# PLASTIC HEALTH SUMMIT

OCTOBER 3, 2019, AMSTERDAM



PLASTIC FOUNDATION PARLEY



## SAVE THE OCEAN, SAVE THE CHILDREN

#### **HOW TO TAKE CARE OF THE NEXT GENERATION**

In January 2019, 16-year-old Greta Thunberg said the following historic words at the World Economic Forum in Davos: "Adults keep saying 'we owe it to the young people to give them hope.' But I don't want your hope. I don't want you to be hopeful. I want you to panic. I want you to feel the fear I feel every day. And then I want you to act. I want you to act as you would in a crisis. I want you to act as if our house is on fire. Because it is."

Sir David Attenborough, also speaking in Davos, was just as provocative when he said, "Global business, international co-operation and the striving for higher ideals: these are all possible because for millennia, on a global scale, nature has largely been predictable and stable. Now, in the space of one human lifetime -- indeed in the space of my lifetime, all that has changed. The Holocene has ended. The Garden of Eden is no more..."

Both of them, this famous young woman and even more famous old man, are right. The earth is warming up and pollution is exponentially increasing. Meanwhile, biodiversity is declining rapidly. The relationship between the plastic soup and climate change has been revealed. That is why we need knowledge, and lots of it. So we can find answers to this urgent question: Is plastic making us sick? And so we can develop smart plans and even smarter strategies that can turn the tide. We owe it to future generations.

Therefore, I welcome you to this conference, the very first Plastic Health Summit — which is already a groundbreaking event. It's great to have you here.

Maria Westerbos
Founder and managing director, Plastic Soup Foundation

#### PROGRAM - OCTOBER 3, 2019 8:30 9:00 9:30 10:00 10:30 11:00 11:30 12:00 12:30 13:00 13:30 РМ РМ AM AM AM AM AM AM AM PM РМ **FOYER PLENARY** SCIENCE TALKS ON **SCIENCE TALKS AUDITORIUM OPENING BREAKOUT 1 BREAKOUT 2 BREAKOUT** ZONMW

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# The PLASTIC SOUP FOUNDATION & PARLEY proudly present the PLASTIC HEALTH SUMMIT 2019 in cooperation with the PLASTIC HEALTH COALITION and ZONMW

#### 9:00 - 9:30 PLENARY OPENING



**MARIA WESTERBOS** (NL), founder and managing director of the Plastic Soup Foundation; and **CYRILL GUTSCH** (USA), founder and CEO of Parley for the Oceans, give a word of welcome.





**DICK VETHAAK** (NL), professor of Ecotoxicology at Vrije Universiteit Amsterdam, and senior specialist of Ecotoxicology, Water Quality, and Risk Assessment at Deltares, will give the keynote speech.

#### 9:30 - 11:00 SCIENCE TALKS ON MICROPLASTICS BY ZONMW

The first round of science talks at the summit focus on the impact of microplastics in our bodies. The speakers, all esteemed scientists, were handpicked by health research financer ZonMw, which coordinates 15 short-term research projects on the human health effects of micro- and nanoplastics.



This session begins with a presentation from **STEPHANIE WRIGHT** (UK), research associate at the department of Analytical, Environmental & Forensic Sciences at King's College London. Stephanie will discuss human exposure to atmospheric microplastics and how such exposure leads to negative health impacts.



Next up is **INGEBORG KOOTER** (NL), senior project leader of Toxicology at TNO Circular Economy and Environment. She will discuss the effects of exposure to microplastics through ingestion and elaborate on the lack of adequate methods to detect plastics. Ingeborg will also describe the potential impact of micro- and nanoplastics on our lungs and digestive systems.



The following speaker brings us an inside scoop. **FRANSIEN VAN DIJK** (NL), postdoctoral researcher at the University of Groningen Molecular Pharmacology department, will share the initial results of her research on how exposure to plastic microfibers from clothing affects lung development.



