

9th Annual Conference
INVIVO PLANETARY
2020 HEALTH

## FINAL PROGRAM

## DECEMBER 2020



People. Place. Purpose. Planet.





## Welcome to inVIVO 2020



### It Is Time...

Indeed, there could not be a more important time to imagine a better world, and fundamentally question the way we choose to live on our planet. That includes how we see ourselves. How we treat others. How we care for our place and our communities. Even the way that we approach our problems.

In an era of so many "broken systems" it is time to equally address the crisis of our "broken spirit". It is becoming clear how much we have neglected and devalued the power of "the best" of human nature—the very things that unite, empower and refocus priorities of individuals and societies—arguably our greatest asset in overcoming our grand challenges.

With this in mind, the theme of **our first virtual** meeting, **Project Earthrise**, takes inspiration from one of the most transcendent moments in modern history--when we first saw the Earth across the void of space. One planet. For all people. Igniting profound wonder and awe, it inspired a renewed desire for **peace**, **unity**, **kindness**, **justice** and **appreciation** and care for **nature**. We believe that this reveals that we are more aligned in our vision and **desire for a better world** than our current polarized social climate suggests—especially when we are inspired.

#### Imagining the future is the first step to getting there.

We might all begin by asking ourselves:

"What kind of world do we want to live in?"



Meeting Chairs,

Prof Susan Prescott (President and Director),
Prof Ganesa Wegienka (Vice President and Director),
Prof Remco Kort (acknowledging his work for the
pre-COVID Amsterdam program that had to be cancelled)

and the inVIVO Board of Directors:



**Susan Prescott**President and
Director, inVIVO



Ganesa Wegienka V/President and Director, inVIVO



Remco Kort, Meeting Chair, (Amsterdam)



Dianne Campbell Australia



Chris Lowry USA



John Penders Netherlands



John Holloway UK



Anita Kozyrskyj Canada



Cecilie Svanes Norway



Harald Renz Germany



Alan Logan USA



**Ralph Nanan**Australia



Jake Robinson UK



# Opportunity through connectivity and imagination:

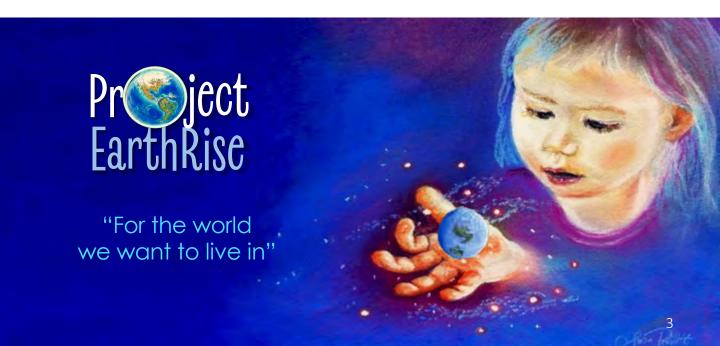
Our grandest challenges in the Anthropocene ultimately stem from human attitudes to each other and to our environment. However, solutions rarely confront the underlying value systems that created these interconnected problems, or the attitudes that perpetuate them. We call to normalize more creative, mutualistic approaches—including the perspectives of traditional and indigenous cultures—to positively influence normative value systems. We revisit the power of inspiration of "Earthrise" which galvanized a fleadling planetary health movement over 50 years ago. We explore the ways in which the awe of Earthrise—and contemporary science and creativity—might reinvigorate imagination, kindness and mutualism.

For more, see: Project Earthrise: Inspiring Creativity, Kindness and Imagination in Planetary Health by Alan C. Logan, Susan H. Berman, Brian M. Berman and Susan L. Prescott Challenges 2020, 11(2), 19

Our agenda underscores the imperative for **creative ecological solutions** for challenges in all systems and all scales with **advancing global urbanization** in the **digital age**— for **personal**, **environmental**, **economic** and **societal** health alike. We aim to bring together diverse perspectives from across many dimensions of the **arts** and the **sciences**, as we explore **novel solutions** and **new normative values**.

We will extend the many discussions we had planned for Amsterdam, prior to the pandemic, and view them through this lens—recognising that to overcome our greatest challenges we must address the value systems that created them in the first place.

This continues to reflect our focus on understanding and improving the complex relationships between human health and planetary health. We seek to emphasize the socio-eco-biological interactions in our living environment (including urbanization, food systems, education, social inequity, climate change, biodiversity loss, and microbial ecology) impact physical, mental and spiritual well-being, together with the wider community and societal factors that govern these. We continue to have a long-range vision which includes transgenerational and 'life-course' approaches to disease prevention and environmental restoration.



## Registration and Membership:

### Membership:

We greatly appreciate everyone's contributions to inVIVO. A much-valued aspect of our meetings is that we have not relied on commercial sponsorship. To make this possible our goal is to cover the costs of our annual meetings with the registration fee. The membership fee allows us to cover our increasing administrative costs as we continue to grow. Thank you all for your continued support.

- We invite all attendees to join as members (for US\$110), to support running costs of inVIVO.
- · Student membership is free.

Member benefits include reduced registration fees and discount journal submission to the International Journal of Environmental Research and Public Health (IJERPH) – (IF 2.849) our new journal partner, and to our journal Challenges.

### Registration:

In view of the pandemic, we are heavily discounting all registration fees this year. Although there are considerable costs of running the virtual platform we have decided to subsidise at well below cost. Your registration will include full access to all live sessions (more than 120 speakers), to all recordings after the event, and a viewing of the movie "Guardians of the Grassland." If you are not already a member, we invite you to join. Thank you for your investment!

Visit the website for registration options

Student registration: US\$20.00 Wember registration: US\$40.00

Non-member registration: US\$200.00 (we invite all attendees to become members)



## **Early Career Network**

We have a dynamic network of early career members! Please visit their <u>website</u> and contact then if you want to join!

