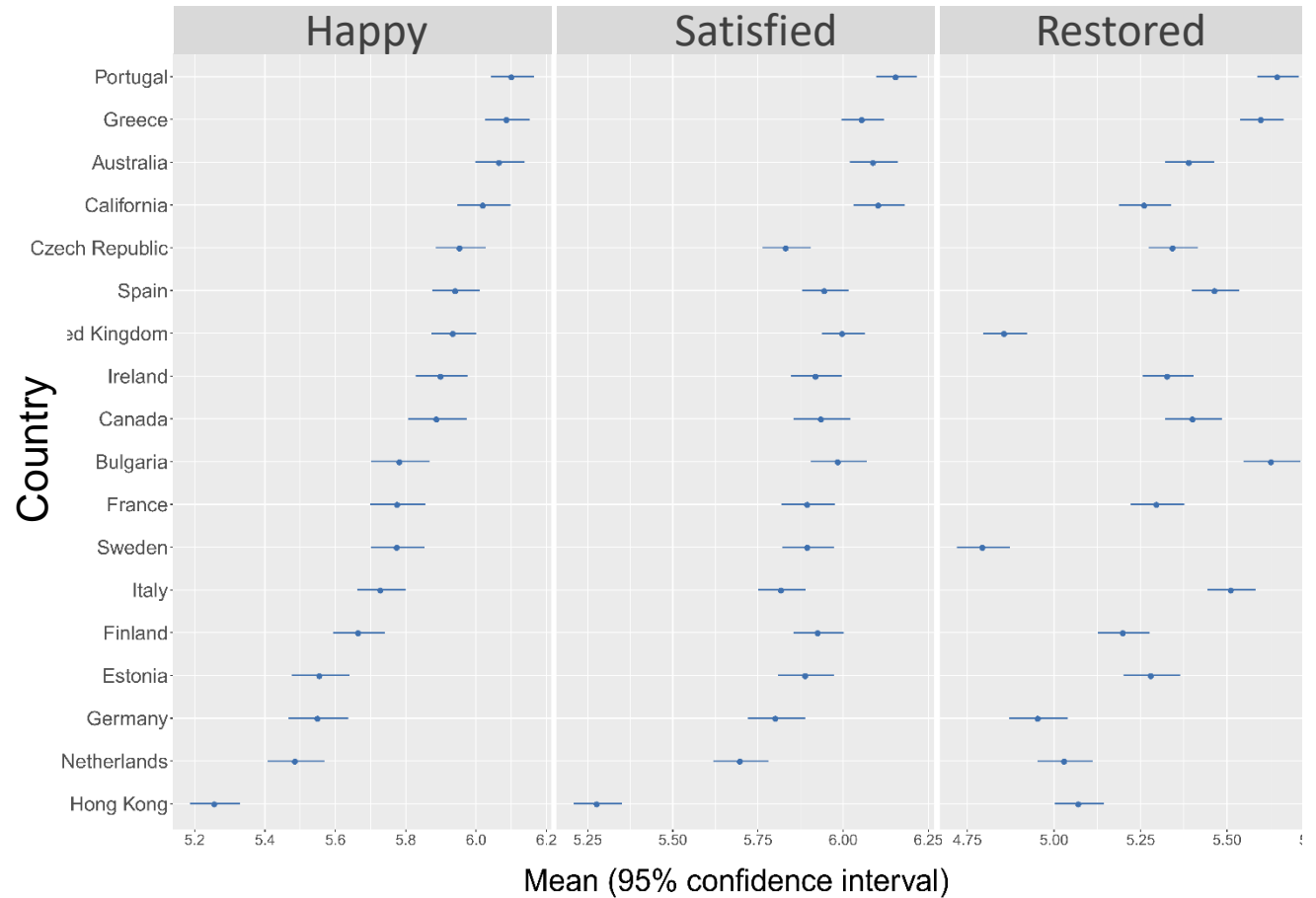


## Survey research



### International survey

- 18 countries
- Use of blue spaces





# Activities



Survey research

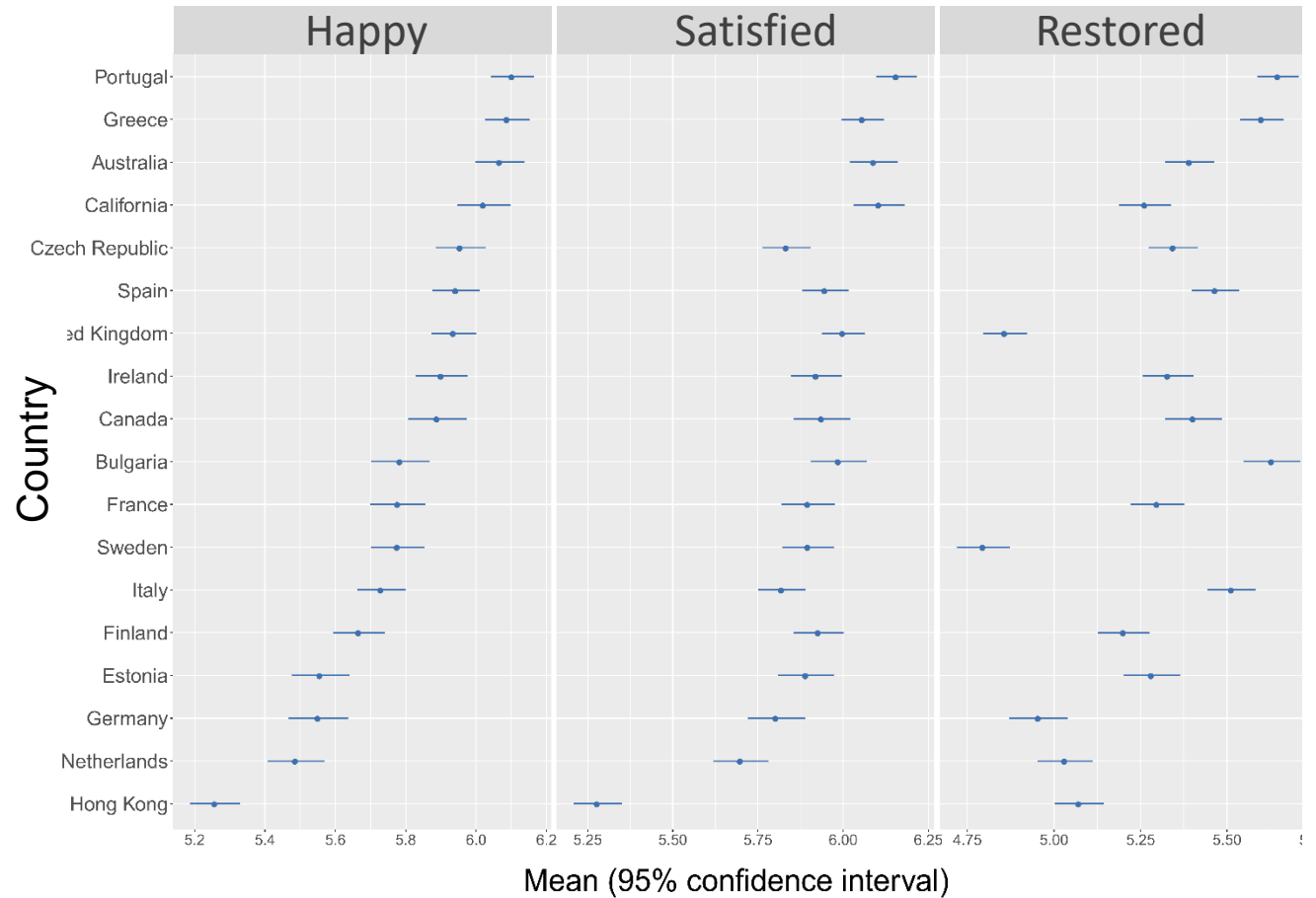


International survey

- 18 countries
- Use of blue spaces



Public health



# Activities



Survey research



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Linking oceans and health research

