# **Opening plenary day 1**

Dr. Victoria Keener introduced the opening plenary, highlighting the inclusion of health impacts in the US National Climate Assessment for the first time in NCA5. Dr. Chip Fletcher discussed the dire global climate change impacts, including a 14% reduction in global GDP and 1.2 billion climate refugees by mid-century. He emphasized the urgent need to cut emissions to avoid warming beyond 1.5°C. Dr. Diana Felton from the Hawaii Department of Health detailed their efforts to assess and mitigate climate change health risks, focusing on heat-related illnesses, mental health, and sea level rise. Both speakers underscored the importance of cross-disciplinary collaboration and social equity in addressing these challenges.

# **Action Items**

- [] Review the paper "Earth at Risk" by Dr. Chip Fletcher.
- [] Contribute to the Hawaii Department of Health's statewide vulnerability assessment on climate change and health impacts.
- [] Provide feedback and additional data to the Department of Health's climate change and health program.

# Outline

#### **Opening Remarks and Introduction to Climate Change and Health**

- Dr. Victoria Keener introduces herself as a senior research fellow at the East West Center and research professor for Arizona State University Global Institute of Sustainability and Innovation.
- She explains her background in climatology and hydrology and her role in translating the effects of climate change to different sectors.
- Dr. Keener discusses her involvement in the US National Climate Assessment, particularly the fourth and fifth editions, highlighting the increasing interest in the impacts of climate change on human health.
- She sets the stage for the two-day conference, emphasizing the importance of cross-disciplinary work and practical interventions in climate change and health.

#### Introduction of Dr. Chip Fletcher and Dr. Diana Felton

- Dr. Keener introduces Dr. Chip Fletcher, highlighting his roles at the University of Hawaii and his expertise in climate resilience and decarbonization.
- She outlines Dr. Fletcher's presentation, which will focus on the current and projected impacts of climate change in Hawaii.

- Dr. Keener introduces Dr. Diana Felton, detailing her background as an ER physician and medical toxicologist and her current role at the Hawaii Department of Health.
- Dr. Felton's presentation will cover the Department of Health's efforts to assess and mitigate the risks of climate change on public health.

#### **Dr. Chip Fletcher's Presentation on Climate Change Impacts**

- Dr. Fletcher discusses his recent paper "Earth at Risk," which covers climate change, biodiversity loss, social inequality, pollution, and disease.
- He highlights the global impacts of climate change, including the potential reduction in global GDP and the displacement of 1.2 billion people as climate refugees.
- Dr. Fletcher provides data on the increase in global temperatures and the role of carbon dioxide in global warming, emphasizing the need to cut emissions to avoid catastrophic warming.
- He discusses the gap between global emissions reduction promises and actual actions, highlighting the need for more ambitious policies.

#### **Dr. Fletcher's Continued Discussion on Climate Change Impacts**

- Dr. Fletcher continues to discuss the global impacts of climate change, including the potential for 1 million people to be displaced for every additional degree Celsius of warming.
- He highlights the current and projected impacts of climate change on food production, water supply, and human health, using examples from California and India.
- Dr. Fletcher emphasizes the need for a new global economic model centered on sustainability rather than wealth accumulation.
- He concludes his presentation by calling for a shift towards sustainable practices and policies to address the climate crisis.

## Dr. Diana Felton's Presentation on Climate Change and Health

- Dr. Felton introduces herself and outlines the Department of Health's efforts to assess and mitigate the risks of climate change on public health.
- She emphasizes the importance of viewing climate change as a health crisis and the need to act now to prevent climate change-induced sickness, injury, and death.
- Dr. Felton discusses the health impacts of climate change, including heat-related illnesses, water scarcity, and mental health issues.
- She highlights the Department of Health's statewide vulnerability assessment and the importance of cross-disciplinary collaboration to address these issues.

## Dr. Felton's Continued Discussion on Climate Change and Health

• Dr. Felton discusses the Department of Health's use of the CDC's "Building Resilience Against Climate Effects" (BRACE) framework to develop a climate health program.

- She highlights the importance of mental health in the context of climate change and the need for a holistic approach to addressing these issues.
- Dr. Felton introduces the Department of Health's climate change and health working group, which includes representatives from various sectors and communities.
- She emphasizes the need for ongoing expert review and input to ensure the vulnerability assessment remains a useful tool for understanding and addressing climate change impacts in Hawaii.

#### Q&A Session with Dr. Chip Fletcher and Dr. Diana Felton

- Dr. Keener moderates a Q&A session with Dr. Fletcher and Dr. Felton, asking them to identify the most significant areas of concern with respect to climate change and health in Hawaii.
- Dr. Felton emphasizes the importance of preparedness and prevention for direct illness and injuries, particularly in the context of mental health.
- Dr. Fletcher highlights the issue of water scarcity and the need for sustainable food production practices.
- Dr. Keener asks about the Department of Health's response to sea level rise, and Dr. Felton and Dr. Fletcher discuss the complex nature of sea level rise and its impacts on health and infrastructure.

#### **Discussion on Integrating Disciplinary Silos and Social Equity**

- Dr. Keener asks about the areas that are currently siloed and need to work together to address climate and health impacts.
- Dr. Felton emphasizes the importance of a holistic approach and breaking down silos to address climate change as a health crisis.
- Dr. Fletcher discusses the need for climate resilient development through a social equity lens, focusing on under-resourced communities.
- Dr. Keener asks about minimizing health impacts on vulnerable populations, and Dr. Felton and Dr. Fletcher discuss the importance of social equity and resiliency in adaptation efforts.

## **Audience Questions and Final Remarks**

- Audience members ask questions about US agencies addressing climate change, state policies, and effective communication strategies for climate change skeptics.
- Dr. Fletcher and Dr. Felton provide responses, emphasizing the need for a comprehensive approach and the importance of community engagement and education.
- Dr. Keener concludes the session by thanking Dr. Fletcher and Dr. Felton for their presentations and contributions to the conference.
- The session ends with a discussion on nature-based solutions and their potential to address sea level rise, flooding, water quality, and human well-being in Hawaii.