Our students also edit a quarterly inVIVO student newsletter **THE PLANET**. The lastest editions are also on their website.



### 2020 early career researcher (ECR) Travel Awards:

We are proud announce the successful travel awards for early career researchers:

- Camilla Allen (UK)
- Chris Buse (Canada)
- Phanie Charest (Canada)
- Zoe Davis (Canada)
- Bahrul Fikri (Indonesia)
- Yogi Hendlin (Netherlands)
- Vivien How (Malaysia)
- Aaron Jenkins (Australia)
- Ingrid Jarvis (Canada)
- Danica-Lea Larcombe (Australia)

- Kyo Lee (USA)
- Danielle MacCarthy (Northern Ireland)
- Anna Ojo (South Africa)
- Sagun Paudel (Nepal)
- Manila Poudel (Nepal)
- Kristina Rueter (Australia)
- Amandine Selle (France)
- Hildy Steinacker (UK)
- Alex Wacoo (Uganda)

These will be honored in future face-to-face meetings.



## Conference format: join the conversation

### Conference format

#### **General Format**

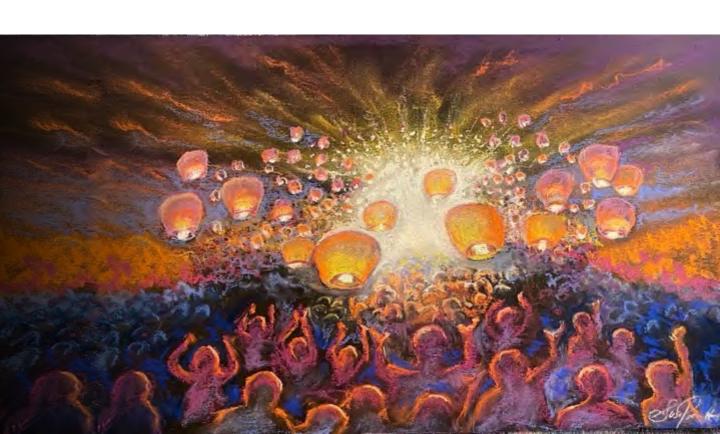
- We have decided to run the conference over 2 weeks because there is so much to cover!
- You can watch at any time after the session goes 'live'—either during live 'broadcast' or afterwards at your convenience, given time zone challenges!
- There will be 10 sessions of content—people sharing their work and perspectives.
- We will ALSO have 2 LIVE interactive "around the campfire" discussions to share ideas, thoughts, and opportunities arising from any session.

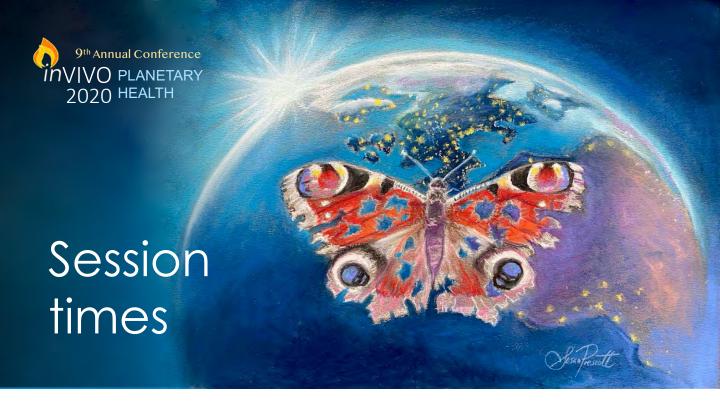
#### Session Format (content sessions)

- We have scheduled roughly 2-hour blocks of short-style talks—as in our in-person meetings.
- For logistic reasons, we will NOT have discussion at the end of each session. Instead we will have SEPARATE interactive discussions. But you will be able to submit comments or suggestions to the chair to bring to the discussion session or wait to make your comments at the "campfire".

#### Campfire Discussions

- These 'campfires' are opportunities for everyone to share thoughts and ideas that have arisen from the conference so far.
- They will both be in WEEK 2 to allow everyone who missed anything to catch up with the content sessions over the weekend before the live discussions.
- The chairs of each session will present comments they have collected during their sessions.
- Anyone else can also present their thoughts or ideas to add to the discussion.





**SESSION 1: Broadening our vision** to set the stage for change

SESSION 2: What kind of world do we want to live in? Urban and social systems for health and fulfilment on all scales

SESSION 3: Food systems from the ground up Can food solutions also be climate solutions?

SESSION 4: Building mutualism through nature connectedness inspiring well-being, meaning, social and environmental responsibility

SESSION 5: Ecological Foundations: Rewilding Environmental Microbiomes - Implications for human and microbial ecology

SESSION 6: Personal ecology in a rapidly changing exposome – what next!? Health and fulfilment in a changing physical, emotional, social and political environment

Around the campfire – LIVE INTERACTIVE SESSION –to discuss ideas, thoughts, and opportunities arising from any session so far!

SESSION 7: Across the Ages – Transgenerational and Life-course Opportunities to improve health (Developmental Origins – part 1)

**SESSION 8: Healthier Beginnings: Early Life interventions** (Developmental Origins - part 2)

**SESSION 9 From the Grassroots:** Change through Communities and Networks

SESSION 10: Taking it Forward – Project Earthrise

Wednesday Dec 2 3pm GMT (4pm CET)

Wednesday Dec 2 8pm GMT (9pm CET)

**Thursday Dec 3** 3pm GMT (4pm CET)

**Thursday Dec 3** 8pm GMT (9pm CET)

Friday Dec 4 3pm GMT (4pm CET)

Friday Dec 4 8pm GMT (9pm CET)

Monday Dec 7 3pm GMT(4pm CET)

Monday Dec 7 8pm GMT (9pm CET)

**Tuesday Dec 8** 3pm GMT (4pm CET)

**Tuesday Dec 8** 8pm GMT

Wednesday Dec 9 3pm GMT (4pm CET)

3pm EST 12pm PST +7am AEDT

**10am EST** 7am PST

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Wednesday Dec 9 8pm GMT (9pm CET) 3pm EST +7am AEDT (N.America) (Australia)



Opening video and Welcome

Messages from the Elders and Dedication of our meeting to Mother Earth from the Dene Peoples, and the Arctic Wellness Foundation, Canada

from the Mardoowarra People, and Nulungu Research Institute, Australia

Project Earthrise: Setting the scene to inspire change

#### **KEYNOTE LECTURE:**

**Beyond polarity: Seeking unity of spirit across ideologies.** A legacy of telling the truth and bearing witness to love and justice for people, place and planet.