This presentation is followed by a talk from **JULIETTE LEGLER** (CA), professor of Toxicology and head of the Toxicology Division at Utrecht University's Institute for Risk Assessment Sciences (IRAS). Julliette has very interesting information to share in a presentation on the potential presence of micro- and nanoplastics in human placentas and how these particles may affect the unborn child.



Next, **HEATHER LESLIE** (CA), research associate at the faculty of Science, Environmental Chemistry and Toxicology at the Vrije Universiteit Amsterdam, will discuss whether microplastics can enter the human bloodstream and on screening methods for the exposure and effects of such contamination.





Heather will be followed by **ANA MARIA DE RODA HUSMAN** (NL), head of the Environmental Department of the Centre for Infectious Disease Control at the National Institute for Public Health and the Environment (RIVM). She will speak about the presence of microplastics in the river Rhine, and how these may be a vector for harmful micro-organisms.



Our final speaker in this part of the program is **NIENKE VRISEKOOP** (NL), assistant professor at the Respiratory Medicine department at UMC Utrecht's Center of Translational Immunology. Professor Vrisekoop has yet more new information to share with us. She will present her findings on how micro- and nanoplastics can cause the death of human immune cells, and how ingested microplastics can enter an animal's bloodstream.

#### 11:30 - 13:00 SCIENCE TALKS ON ADDITIVES

The second round of science talks is organized by Plastic Soup Foundation and addresses the health effects of additives commonly used in plastic, both in terms of child development and the development of long-term and chronic disease in adults.



**PETE MYERS (USA)** is the chair, founder, and chief scientist of Environmental Health Sciences. He will open the second round of science talks by discussing how plastic harms the health of future generations through intergenerational endocrine disruption.



Next, **STEVE FLETCHER** (UK) professor Environment and Sustainability and director of Revolution Plastics at the University of Portsmouth, will discuss how plastic touches every facet of life, especially in the contexts of atmospheric plastic and plastic pollution in the global south.



**SUSAN SHAW** (USA), Environmental Health scientist and founder & president of the Shaw Institute, will delve into flame retardants, which are part of the toxic cocktail of chemicals in plastics. Susan will discuss her research on skin absorption, one of the ways plastic can enter the body; firefighters are the "canaries in the coalmine" who reveal the harm plastic additives do to our bodies.



This will be followed by an explanation of the complex chemical mixture in food packaging plastics by **JANE MUNCKE** (CH), toxicologist, managing director, and chief scientific officer at the Food Packaging Forum. She will describe how plastic chemicals can seep into food from food packaging; some of these chemicals are known, but many are not.



**LAURA VANDENBERG** (USA), associate professor and Graduate Program director at the University of Massachusetts, will take it from there by describing how early life exposure to chemicals and chemical mixtures can predispose individuals to diseases that manifest later in life. Laura asks, "Are we fine?". And her worrying answer is: "No, we're not fine."



Finally, we welcome **HEATHER LESLIE** (CA) back onstage, prefaced by a 3-minute video outlining the extent of our everyday contact with plastics. Heather will share the results of the VU's small-scale tests looking for plastics in commonplace consumer items.

The Science Talks will be followed by three breakout sessions: Advocacy & Policy, Influencers, and ZonMw Scientists (closed session).

#### 14:30 - 15:30 BREAKOUT SESSION: POLICY & ADVOCACY

The breakout session on Policy and Advocacy will address the use and regulation of toxic additives in plastics. It will also shed light on the enforcement of existing regulations and provide a legal perspective. We will try to burst the marketing bubble created by the plastic industry and look into initiatives to widen bans and restrictions on harmful additives in plastics.



To kick off the Policy breakout session, **ARLENE BLUM** (USA), executive director of the Green Science Policy Institute and research associate at UC Berkeley, has created a video which will delve into the six classes of harmful chemicals her institute has identified; she will explain how these chemicals function and how to manage them effectively.





