The Researcher

Sophie – Researcher

42 years old
Associate Professor / Senior Lecturer
London School of Hygiene & Tropical Medicine (LSHTM), London, Europe

"Provide robust evidence to inform adaptation policies"

Goals

- Conduct primary quantitative research in climate and health
- Contribute to risk assessment
- Evaluate public health responses for addressing climate change
- Publish work in peer-reviewed journals

Frustrations & Pain Points

- Struggle to access health data: restricted and complicated process
- Struggle to access statistics on health (it takes a very long time)
- Struggle to process data (universities and institutions have no massive processing power)
- Struggle to find a systematic reporting system on extreme events / disasters
- Struggle to find evidence around policy implementation in a country
- Struggle to find people with interdisciplinary skills for own projects

Description

Sophie is an Associate Professor in the Faculty of Public Health and Policy in London. She has been researching the effects of weather, climate and climate change on human health for more than 20 years and has published widely on this topic.

Sophie leads a research project on the emerging health effects of large-scale changes in our environment. Along with other researchers from a variety of other institutions she evaluates public health responses for addressing climate change.

Sophie has a very wide network of academic people, researchers and experts in the climate and health domain and she leverages her network for the success of her projects (to recruit researchers, gather information, request peer-reviews, validate data).

She is very passionate about her job and she is very rigorous. She trusts information processed by a cohort of people rather than individual modelers. She is frustrated by the scarcity of time, money and human resources with interdisciplinary skills.

Key Tasks

- Teaches postgraduates in the field of environment, health and sustainable development
- Does primary quantitative research on climate and health
- Analyses data gathered from the UK Met Office
- Does climate change impact assessments on health
- Contributes to risk assessments with other academic organizations
- Does evidence syntheses for adaptation policies for national and local governments
- Provides evidence around the distribution of heat and flood risk to target public health interventions (i.e. shows who is affected by heat and flood risks and where)
- Produces policy briefs about heating/heat waves, flooding and health
- Does outcome and process evaluations to understand if risk assessment plans work well
- Publishes journal papers on the research done
- Shares research findings at conferences

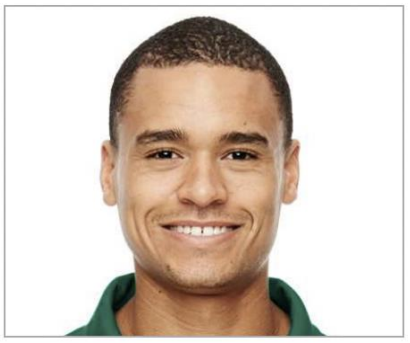
Seeks

- Gathers information mainly through the UK Met Office, her network, peer-reviewed papers, primary sources, conferences
- Looks for evidence for adaptation policies and looks for existing policies
- Looks for climate summaries and studies that provide do's and don'ts
- Seeks guidance around evaluation of early warning systems
- Seeks processed data sets where it is specified the ideal conditions for application

Communication Channels

Web: uses the web to look for information (primary sources mainly) and share information on the research done (through institutional website)
Books: contributes to scientific publications (she has contributed to one of the first comprehensive books on climate change and health)
Journals: publishes own research through journal papers for academics
Conferences: shares findings at conferences and takes advantage of meeting people face-to-face to gather information
Personal network: keeps in touch with her contacts regularly and leverages her network to learn new skills and info by talking to friendly experts

The Climate Practitioner



Dennis – Climate Practitioner

31 years old
Climatologist
Barbados Met Office, St. James, Barbados, Americas

"Building robust impact-based forecast models is a challenge: we need quick access to quality health information"

Goals

- Develop climate information products for the health sector
- Develop climate services that help inform health decisions
- Understand how health-tailored climate products can be disseminated to the local level

Frustrations & Pain Points

- Struggle to collect data from the health sector (very little information, not centralized, not digital, complex process to access it)
- Struggle to disseminate information from district to local level (smallest health centers)
- Struggle to find the funds to improve the set-up of the system (e.g. measurements, transmission of data, technical maintenance)

Description

Dennis is an enthusiastic climatologist that works at the Barbados Met Office. He has almost 10 years of experience in climatology and he has recently specialized in translating climate information for the health sector in his country.

His job focuses on developing the capacity of the national meteorological and hydrological service in his country and designing and implementing climate information products to help inform health decisions at national and regional level.