Cornel West is an acclaimed American philosopher, political activist, social critic, author and public intellectual. He is Professor of the Practice of Public Philosophy at Harvard and as an Professor Emeritus at Princeton University. He has also taught at Union Theological Seminary, Yale, Harvard, and the University of Paris. He graduated Magna Cum Laude from Harvard and obtained his M.A. and Ph.D from Princeton. He has written 20 books and has edited 13. He is a frequent guest on the Bill Maher Show, CNN, C-Span and Democracy Now. He made his film debut in the Matrix – and was the commentator on the official trilogy released in 2004. He has appeared in over 25 documentaries and films. He has a passion to communicate to a vast variety of publics to keep alive the legacy of Martin Luther King, Jr.

**Making connections, finding balance:** remembering the social and spiritual dimensions of ecology

**The lowest common dominator:** shifting the underlying value systems that undermine planetary health on all fronts

Marketing and advertising-based artificial selection: intended and unintended consequences of mass mimicry in contemporary culture

The Crossroads of the Planetary Health Paradigm:

An Indigenous Perspective on Land Based Healing

**Rising the Feathered Serpent:** Indigenous Contemplative Traditions

**Every species has a song:** Plant intelligence and the importance of imagination in science

Susan Prescott

Nicole Redvers Be'sha Blondin

Anne Poelina Marlikka Perdrisat

Susan Prescott (Australia)



Trevor Hancock (UK)

Rob Moodie (Australia)

Yogi Hale Hendlin (Netherlands)

Nicole Redvers (Canada/USA)

Yuria Celidwen (Mexico, USA)

Monica Gagliano (Australia)

Cont...

5 minute stretch break – we will play photo albums from our last meetings! ©	
LIGHTNING TALKS – presenters have been asked to tell their story in 3 minutes with 1 bonus minute to explain the wider relevance and what they would personally love to see in the future	
Planetary Health: An Emerging Public Health Concern in Nepal	Sagun Paudel (Nepal)
Planetary Health Perceptions Versus Priorities in Fijian Communities	Sarah Nelson (Australia)
Transforming Ecological Grief Through Hypnotherapeutic Storytelling Traditions	Ryan Jenkins (Australia)
Interplanetary health equity: implications of dominant value systems in space exploration for human cultural identity and equitable survival	Evelyne de Leeuw (Australia)
Biomimicry and Nature as Sympoiesis: A Case Study into Living Machines	Laetitia Van den Bergen (Netherlands)
The Reciprocal Requirements for Undisciplined Cross-sectoralism	Aaron Jenkins (Australia)
Group discussions will be deferred to "Around Campfire" live interactive discussions. You can submit comments to the chair of this session now, or wait to bring your ideas to the "campfire"	

Session close



Welcome to Session (Chair)	David Nelson
<b>Rethinking social change:</b> regenerative sustainability, reciprocity and joy	Blake Poland (Canada)
Addressing the "Social Dilemma": can we realign digital technology with humanity's best interests	Dave Nelson (Canada)
Managing the digital environment for our children: physical, mental and social implications for a post COVID generation	Desiree Silva (Australia)
Nature as an antidote to digital displacement: Increasing the awareness of nature-based solutions for human health in urban settings post COVID	Matilda van den Bosch (Canada/Spain)
The future of urban systems: saving our cities to save our health in the post COVID era.	Mark J Nieuwenhuijsen (Spain)
Inspiring children to imagine the future: what they can teach us though art	Alanna Berman (USA)
Imagining our future: comparing green and sci-fi utopian themes and effects on social change motivation	Julian Fernando (Australia)
<b>The Artist as Rebel:</b> Enhancing awe, wonder and connectivity to people, places and planet	Catherine Sarah Young (Australia/ Philippines)

Cont...

(all these talks are scheduled for 10 minutes each)

5 minute stretch break – we will replay photo album from last meetings!	
LIGHTNING TALKS – presenters have been asked to tell their story in 3 minutes with 1 bonus minute to explain the wider relevance and what they would personally love to see in the future	
Parent use of smartphones and tablet computers and prenatal attachment	Rebecca Hood (Australia)
'Desirable green': Informing design guidelines for restorative small urban green spaces	Hildy Steinacker (UK)
Knowledge Translation in the Response to the COVID-19 and Climate Change Co-Emergencies of our Time	Cecilia Sierra- Heredia (Canada)
A history of the psychologies of the environment	James Dunk (Australia)
Change in complex systems: Lessons about policy and practice for healthy, sustainable healthcare	Sarah Walpole (UK)
Strategies Caregivers Use to Support Adolescents Who Experience Climate Grief	Taylor Hirschberg (USA)
Designing a Carbon Neutral Health System Through Sustainable Quality Improvement	Kathleen Leedham-Green (UK)

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Implementation of an Air Quality Forecasting Operating System for