International survey

- 18 countries

Use of blue spaces



Public health

Europe-wide survey

- 10 countries
- **Public perception**  
Marine activities



Human health



# Activities



## Survey research



### International survey

- 18 countries

Use of blue spaces



Public health



**Seas, Oceans & Public  
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### Europe-wide survey

- 10 countries
- Public perception  
Marine activities



Human health



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Health | Equity | Environment

### Household survey

- 5 EU countries
- Attitudes towards  
change

# Activities



Experimental/field work

# Activities



Experimental/field work



Landscape  
interventions



# Activities



Experimental/field work



Landscape  
interventions

VR lab experiments



# Activities



Experimental/field work



**Seas, Oceans & Public Health in Europe**

Linking oceans and health research

Landscape interventions

VR lab experiments

Tourism + Citizen science



Marine monitoring



# Activities



Experimental/field work



Landscape  
interventions

VR lab experiments



**Seas, Oceans & Public  
Health in Europe**

Linking oceans and health research

Tourism +  
Citizen science



Marine  
monitoring



**INHERIT**

Health | Equity | Environment

Implementing and  
assessing impact of  
12 pilot projects



# Activities



Experimental/field work



## INHERIT

Health | Equity | Environment

Implementing and  
assessing impact of  
12 pilot projects

 <b>4</b> Moving Pilots	 <b>4</b> Living Pilots	 <b>4</b> Consuming Pilots
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# Activities

Engagement



# Activities



Engagement



Innovation workshops

Public engagement  
group



# Activities



## Engagement



Innovation workshops

Public engagement group

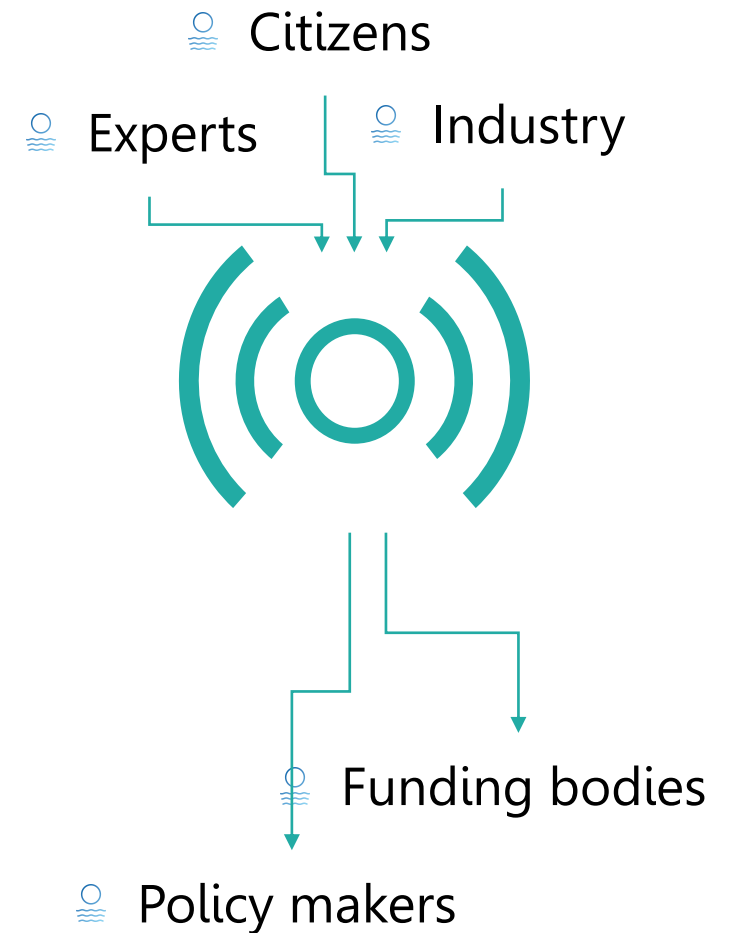


**Seas, Oceans & Public Health in Europe**

Linking oceans and health research

Stakeholder discussions and collaborations

Expert group



# Activities



## Engagement



Innovation workshops  
Public engagement  
group



Stakeholder discussions  
and collaborations  
Expert group



Workshops and  
events  
• 'back casting  
workshop'