Second up is **KAROLÍNA BRABCOVÁ** (CZ), Toxics & Plastics advisor for IPEN. She will share her findings on what she considers both the worst and least-discussed toxins in plastic: dioxins. These are released when plastic is incinerated. Karolina will also touch upon the relevance of the Basel Convention, the export of waste, and lung disease.



Next, **GÉNON JENSEN** (USA), founder and executive director of the Health and Environment Alliance (HEAL) has something newsworthy to share. She will select two notable examples from the tests conducted by VU and elaborate how these plastic consumer items fit into the European regulatory framework.



**BJORN HANSEN** (DK), executive director of the European Chemicals Agency (ECHA), will join us by video to share the results of his organisation's investigation into the environmental risks caused by intentionally-added microplastics. This investigation was prompted by the release of the EU Plastics Strategy. Bjorn will build on this by discussing how to tackle microplastics from a policy perspective.



**TATIANA LUJÁN** (CO), wildlife conservation lawyer at ClientEarth, will then share her insights on how companies that don't follow environmental policies risk both their reputation and their financial position. Engagement at the local and municipal level is necessary to hold governments and companies to their legal commitments.



After Tatiana's legal perspective, we hear from **LISA KAAS BOYLE** (USA), environmental attorney, activist and co-founder of the Plastic Pollution Coalition. She will give a presentation on the past successes of legislation and the need to keep harmful products from reaching the consumer through measures such as Proposition 65, which requires warnings on items that contain carcinogenic or fertility-damaging chemicals. Finally, she will share the trailer for her new documentary Overload: America's Toxic Love Story.



To conclude this part of the program, **SIAN SUTHERLAND** (UK), co-founder of A Plastic Planet, will discuss the power of the plastic lobby and retrace how we came to exist in the current marketing bubble created by the plastic industry. We are all plastic addicts, and it's time for people to demand alternatives as their right.

#### 14:30 - 16:00 BREAKOUT SESSION: INFLUENCERS

The Influencer breakout session will be led by speakers who have turned words into deeds, and in doing so, have inspired audiences across the world to take action against our excessive use of plastic.



To kick off on a newsworthy note, the first speaker in our influencers session is biochemist, wildlife biologist and BBC Science presenter **LIZ BONNIN** (UK). She will reveal the results of the additives tests carried out by Tegengif and comment on the media's role in shaping public perception of the plastic problem and personal responsibility.

PHOTO: WALL TO WALL, STEPHEN PERRY



This will be followed by a video talk from **SHARON LERNER** (USA), environmental journalist for The Intercept and reporting fellow at Type Investigations. Sharon will talk about the power of the plastics industry through lobbying, greenwashing, and misleading governments and consumers with sustainable facades. She draws a comparison to the tobacco industry.



Then, we will hear from **CYRILL GUTSCH** (USA), founder and CEO of Parley for the Oceans, the main sponsor of the Plastic Health Summit. He states that plastic is a design failure.



Next, 16-year old activist and environmental ambassador **BELLA LACK** (UK) will share her very personal perspective on the intergenerational aspect of the plastic problem through a video; she will also discuss how plastic is an issue that ties into the fossil fuel industry, the CO<sub>2</sub> problem and climate change. Her theme: It's never as simple as it seems. Photo: CHARLIE FORGHAM



**DAVID JONES** (UK), CEO and founder of Just One Ocean, was heavily involved in the documentary a Plastic Ocean. David will discuss the public's role in the plastic crisis; in addition to spreading awareness through his documentary and organization. He also facilitates citizen science research with his ongoing Big Microplastics Survey project.





Next up is **FREDERIKKE MAGNUSSEN** (DK), co-founder of A Plastic Planet. Her talk is about the fact that we are all plastic addicts, while plastic-free is what consumers want. Her evidence? The huge success of the Plastic-Free Supermarket Aisle set up by her organization in Amsterdam in early 2018; this initiative reached millions of people worldwide.



**JO ROYLE** (UK), managing director of Common Seas, will tell the audience why her organization has been tirelessly searching for microplastics in human blood since December 2018. Conference attendees can get involved in this quest for knowledge; they can have their own blood included as test samples in this research project.