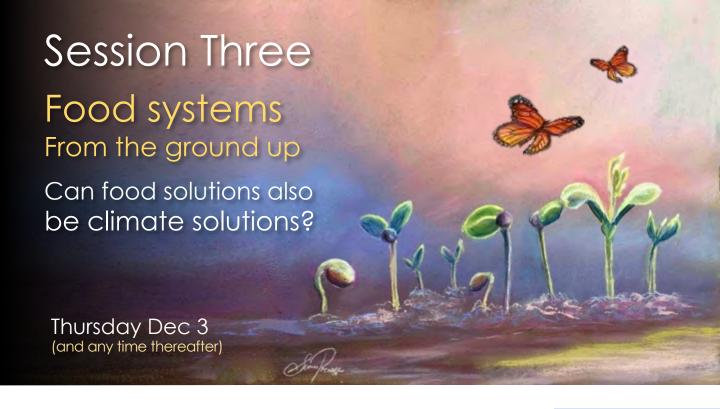
Health Surveillance and Sustainability in the Salvador Metropolitan

Region, Brazil

Session close

Nelzair Vianna

(Brazil)



"Kiss the Ground"	
Welcome to Session (Chair) Invitation for all delegates to watch film "Guardians of the Grasslands" documentary as part of the registration package (at leisure)	Anita Kozyrskyj (Canada)
Rules of Resilience: a guide to developing solutions that cultivate social-ecological resilience	Laura Lengnick (USA)
From the ground up: soil microbes, carbon fixing and regenerative agriculture from a grass roots perspective	Sarah Hargreaves (Canada)
The future of food: addressing value chains and value systems	Sabine Gabrysch (Germany)
The challenge of transforming food systems in an 'ultra-processed' society prone to corporate capture and overconsumption	Jean-Claude Moubarac(Canada)
The implications of ultra-processed diets and food additives for the gut microbiome	Laurence Macia (Australia)

Multi-dimensional advantages of beneficial microbes for food

solutions: from nutrition to prosperity and empowerment of women in

Beneficial Microbes in Apiculture: A Multi-Purpose Solution to Improve
Honey Bee Health and Reduce the Environmental Spread of
Antimicrobial Resistance

(all these talks are scheduled for 10 minutes each)

Brendan Daisley
(Canada)

Cont...

Gregor Reid

(Canada)

5 minute stretch break – with replay of photo album from last m	eetings!

<b>LIGHTNING TALKS</b> – presenters have been asked to tell their story in
3 minutes with 1 bonus minute to explain the wider relevance and
what they would personally love to see in the future

Biochar-Urine Nutrient Cycling for Health: A carbon intelligence project	Jillian Waid (Germany)
A real-life nutritional study and a double-blind placebo-controlled nutritional trial on health outcomes of a probiotic yoghurt interventio among schoolchildren from three to six years old in Southwest Ugano	
Probiotic approach for mitigation of the risk effects of aflatoxin: The application of Lactobacillus rhamnosus yoba to enrich and decontaminate aflatoxins in fermented foods	Alex Paul Wacoo (Uganda)
Bacterial Community Diversity in Gundruk – The Naturally Fermented Food from Nepal.	Prajwal Rajbhandari (Nepal)
Microbial Characterization of Kefir From Raw Milk Fermented by a Commercial Culture or a Symbiotic Consortium of Bacteria and Yeas	Luuk van Ooijen st. (Netherlands)
Screening of $\beta$ -galactosidase Production from Lactic Acid Bacteria Isolated from Different Livestock of Nepal	Manila Poudel (Nepal)
From Agricultural Health to Climate Change's Health Threat among Farmers and their Families	Vivien How (Malaysia)
The under-appreciated role of tropical forests in nutrition and food security	Sarah Gergel (Canada)
Protein for a healthy future: How to increase protein intake in an environmentally sustainable way in older adults in the Netherlands	Alessandra Grasso

An integrated scalar analysis of the cumulative health impacts of multiple landuses: Focus on British Columbia, Canada (Canada)

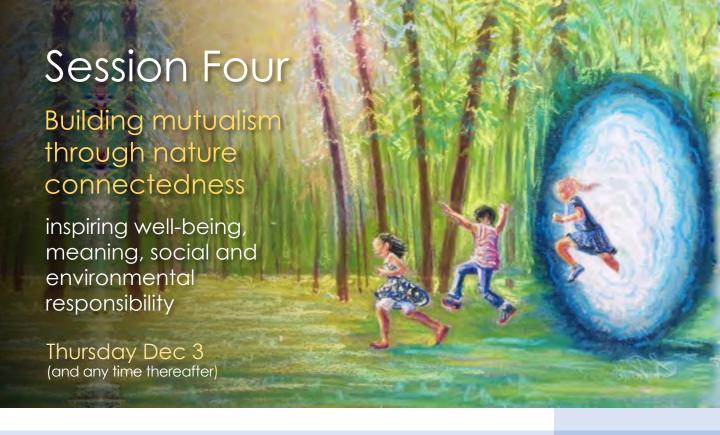
Altered Eating in the Anthropocene and Brain 'Injuries': Is it fundamentally altering our senses?

Duika Burges Watson (UK)

Group discussions will be deferred to "Around Campfire" live interactive discussions. You can submit comments to the chair of this session now, or wait to bring your ideas to the "campfire"

Session close

(Netherlands)



Welcome to Session (Chair)	Chris Lowry (USA)
Imagining new ways of living: at the intersection of art, nature and health	Sara Warber (USA)
The Green Road Project a therapeutic nature space veterans struggling with the unseen injuries of war  Built in the woodlands of the National Military Medical Complex in Bethesda, in collaboration with The Institute for Integrative Health, Baltimore	The Institute for Integrative Health, Baltimore (USA) (Fred Foote / Brian Berman)
Group activities in nature: growing resilience and buffering adversity	Melissa Marselle UK/Germany)
<b>Let nature be thy medicine:</b> a socio-ecological exploration of green prescriptions in the UK.	Jake Robinson (UK)
Can nature contact build character strengths: wider implications for environmental education?	Amparo Merino (Spain)
Nature and spiritual well-being: a simple path to improving human potential	Margaret Hansen (USA)

Cont...