He tackles mainly hazards that have an impact on health, such as atmospheric dust, flood, heat and heat waves. He collects climate data from national stations and NOOA.

He is frustrated by the long and complex process required to collect quality data from the health sector: "there is very little information, not centralized, not digital". And it is not only about accessing health data, he needs to rely on partners within the health ministry to do quality control of the collected health data: "It takes so long".

He is also frustrated by the lack of funding to maintain and improve the climate information services that have been put in place for the health sector.

Key Tasks

- Organizes IRI training for a group of climate and health experts created to develop health-tailored climate service information products
- Coordinates the set-up of additional stations to cover the data needs defined by the climate and health experts group
- Coordinates health risk assessments at local level
- Collects health data from health centers (regional, district and local level)
- Collects climate data from stations of the national observation network and from NOAA
- Sets up a seasonal forecast for health professionals so that they can create a bulletin with advisories for the health sector
- Issues monthly forecasts for temperature, rainfall and risk of extreme weather events
- Communicates to local centers health risks and instructions (what they should do) via mobile phone
- Coordinates a vulnerability and adaptation study for own country in order to have a national adaptation plan
- Attends international workshops to share experiences with colleagues from other countries
- Does research for the development of climate information products
- Provides training to the users of the climate information products
- Co-develops climate services and climate products with sector partners, working separately with each sector (e.g. health sector and agriculture sector)

Seeks

- Collects existing examples of similar climate information products to understand how new product integrates with them
- Looks for disaggregated data regarding population, land-use, economic activities in a format that can be used with GIS
- Gathers data needed to augment existing models which look at socio-economic and climate factors
- Looks for observed info on sea surface conditions and forecasts on El Nino/La Nina

Communication channels

Web: uses the web to share climate information products through own organization website and regional organizations
Networks: participates to the Global Heat Health Information Network; acquires knowledge thanks to own friends or friends of friends

The Health Project Manager

Saliza – Health Project Manager

48 years old
Project Manager
Global Framework for Climate Services Adaptation Program for Africa, Malawi, Africa

"Health decision makers know they have to address climate risk, we need to support them developing resilience to climate impacts on health"

Goals

- Support national and local governments to develop their resilience to climate impacts on health
- Support decision makers to develop risk assessment plans that include all sectors (not just health)
- Help communities use climate services to develop their resilience to climate impacts on health

Description

Saliza is the project manager for the Global Framework for Climate Services Adaptation Program for Africa. Previously, she has worked as a Climate Preparedness Officer at WHO. Her primary area of expertise is public health and she has an excellent knowledge of climate issues that she has been developing for over 18 years.

She supports ministries of health and local governments to develop their resilience to climate impacts on health. She encourages decision makers to develop their risk assessment plans based on all issues, not just health. She constantly underlines the importance for health decision makers to work in collaboration with all the other sectors.

She has a broad network of people in the domain in order to collect information, learn new skills and acquire knowledge. She knows how hard it is to find experts with interdisciplinary skills: "people focus either on climate or health and have an interest in the other domain".

She witnesses how national and sub-national decision makers struggle to understand what happens in their own country, their vulnerabilities to climate hazards and how to develop capacity to overcome climate impacts to health.

Frustrations & Pain Points

- Struggle to understand how to use so much information
- Struggle to access information on disease predictability (governments do not give it out)
- Wish to have capacity to share good stories from the field
- Wish to compare climate information issued by global services (different formats make it difficult)

Key Tasks

- Interprets climate information for the health sector and other related sectors
- Extrapolates the health impacts implied in the seasonal forecasts and develop a calendar of diseases based on climate information
- Helps health decision makers define situation assessments that have a multi-sectoral perspective and develop a risk assessment plan based on all issues, not just health
- Supports decision makers in working in collaboration with other sectors
- Synthesizes timely climate impact on health from a regional perspective
- Builds capacity in the climate and health domain within the countries
- Develops messages for decision makers with actions to prevent/respond to a disease outbreak
- Works on how to communicate updates in time when events do not happen
- Helps countries understand the influence of social determinants to health (e.g. education)