Finally, **OGI MARKOVIC** (AT), co-founder and chief strategy officer for Surfing Medicine International, will represent the voice of the doctor. Ogi uses a video to share the perspective of a worldwide network of medics, and will continue his push to mobilize medical professionals.

#### 16:00 - 17:00 PLENARY SESSION: SOLUTIONS

Finally, the speakers' part of the summit will conclude with a plenary session on Solutions. This brings the conference to an end on a hopeful note: there are innovators and organizations developing tangible solutions. Some speakers in this session will introduce their own, accessible solutions to the issue of plastic and human health, while others will share tips on what the everyday citizen can do to reduce their plastic use and exposure.



**TROY SWOPE** (USA), the CEO of Footprint sustainable technology, will be the first speaker in our concluding session. Speaking to us via video, he will discuss why plastics are not just a problem, but also an opportunity to create new alternatives and brainstorm innovative solutions. He will share examples from his own work and product lines, including a few setbacks and victories.



Then, the head of PR and Media at the Mirpuri Foundation, **ANA AGOSTINHO** (PT), will discuss how the Mirpuri airline eliminated single-use plastics. She will discuss the decision-making behind the step, the impact of the idea, and the follow-through. She will also tell us how and why the organization has donated 5 million euros to fund research into an alternative for plastic botles.



The next solution we will hear about is from PlanetCare, a leading developer in microfiber filtering solutions designed to combat microfiber pollution. **MOJCA ZUPAN** (SI), CEO of PlanetCare will introduce the organization's Microfiber Filter, which was awarded the Ocean Clean Wash label by the Plastic Soup Foundation. A macro problem affecting our everyday lives, the exponentially-growing number of tiny synthetic microfibers in the environment can be found not only in our oceans but also in our food and drinking water.



Next, **FIONN FERREIRA** (IE), the 18-year-old overall winner of the 2019 Google Science Fair has created a very nice video for us about his winning project, in which he investigated a method of filtering microplastics out of water using a magnetic liquid called ferrofluid.



Finally, **Laura Díaz Sánchez** and **Madhuri Prabhakar** from PLASTIC SOUP FOUNDATION will present the groundbreaking new app and campaign The Plastic Diet for consumers.

The conference will conclude with a live-streamed cross-media round table at 17:00 and drinks at 18:00.



## PROGRAM - OCTOBER 3, 2019

# PLASTIC FOR SOUP

# PARLEY

#### PLASTIC SOUP FOUNDATION

We do not take plastic out of the water; instead, we want to put an end to the increasing amount of plastic polluting the ocean by tackling the issue at its source. Like microplastics in cosmetics and synthetic fibres from clothing. These all end up in the ocean one way or another. We have been working towards our goal since 2011. International press consider us 'one of the leading advocacy groups to tackle plastic pollution.'

www.plasticsoupfoundation.org/en

#### **PARLEY**

Parley is the space where creators, thinkers, and leaders come together to raise awareness for the beauty and fragility of our oceans and collaborate on projects that can end their destruction.

www.parley.tv



SCAN ME

We eat and breathe plastic.

How does it affect our health?

Read this deep dive into the unknown effects of plastics on our health, written by John Vidal for Common Seas.

## PLASTIC HEALTH

#### **PLASTIC HEALTH COALITION**

The potential negative health effects of plastics are a major cause for concern. Not just for us, but for an increasing number of scientists and organizations as well. This is why Plastic Soup Foundation initiated the Plastic Health Coalition. Together we're working on more research, prevention, and solutions.

www.plastichealthcoalition.org/plastic-health-coalition



#### **ZONMW**

ZonMw (The Netherlands Organization for Health Research and Development) funds health research in the Netherlands and promotes the actual use of the knowledge produced by this research produces. Their aim is to promote the quality and innovation of health research in order to make health care better and to keep it affordable.

www.zonmw.nl/en