(all these talks are scheduled for 10 minutes each)

5 minute stretch break - with replay of photo album from last meetings!

LIGHTNING TALKS – presenters have been asked to tell their story in 3 minutes with 1 bonus minute to explain the wider relevance and what they would personally love to see in the future	
Bac2Nature - Biodiversity is at the core of our health and happiness: An explanatory animation	Marco van Es (Netherlands)
Do Natural Environments Promote Childhood Mental Health and Development? A Systematic Review and Assessment of Different Exposure Measurements	Zoe Davis (Canada)
Childhood experiences of nature influence outdoor preferences as adults	Shinya Numata (Japan)
The Allure of Healing Nature: Examining the impact of light on mental health	Brent Erickson (USA)
The influence of different types of natural environments on self-reported health and mental illness	Ingrid Jarvis (Canada)
Walking the Talk - putting healthy and ecologically mindful living into practice	Sheelin Coates (Australia)
Nature nearby and its association with physical activity in older adults in Delhi, India.	Danielle MacCarthy (N. Ireland)
Therapeutic landscapes in Brussels city for human health promotion and disease prevention	Vitalija Povilaityte Petri (Belgium)
A biography of Richard St. Barbe Baker's 1950 New Earth Charter; an ecological manifesto calling for harmony between people and nature	Camilla Allen (UK)
Important Park Features for Encouraging Adolescents' Park Visitation, Physical Activity and Social Interaction: A Conjoint Analysis	Elise Rivera (Australia)
Urban landscape multifunctionality : Integrating socio-cultural values to ensure sustainable urban futures. *	Elizabeth Schrammeijer (Netherlands)
Group discussions will be deferred to "Around Campfire" live interactive	

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\*written abstract only (no presentation)

Session close



Welcome to Session (Chair)	Jake Robinson
"Earth" rise: soil ecosystems connecting the health of people, place and planet (celebrating World Soil Day today!)	Janet Jansson (USA)
Soils and forest materials to rewild the human microbiome: using environmental microbes in topical preparations	Aki Sinkkonen (Finland)
Restoring the environmental microbiome - a public health intervention?	Martin Breed (Australia)
<b>Transfer of environmental microbes</b> to the skin and respiratory tract of humans after urban green space exposure	Caitlin Selway (Australia)
Health-associated Microbiome is Altered in Urban Environments:  Daycare biodiversity interventions improve children's microbiome and immune regulation	Marja Roslund (Finland)
<b>Urban rewilding by green printing:</b> ecological restoration of microbial diversity on city walls	Remco Kort (Netherland)
<b>Fear and the city:</b> how exposure to environmental microbes enhances fear extinction	Chris Lowry (USA)
<b>Urbanized early life microbiota</b> increases the risk of asthma and atopic traits	Jenni Lehtimäki (Finland)
<b>What is a Healthy Skin Microbiome?</b> Leveraging ancestral microbiomes for guidance in restoration of a healthy western skin microbiota.	Julia Durack (USA)

Cont...

(all these talks are scheduled for 10 minutes each)

5 minute stretch break - with replay of photo album from last meetings!	
LIGHTNING TALKS – presenters have been asked to tell their story in 3 minutes with 1 bonus minute to explain the wider relevance and what they would personally love to see in the future	
Urban Green Space Aerobiomes: Exposure to Airborne Bacteria Depends Upon Vertical Stratification and Vegetation Complexity	Jake Robinson (UK)
Using the Human Skin Microbiota to Measure Nature Exposure in a Longitudinal Study	Danica-Lea Larcombe (Australia)
Investigating the Effect of Chlorinated Drinking Water on the Assembly of the Infant Gut Microbiome	Kimberley Parkin (Australia)
Algae as Allies: Learning Algal Patterns to Better Understand Ecosystem Health	Yogi Hendlin (Netheralnds)
Insights into the Circadian rhythms on Parasitic Infections and Planetary Health	Mona El-Sherbini (Egypt)
Can soil microbes modulate the plasma metabolome in an animal model?	Saydie Sago (USA)
Do soil microbes influence stress coping behaviors and cognitive performance in an animal model?	Kyo Lee (USA)
Effects of soil microbe Mycobacterium vaccae on faecal microbiomes: investigating effects in an animal model *	Evan Schaefer (USA
Effects of M. vaccae, a Bacterium with Anti-Inflammatory and Immunoregulatory Properties, on Circadian Rhythms of Locomotor Activity in Mice Experiencing Circadian Disruption *	M. C. Flux (USA)

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\*written abstract only (no presentation)

Session close



Welcome to Session (Chair)

#### **KEYNOTE:**

Reimagining Humanity: Promoting self-awareness, connectivity and mutualistic value systems for healing person, place and planet

Deepak Chopra, founder of <u>Ihe Chopra Foundation</u>, a non-profit entity for research on well-being and humanitarianism, is a world-renowned pioneer in integrative medicine and personal transformation. He is a Clinical Professor of Family Medicine and Public Health at the University of California, San Diego and serves as a senior scientist with Gallup Organization. He is the author of over 90 books, including numerous New York Times bestsellers. For the last thirty years, Chopra has been at the forefront of the meditation revolution working to help achieve new dimensions of stress-free living and joyful living. TIME magazine has described Dr. Chopra as "one of the top 100 heroes and icons of the century."

Making planetary health personal: promoting the understanding that it goes both ways!