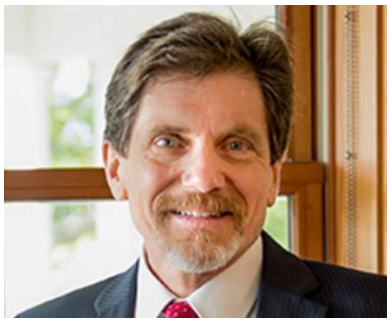
Seeks

- Gathers information mainly from the National Meteorological and Hydrological Services, the global services, her network, conferences, online readings and books
- Seeks people/organizations to get help in interpreting climate information
- Looks at anything new written by subject matter experts/authorities
- Research support and technical advisory
- Templates, examples, and other documentation relating to other projects

Communication channels

Web: uses the web to do a lot of readings and look for information, known sources mainly
Books: does a lot of readings on books
Conferences: learns new skills and knowledge needed for own work by attending conferences
Personal network: learns new skills and knowledge from her network; she leverages her network to get legitimate information

The Policy Maker Advisor



Tim – Government Official – Policy Maker Advisor

51 years old
Senior Policy Analyst and Science Advisor, Climate Change and Innovation Bureau
Government of Canada, Toronto, Canada, Americas

"Make our health system resilient to climate change"

Goals

- Research on climate change and health
- Bring scientific expertise to the development of policies
- Provide scientific expertise to local and provincial territorial health partners
- Develops guidance for national stakeholders, international experts and practitioners

Description

Tim has been working at the Climate Change and Innovation Bureau (Government of Canada) for 16 years. He leads and facilitates research for risk assessment and adaptive management concerning health sensitivities, vulnerabilities and impacts from climate change and climate variability.

At the moment he is heavily involved in the development of the next National Climate Change and Health Assessment Report. He is very enthusiastic about this report that will also help provincial and local health authorities develop their own climate change and health assessments.

He contributes to disseminate climate change and health adaptation information, data and tools to public health and emergency management partners in Canada and internationally. Currently he contributes to a paper on developing capacities to manage a climate change impact on mental health.

Tim participates as a speaker in many presentations at Canadian and international workshops. He is particularly excited about the increasing number of university courses and programs on climate change and health that are blossoming in Canada recently.

Frustrations & Pain Points

- Struggle to find information on current climate variability impacts on health
- Need future projections in the context of climate change (e.g. drought)
- Face the challenge on how to integrate information from other sectors that are important to health
- Struggle to find experts in climate change impacts on mental health in own country

Key Tasks

- Contributes to national climate change and health assessments
- Contributes to research projects in drought impacts on health/mental health
- Contributes to develop a strategy on National Climate Change Health Monitoring and Surveillance
- Provides information about climate change impacts to other programs (e.g. chemicals and health)
- Provides guidance to local health partners based on WHO guidelines
- Provides guidance to local and regional health units to do climate change and health assessments and adaptation plans
- Collaborates with researchers and universities to do analysis of vulnerabilities and develop models
- Briefs Directors/Assistant Deputy Ministers/Deputy Ministers on climate change impacts on health

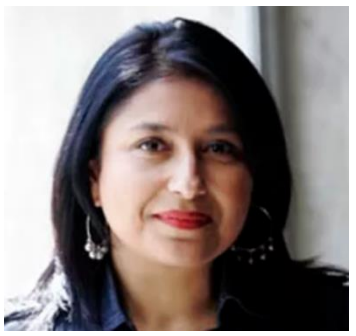
Seeks

- Gathers climate information from several services in his country
- Looks for data on health and climate variability
- Looks for data about climate change impacts on health systems and hospitals
- Learns from research done in other countries that have similar profiles
- Needs visual tools for communicating climate and weather risks to non-specialists and the public
- Seeks guidance on sensitivity analysis for specific health impacts
- Information on causal pathways in health and climate change (e.g. mental health, malnutrition)

Communication channels

Web: uses the web to look for information, known sources mainly
Books: reads scientific publications, assessment reports
Conferences/Meetings/Workshops: participates as a speaker in many presentations at national and international workshops
Personal network: leverages finding from other research done by people in his network

The Technical Advisor (WHO/WMO)



Agnés – Technical Advisor

45 years old
Technical Officer, Department of Public Health, Environmental and Social Determinants of Health
World Health Organization (WHO), Geneva, Switzerland, Europe

"We need to translate science into concrete tools that countries and regions can implement"

Goals

- Develop technical guidance for countries on climate and health
- Provide support to countries around activities to be implemented
- Build national capacity for the ministries of health

Frustrations & Pain Points

- Struggle to access national data (met service data is payable)
- Struggle to understand which climate products WMO has
- Struggle to understand climate trends
- Struggle to find evidence on climate change impacts on a disease at country level
- Struggles to comprehend uncertainty in data

Description

Agnés is Technical Officer at the Department of Public Health, Environmental and Social Determinants of Health at WHO. She has been working in health for over 10 years.