# Future scenarios



## Building in resilience

- Changing climate
  - Heatwaves
  - Water quality
- Changing cities
  - Urban heat islands
  - More people living in urban areas
- Changing aspirations



# Activities



Tools and outputs

# Activities



## Tools and outputs



Environmental  
Assessment Tool (BEAT)

Behavioural Assessment  
Tool (BBAT)

Community Level  
Survey (BCLS)

Decision Support Tool





# Activities



Tools and outputs



Evidence-based tools

Guidelines

# Activities



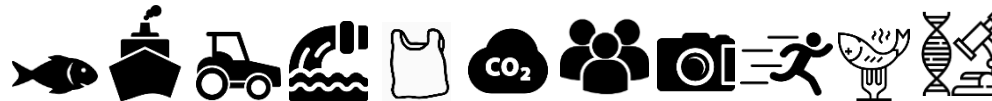
Tools and outputs



Evidence-based tools

Systematic map

Guidelines



1	1							1			Mortality
3	5		2		2	4				2	General physical health (not covered by below)
1										2	Cardiovascular
3	3		8		1	6					Mental health
1	1		2		2	1					Wellbeing (Quality of life, Social, Economic)
											Wounds and injuries
								1			Infections
			2					2	1		Toxins, poisoning, bites and stings
	1	2				1			2		Gastrointestinal diseases
	1	2						2			Musculoskeletal disease
		4	1					2			Respiratory disease
		2								1	Nervous system disease
											Endocrine

# Activities



Tools and outputs



**Seas, Oceans & Public  
Health in Europe**

Linking oceans and health research

Evidence-based tools

Systematic map

Guidelines

Strategic research  
agenda



Network of stakeholders



# Activities



Tools and outputs



Evidence-based tools

Guidelines



**Seas, Oceans & Public  
Health in Europe**

Linking oceans and health research

Systematic map

Strategic research  
agenda

Network of stakeholders



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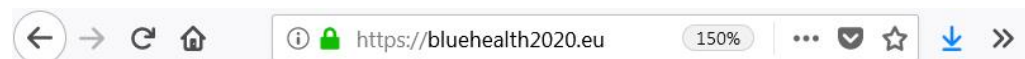
Common analytical  
framework

Policy kit

# Find out more...



## Websites



## Seas, Oceans & Public Health in Europe

Funded by the European Union's Horizon 2020 programme, the Seas, Oceans and Public Health in Europe project (SOPHIE) is helping to build new research capacity for the emerging scientific discipline of Oceans and Human Health.

[Learn more about this project](#)



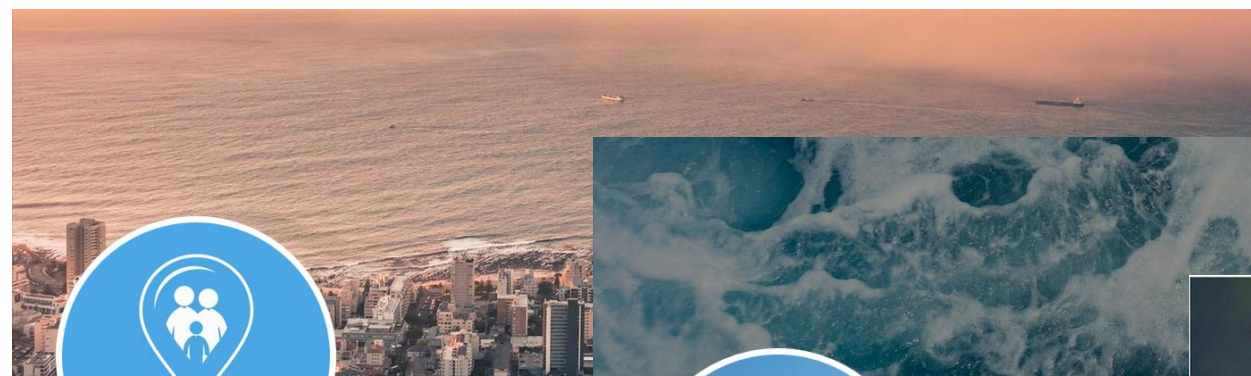
Go to...