Increases in depression during the COVID-19 pandemic:

Socio-economic gradient of mental health impact

**Happiness as fairness:** The relationship between national life satisfaction and social justice in EU countries

The COVID-19 Pandemic and Perinatal Mental Health in Sweden

Framing the Discussion of Microorganisms as a Facet of Social Equity in Human Health

**Resilience through nutrition**: buffering stress and adversity through personal ecology

Gut Microbiome in Children from Indigenous and Urban
Communities in México: selective pressures of Western diet and lifestyles

**Restoring our inner wisdom:** microbes modulate oxytocin compassion and prosocial behavior

Transcending chaos: Spirituality and coping in the aftermath of disaster

David Nelson



Jeff Bland (USA)

Catherine Ettman (USA)

Salvatore Di Martino (UK)

Emma Bränn (Sweden)

Suzanne Ishaq (USA)

Pedro Carrera Bastos (Portugal)

Isaac G-Santoyo (México)

Susan Erdman (USA)

Susan Young (New Zealand)

5 minute stretch break - with replay of photo album from last meetings!	
LIGHTNING TALKS – presenters have been asked to tell their story in 3 minutes with 1 bonus minute to explain the wider relevance and what they would personally love to see in the future	
Unintended Consequences From The COVID19 Response	Jacinta Ryan (Australia)
Canadian Public Health Measures for SARS-CoV-2 Targeting Children During the Early Days of the COVID-19 Pandemic	Rachel Livergant
TSUNAMI: An environment wide association study of diabetes burden in India	Puja Chebrolu (India/USA)
A Live Probiotic Sunscreen to Protect Against Skin Neoplasia	Tina Varkevisser (Netherlands)
Metabolic Diversity amongst Lactobacillus Crispatus Isolates for Probiotic Purposes	Rosanne Hertzberger (Netherlands)
The brain-gut axis organoid model, creation of an organoid-organoid connection of the intestine and brain	Job Schlösser (Netherlands)
Hyphae-active: mycelia-inspired participatory Service Design for healthier people and places - Inspired by Nature's Internet.	April Rose Presto

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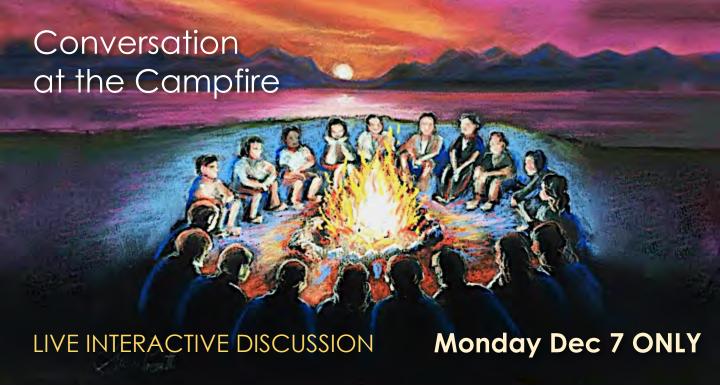
Strategies to reduce antibiotic usage by targeting bacterial quorum

sensing: the Q-Patch

Session close

Annika Dokter

(Netherlands)



JOIN US LIVE to discuss ideas, questions and opportunities arising from any session so far!

### **Monday Dec 7**

3pm UTC (GMT)
4pm CET (Europe)
10am EST (N.America)
7am PST (N.America)
11pm AWST (Australia)
+2am AEDT (Australia)

Like our in-person meetings, we aim to encourage organic interactions and opportunities for everyone to share their thoughts and ideas. The goal is to explore the space "between siloes" of expertise, and find new opportunities through the connectivity of our community.

As always, we welcome new members and value the thoughts of early career researchers as much as those who have been around for a while.

To get the ball rolling we will ask the chairs of each session so far (sessions 1-6) to share their thoughts and feedback from participants during their session, inviting further comment from others.

### There are no obligations or expectations – whatever happens is right.

Whoever comes to the campfire is meant to be there. If people choose to come and go that is ok. The conversation takes us wherever we want it to go. It lasts for as long as long we want it to last.

"Imagining the future is the first step to getting there. Sharing it helps make it real"



## Session Seven

Across the Ages – Transgenerational and Life-course Opportunities to improve health

Developmental Origins of Health and Disease – part 1

Monday Dec 7 (and any time thereafter)



Welcome to Session (Chair)

Across the generations: a traditional perspective from the longest surviving culture on Earth

**From Mother to Child:** How, when and why we need to optimise the developing microbiome.

**From Father to Child:** Transgenerational effects of toxic environmental exposures in Artic populations

Early-Life Exposome and Industrial Chemical Emissions

A nudge from evolution: Sex and birth order influence how mothers eat and offspring grow

**The burden of maternal depression in pregnancy:** implications for psycho-emotional and physical development of next generations

Ecology of the microbial mother-newborn dyad

**Life in our gut: the impact of birth mode, diet and social interactions** in shaping the microbiome during early life

**Reduced microbial richness in breast milk** associates with increased risk of immune disease

**Human Breast Milk Bacterial Dysbiosis** is Associated with Lactose Fermentation and Poor Breast-feeding Outcomes

(all these talks are scheduled for 10 minutes each)

Ganesa Wegienka (USA)

Sandra Eades (Australia)

Maria-Carmen Collado (Spain)

Janice Bailey (Canada)

Charlene Nielsen (Canada) Ralph Nanan (Australia)

Alkistis Skalkidou (Sweden)

Nelly Amenyogbe (Australia)

John Penders (Netherlands)

Maria Jenmalm (Sweden)

Anna Ojo (South Africa)

5 minute stretch break - with replay of photo album from last meetings!	
LIGHTNING TALKS – presenters have been asked to tell their story in 3 minutes with 1 bonus minute to explain the wider relevance and what they would personally love to see in the future	
A prospective study of persistent organic pollutants and body mass index trajectories among Black women	Xiaoxia (Sasha) Han (USA)
Gut Microbiota Signature Based On Sex and the Presence of Siblings in 2 Years Old Japanese Children	Bahrul Fikri (Japan/Indonesia)
The role of early-life gut microbiota maturation in allergy predisposition: Higher risk of sensitization among Asian-Canadian children	Hein Min Tun (Hong Kong)
Ancestral Paternal Exposure to Arctic Pollutants Impairs Placental and Fetal Developmental Outcomes Without Protective Effect from Folic Acid Supplementation*	Phanie L.Charest (Canada)
Group discussions will be deferred to "Around Campfire" live interactive discussions. You can submit comments to the chair of this session now, or wait to bring your ideas to the "campfire"	
*written abstract only (no presentation)	Session close

Healthier Beginnings: **Early Life** interventions

Developmental Origins of Health and Disease – part 2

Tuesday Dec 8 (and any time thereafter)



Welcome to Session (Chair)

Can rewilding the microbiome ameliorate the effects of early life stress and transgenerational vulnerability?