She works with countries to develop their National Strategy on Climate Change and Health, to integrate health in their National Adaptation Plan and Disaster Risk Reduction. She coordinates with WHO focal points in the countries and regions in order to organize training and develop technical guidance that helps health services make decisions based on climate information and weather forecasts. She collaborates with a large number of agencies and universities to implement climate and health projects.

Agnés is very practical and well organized. She has created a personal virtual library to quickly access the information she needs for her work. She has a very broad network of partners and professionals that she can leverage for her work.

She is concerned about the challenges that public services are facing: no free access to national climate data, no understanding of which data is relevant amongst the ocean of information that is available nowadays, no time to improve their climate knowledge. She empathizes with people in countries: "there is too much information, they do not know what is relevant and which sources can be trusted in the domain".

Key Tasks

- Receives requests for support from countries and regions
- Analyzes integrated climate and health data sets
- Organizes training for countries/regions to develop tools in climate and health
- Contracts experts to develop climate and health guidance for countries
- Contracts experts to provide technical support to countries
- Provides overall strategy/scope to experts developing guidance for countries/regions
- Pilots and refines draft technical guidance for countries and regions (5-year cycles)
- Translates UNFCCC policy into the health sector
- Supports countries develop the health component of their National Adaptation Plan
- Supports countries develop their National Strategy on Climate Change and Health
- Supports countries integrate Health with Disaster Risk Reduction
- Helps countries understand where climate change can impact health facilities
- Helps countries access funds for climate and health activities

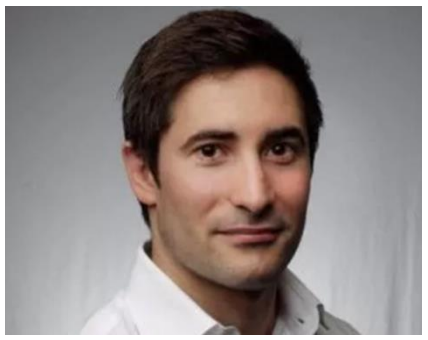
Seeks

- Gathers information mainly online, from national met services, global services, her network, her personal virtual library
- Seeks information from qualified sources or recognized partners
- Looks for experts that can provide technical guidance/support to countries and regions
- Seeks integrated climate and health data sets
- Looks for evidence on climate change impacts on specific diseases at country level

Communication channels

Web: uses the web to do a lot of readings (qualified sources or recognized partners) and looks for information to develop guidance products
Personal virtual library: looks for information to develop guidance products in personal folders
Personal network: leverages personal network and partners to recruit experts with the right skills for her projects; creates links between the researchers and the local communities and ministries of health

The Journal



Adam - Journalist

45 years old
Senior Editor
Bloomberg, Australia, Oceania

"Access to robust trends data on climatological hazards would really help us in reporting the attributability of the health impacts of climate change"

Goals

- Communicate relevant information about climate change and health to a public audience
- Uncover injustices being faced by those being affected by extreme heat
- Generate relatable and factually accurate leads for stories relating to climate change and health
- Cultivate trust on reliable and authoritative info

Description

Adam is a Senior Editor and health correspondent for the Asia-Pacific desk of the global news corporation Bloomberg. Adam has been working as a journalist for over 15 years and recently gained a Masters Degree in Health Security.

An investigative journalist, Adam works around the world to uncover injustices related to the impact of climate change on vulnerable people and workers. He uses available information and personal testimonials to construct a narrative around the health impacts of climatological hazards (with a special interest in extreme heat and flooding). He works with a global network of producers and 'stringers' to gain access to subject experts and patients during health emergencies and epidemics.

Adam is sceptical about the prevalence of morbidity and mortality being reported as a consequence of climate change and variability and is using his knowledge of epidemiology to influence political will to improve studies of this kind. He also has a keen interest in improving the standard of reporting in the media around the health impacts of climate change and is working to coordinate a group of experts in a new community of practice in this area.