# Find out more...



Twitter



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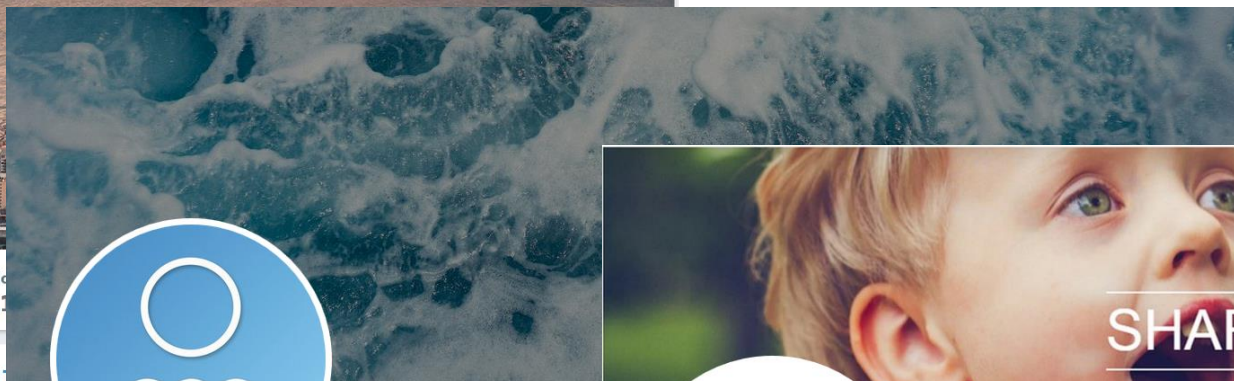
@BlueHealthEU Follows you

A pan-European research program investigating the links between water-based environments and health and wellbeing. Funded by Horizon2020.

Tweets 644 Followers 1,700

Tweets

BlueHea  
**Madel**  
If you'  
to hear  
on the  
@Men



**SOPHIE Project**

@OceansHealthEU

Seas, Oceans and Public Health in Europe, a pan-European project exploring how to link oceans & human health research. Led by Exeter Uni, funded by @EU\_H2020.

Tweets 25 Followers 10

Tweets

SOPHIE P  
**Europe**  
Is your v  
are gath  
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**INHERIT**

@inheritEU

This #EU #H2020 project encourages societal behavior change by advancing #living #moving #consuming scenarios for a more #sustainable future.

Tweets 1,534 Following 458 Followers 601 Likes 1,203 Lists 5

Following

Tweets Tweets & replies Media

Pinned Tweet



**INHERIT** @inheritEU · Mar 14  
#InheritYourFuture Spring 2018 update >> Happy to share news about our Policy Route Map for effective #policy interventions promoting healthier, more equitable & environmentally sustainable European societies #living #moving #consuming bit.ly/2FDtdOM

@BlueHealthEU

@OceansHealthEU

@inheritEU



Beyond 2020

- Shared vision of improved health, wellbeing and the environment

- Evidence
- Policy guidance
- Planning tools





Lead: Prof Lora Fleming  
[www.bluehealth2020.eu](http://www.bluehealth2020.eu)



Lead: Prof Lora Fleming  
[www.sophie2020.eu](http://www.sophie2020.eu)



Lead: Caroline Costongs  
[www.inherit.eu](http://www.inherit.eu)

[j.k.garrett@Exeter.ac.uk](mailto:j.k.garrett@Exeter.ac.uk)



[@JoGarrett4](https://twitter.com/JoGarrett4)

BlueHealth, SOPHIE and INHERIT are funded by the European Union's Horizon 2020 Research and innovation programme, grant agreements No 666773, 774567 and 667364