Born to be Wise: Impact of Modifiable Early-life Environmental Exposures on the Health and Development of Children

ActEARLY: How can we keep our young people happy, health and physically active? A multi-method, multi-disciplinary community priority setting exercise in the City of Bradford, United Kingdom

Breast milks as personalised preventive medicines: implications of environmental changes in the Anthropocene

Breastfeeding and planetary diets: why breast milk substitutes should have the same aspirations for people, place and planet

The benefits of spending time in nature for infant gut health overcoming the increasing use of disinfectants in the post-COVID era

**Improved eating habits and active playtime** though connecting preschool children to nature: preliminary results of a randomized controlled trial

John Penders (Netherlands)

Bridget Callaghan

Matilda van den Bosch (Canada)

> Rosie McEachan (UK)

Valerie Verhasselt (Australia)

Daniel Munblit (UK)

Anita Kozyrskyj (Canada)

Tanja Sobko (Hong Kong)

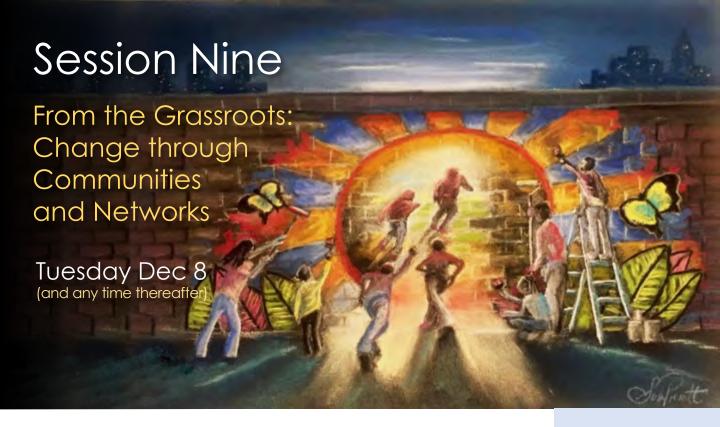
(all these talks are scheduled for 10 minutes each)

Cont...

5 minute stretch break - with replay of photo album from last meetings!	
LIGHTNING TALKS – presenters have been asked to tell their story in 3 minutes with 1 bonus minute to explain the wider relevance and what they would personally love to see in the future	
Impact of COVID-19 on families: comparison of birth cohorts in Australia and the UK (collaboration between ORIGINS and Born in Bradford)	Bridget Lockyer (UK)
Urban Children's Well-Being Factors and Qualities of Being and Doing in Natural Space	Misako Nagata Patricia Liehr (Japan/USA)
The Influence of Early Vitamin D Supplementation and UV light Exposure on Allergic Disease Outcome in Infancy: A Double-Blinded Randomized Controlled Trial	Kristina Rueter (Australia)
Exploring the Experience and Engagement of Perinatal Women in Online Emotional Wellbeing Training	Jacqueline Davis (Australia)
Modulation of the Immune System in Feto-Maternal Tissues by Prebiotics Supplementation During Pregnancy: a Future Strategy for Allergy Prevention	Carole Brosseau (France)
Impact of Prebiotics Supplementation During Pregnancy on Food Allergy Development in Offspring	Amandine Selle (France)
Short chain fatty acids augment differentiation and function of human induced regulatory T cells	Mingjing Hu (Australia)
Does Dairy Fat Alters the Gut Microbiome of Australian Children? A Randomised Controlled Trial*	Claus Christophersen (Australia)
Group discussions will be deferred to "Around Campfire" live interactive discussions. You can submit comments to the chair of this session now, or wait to bring your ideas to the "campfire"	

\*written abstract only (no presentation)

Session close



Welcome to Session (Chair)

Susan Berman

**Inspiring hope through stories of grassroots action:** using impact-driven film to accelerate change. A message from the Redford Center

Founded by Robert Redford and son James Redford, The Redford Center uses film and media to accelerate environmental and climate justice, solutions and repair—balancing out the pervasive, alarmist environmental narrative with stories of individuals, communities and organizations taking action to protect and restore the planet.

Jill Tidman
Executive Director
(USA)

Galvanising action towards justice in a greener and healthier future – addressing Health disparities created by COVID-19 in Detroit

Nicholas J. Schroeck (USA)

**Co-creating multi-system human and planetary resilience with nature:** Using ecology, campaigns and activism for transformation

Robert Verkerk (UK)

**Life knowledge for preventing lifestyle diseases:** Experiential culinary and lifestyle learning for medical students

Chris D'Adamo (USA)

**Mission Thrive Community-Based programs:** empowering youth, families, and communities to make lifestyle changes that support their health and well-being.

Brian Berman and The Institute for Integrative Health (USA)

A collaboration between The Institute for Integrative Health and Civic Works Real Food Farms, Baltimore

> Brandin Bowden (USA)

**Mindfulness at Patterson Partnership**: impact of a school-wide mindfulness program on attitudes, behavior and performance

Cont...