Frustrations & Pain Points

- Frustrated by the absence of robust epidemiological data and the prevalence of poor reporting on morbidity
- Takes him a long time to seek and recruit subject experts for special comment on reports which require a fast turnaround
- Takes too long to find relevant, trustworthy, robust, and up to date trends data on specific diseases and health impacts when responding in emergencies

Key Tasks

- Review epidemiological data for relevant evidence
- Gather testimonials from people impacted by climate change
- Deploy meteorological trends data for public audiences
- Communicate economic analyses to public audiences
- Make observations about patient behaviours
- Illicit comments from experts
- Monitor impact of media publications
- Deploy visual aids (graphs and charts) in mainstream media
- Review relevant experts for language skills and proximity

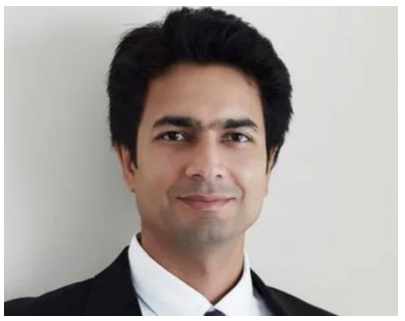
Seeks

- Searches for subject-experts and researchers
  Searches for information from trusted providers (such as WHO/WMO)
- Search for institutions relevant to specific risk
- Multimedia that can be used or repurposed to demonstrate essential information

Communication Channels

Networks: Internal Newswire
Web: media outlet website
Social media: often produces multimedia resources for social media
Print media: sometimes gathers information on print media

The Donor



Marcus - Donor

37 years old
Climate Health Programme Lead
World Bank, Washington, United States of America, Americas

"We need a uniform approach to collecting country data in order to fund climate and health projects"

Goals

- Maintain a knowledge repository on climate and health projects and investment strategies through the World Bank
- Mainstream Climate and Health into other interdisciplinary investment cases
- Makes direct investments to Ministries of Finance for Climate and Health Projects in developing Countries

Frustrations & Pain Points

- Struggle to make people understand the importance of addressing climate and health
- Struggle to have climate and health projects funded because they are too multidisciplinary
- Struggle to access good quality country-specific climate and health data and statistics
- Frustrated by the lack of a uniformed approach to collecting data and compiling it within the countries he works on
- Faces difficulties using academic literature to drive country investments

Description

Marcus is a Programme Lead for the World Bank and an expert in Climate and Health. He has been working for the World Bank for almost 8 years and has a medical degree, as well as a keen interest in oceanography.

His work focuses on developing investment packages around climate change and health and bringing together collective knowledge on climate change health resources that can be used by people within the World Bank, and other development institutions to make climate change and health interventions, whether that be through the health department, or environment department, or through specific climate change investments.

He sees the role of the bank as a knowledge repository for climate health projects and investments and as a direct donor to countries and development institutions. Much of his time is spent analysing, writing reports and building climate and health objectives into multidisciplinary investment cases, such as transport, urban planning, health financing.

Marcus has a broad network of experts and project implementers that he relies on to make value judgements about the feasibility of specific investments. He often relies on recommendations from experts about the validity and quality of specific data and information, which he relies on heavily to construct business cases within the area.

Key Tasks

- Develop investment packages around climate change and health
- Collect knowledge about climate change and health resources to be used at the bank
- Collect knowledge about climate change and health resources for other organizations' interventions
- Make recommendations to have existing projects in developing countries include climate and health
- Write analysis to modify bank investments to include climate and health deliverables
- Make recommendations to address needs in the health community or in the Ministry of Health in various countries
- Monitor number of projects and amount of money behind climate and health activities
- Summarise collected information in reports with other partners in the region
- Identify a country need for research in a particular area
- Identify a cohort of people in a country that can help you pull up the most relevant pieces of work
- Dialogue with members of the Government and local players before making investment decisions

Seeks

- Country-level climate and health data in order to make investments
- High level people talk about climate change and health to get people on board
- Facts and figures from trusted institutions for talking points and briefings and awareness raising exercises for high level decision makers
- Financial and economic modelling of climate and health impacts
- Information on development agencies and international funds

Communication Channels

Networks: personal networks, and functional networks such as implementing agencies and government partners
Web: research and post content through World Bank website