(all these talks are scheduled for 10 minutes each)

Cont.	
Taking the planetary health pledge: University of Minnesota School of Nursing leads by example	Courtesy of Teddie M. Potter and the students and staff at Minnesota School of Nursing
Engaging Healthcare Professionals in the planetary health narrative: development and rational for a planetary health pledge	Kathy Wabnitz (UK)
5 minute stretch break - with replay of photo album from last meetings!	
<b>LIGHTNING TALKS –</b> presenters have been asked to tell their story in 3 minutes with 1 bonus minute to explain the wider relevance and what they would personally love to see in the future	
Narrative Medicine and Planetary Health: Promoting Physician Wellness in the Shadow of a Pandemic	Mona El-Sherbini (Egypt)
A Case Study on Impacts of Student Organizations Focused on Planetary Health	Taylor Hirschberg (USA)
240 seconds of Lockdown: A short film, giving a "lightning" perspective on the opportunities of the COVID-19 Pandemic for the greater good of our world and planet.	Abdelrahman Ahmed El-Badry (Egypt)
Influence of Community Governance on Planetary Health in Fiji	Sarah Nelson (Australia)
The Watershed Interventions for Systems Health in Fiji project: a Model for Adaptive Management of Catchment-to-Reef Social-Ecological Systems	Aaron Jenkins (Australia)
Making planetary health part of professional health care: Blurring the Boundaries between Patient, Professional, Personal, Body, and Healthcare Practice as a Way of Life	Filip Maric (Norway)
Group discussions will be deferred to "Around Campfire" live interactive discussions. You can submit comments to the chair of this session now, or wait to bring your ideas to the "campfire"	
	Session close

# Session Ten Taking it forward



Wednesday Dec 9 (and any time thereafter)

Earthrise video and Welcome to Session (Chair)	Susan Prescott
Taking the leap of faith	Cornel West
Inspiring social and cultural change: the importance of imagination	Blake Poland
Creating new narratives for systemic solutions: co-creating a story to enliven connectivity between individuals, communities and the planet	Jamie Harvie
<b>Touchpoints for action:</b> interwoven global conversations and threads connecting different global efforts	Margot Parkes
Putting it Back Together to Move Forward	George Kaplan
From "Me" to "We" – How to Promote Wellness and Fairness for People, Places and the Planet	Isaac Prilleltensky
<b>Towards more mindful societies</b> —political discourse that tackles societal challenges at the level of the human heart and mind	Jamie Bristow
Are we being good ancestors—for our grand children's grand children?	Brian Berman
Depolarizing the cultural divide: A path for social healing	Kirk Schneider
Starting a much bigger conversation:	
Taking it Forward – Project Earthrise	Susan Prescott
Conclusion and thanks, including where we take it from here!	Susan Prescott



JOIN US LIVE to discuss ideas, questions from any session so far and opportunities arising as we take this forward to 2021 and beyond!

### Wednesday Dec 9

8pm UTC (GMT)
9pm CET (Europe)
3pm EST (N.America)
12pm PST (N.America)
+4am AWST (Australia)
+7am AEDT (Australia)

This is another opportunity for everyone to share their thoughts, ideas and reflections, after the full conference program has been completed. In particular, we invite people to share ideas on how to take emerging themes and ideas forward, including how they would like our network to evolve.

As in our previous "campfire", we will ask the chairs of each session (7-10) to get the ball rolling so far to share their thoughts and feedback from participants during their session, inviting further comment from others.

Again, there are no obligations or expectations – whatever happens is right.

Whoever comes to the campfire is meant to be there.

If people choose to come and go that is ok.

The conversation takes us wherever we want it to go.

It lasts for as long as long we want it to last.

"Visualizing possibility is fundamental for flourishing—creating imaginative solutions while generating hope and enthusiasm to energise action towards transformation"



### 1. New IJERPH Special Issue



We have a new PubMed indexed special issue on Planetary Health to celebrate our 2020 meeting in *IJERPH*. We encourage submissions related to any relevant topics, particularly those submitted for our 2020 meeting. NOW OPEN (until October 2021). https://www.mdpi.com/journal/ijerph/special\_issues/PlanetaryHealth

All inVIVO members receive a 20% discount on Article Processing Charges.

## 2. Submit to Challenges



Our own multidisciplinary journal *Challenges* encourages diverse work spanning all the Grand Challenges of our time - an ideal fit for inVIVO. This is a **open access** peer-review journal that promises very rapid publication – this will **remain free of charge** for inVIVO members in 2020.

Open Access

Please visit the Challenges <u>website</u> for more information, or contact our Editor-in-Chief, Professor Susan Prescott.

Free of charge

For more on our philosophies: Please see the Canmore Declaration, which was a key outcome of our 2018 conference. This is intended to be both a foundation and a "way-finder" for our network going forward, and articulates the 10 principles for planetary health, that guide the inVIVO vision.



## We are grateful for B-Corp support

We are grateful to our **B-Corp Certified** sponsors **Danone Nutricia Research** and **Genuine Health** for supporting travel grants for ECR.









## inVIVO favors Certified B Corporations

**About B Corps:** Society's most challenging problems cannot be solved by government and nonprofits alone. B Corps form a community of leaders and drive a **global movement** of people **using business as a force for good**. B Corps are accelerating a **global culture shift** to redefine success in business and build a more **inclusive** and **sustainable** economy. These businesses meet the highest standards of verified **social** and **environmental** performance, public **transparency**, and legal accountability to **balance profit and purpose**. The B Corp community works toward reduced inequality, lower levels of poverty, a **healthier environment**, stronger **communities**, and the creation of more high quality jobs with dignity and purpose. By harnessing the power of business, B Corps use profits and growth as a means to a greater end: positive impact for their employees, communities, and the environment.

We invite new B-Corp partners, and we encourage all our members to choose B-Corp products and services.

