



International One Health Conference in Catania, Italy 27-28, September 2022  
*A systemic approach to manage urban and natural resources*

International

# One Health Conference

Catania 27-28, September 2022

A systemic approach to managing urban and natural resources

Animal Disease

Human Disease

ENVIRONMENT

One Health





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## **Scientific Program**

### **Tuesday, September 27, 2022**

OPENING CEREMONY Start 9.00am UTC (7.00am UTC)

Domain 1: One health, antimicrobial resistance, and epidemiological models)

Domain 2: One health in transition cities, big data, and urban metabolism

PART 1: Building a new environment under a One-Health Vision

PART 2- Nature-based solutions - 15.30 - 17.00

Domain 3: One health as part of adaptation and human rights

### **Wednesday, September 28 2022**

DAILY OPENING 9.00 - 10.00 CEST (UTC +2)

Domain 4: One-health vision on environmental hazards, toxicology, and epigenetics

CONCLUSIONS OF THE CONFERENCE

POSTER SESSION

STUDENT CONFERENCE AND AWARDS



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## OPENING CEREMONY Start 9.00am CEST\* (7.00am UTC\*\*)

Chairs: Margherita Ferrante, Gea Oliveri Conti

Opening Keynotes and Speakers
<b>Francesco Priolo</b> - <i>Dean of Università di Catania</i>
<b>Gaetano Sirna</b> - <i>General Director Policlinico di Catania</i>
<b>Maria Neira</b> - <i>Director of Department of Environment, Climate Change, and Health WHO</i>
<b>Pasqualino Rossi</b> - <i>Italian Ministry of Health</i>
<b>Ruggero Razza</b> - <i>Assessor of Health Regione Sicilia</i>
<i>Municipality of Catania Representative</i>
<b>Giuseppe Arcidiacono</b> - <i>Assessor of Health Comune di Catania</i>
<b>Ignazio La Mantia</b> - <i>President of Medical Order</i>
<b>Margherita Ferrante</b> - <i>Conference Organizer, Full Professor of General and Applied Hygiene, University of Catania</i>

\*CEST = Central European Summer Time (UTC+2) \*\*UTC = Universal Time Coordinated (GMT)

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## **Domain 1: One health, antimicrobial resistance and epidemiological models**

*Start :10.30 CEST (UTC+2) End : 12.15 CEST (UTC+2)*

### **Domain topics**

- Infection and antimicrobial resistance
- COVID-19 and long COVID-19
- Vector borne diseases
- Epidemiology models and policies

**Keynotes and Guests 10.00 CEST (8.00 UTC)**

**Antonella Agodi**, Director of the Department of Medical, Surgical Sciences and Advanced Technologies "GF Ingrassia"

**From 10.30 - 12.00 CEST (UTC+2)**

**Chairs:**

**Paolo Lauriola**, RIMSA

**Margherita Ferrante**, University of Catania

**Antonio Cristaldi** , University of Catania

<b>Time (min)</b>	<b>#</b>	<b>Authors</b>	<b>Title</b>	<b>Track</b>	<b>Presentation</b>
00:10 00:05 quest	1022	Gea Oliveri Conti	One-health approach in the ecological transition	Domain 1	ORAL

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00:10 00:05 quest	264	Damas Theobald Msaki and Sigrid Agenäs	Promotion of safe food to consumers of Milk and Dairy Products in Kibaha Town Council (Tanzania)	Domain 1	ORAL
00:10 00:05 quest	5469	Andrea Falco and Prisco Piscitelli	COVID-19 Epidemic spread and Green Areas Italy and Spain between 2020 and 2021: An observational multi-country retrospective study	Domain 1	ORAL
00:10 00:05 quest	7766	Gabriela Fernandez, Harrison Yang, Carol Maione, Karenina Zaballa, Norbert Bonnici, Jarai Carter, and Ming-Hsiang Tsou	Covid-19 societal effects and perceptions: The case study of Italy	Domain 1	ORAL
00:10 00:05 quest	8094	Sheilla Chebore, Jedidh Kahura and David Mungai	ANTIMICROBIAL RESISTANCE SURVEILLANCE CURRICULUM DEVELOPMENT ONE HEALTH APPROACH A KENYAN EXPERIENCE	Domain 1	ORAL
00:10 00:05 quest	3255	Erimma Orié	CLIMATE CHANGE, SUSTAINABLE HEALTH AND CORONAVIRUS DISEASE ( COVID-19 PANDEMIC) IN NIGERIA: THE LEGAL ISSUES IN PERSPECTIVE.	Domain 4	ORAL

## CONCLUSIONS of the Domain from Chairs - 12.15 - 12.30

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## Domain 2: One health in transition cities, big data, and urban metabolism

Start :13.45 CEST (UTC+2) End : 17.00CEST (UTC+2)

### **PART 1- *Building a new environment under a One-Health Vision***

#### **Domain topics**

- Net Zero, Decarbonization, and healthy cities
- C40 Network Connection and Ren21
- Big data analytics for epidemiology and environmental monitoring
- Citizen science

### Keynotes and Guests 14.00 CEST (12.00 UTC)

*Introduction:* **Prisco Piscitelli**, Vice President of the Italian Society of Environmental Medicine (SIMA)

**Carlos Dora**, *President Isuh*

**Mark Neuhausen**, *Institute for Global Health (ISGlobal)*,

#### **From 14.30 to 15.30 CEST (UTC+2)**

**Prisco Piscitelli**, SIMA

**Gabriela Fernandez** , Metabolism of Cities Living Lab, San Diego State University

**Domenico Vito**

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Time (min)	#	Authors	Title	Track	Presentation
00:10 00:05 quest	2683	Antonina Torrisi, Margherita Ferrante, Alessia Anna Di Prima, Domenica Niglio, Fiorella Paderni, Domiziana Giordano and Rosalia Ragusa	BENCHISTA project: Benchmarking of population-based childhood cancer survival by Toronto stage	Domain 2	ORAL
00:10 00:05 quest	2867	Francisco Guachalla	Embracing the SDG-2030 for Monitoring and Learning in Emergency and Developing Projects	Domain 2	ORAL
00:10 00:05 quest	3357	Paolo Fidelbo, Rosalia Ragusa, Carmelo Ettore Viscosi, Andrea Benedetto, Eleonora Salamone, Angelo Pisano and Margherita Ferrante	Lean six sigma: application of the methodology in data processing for Cancer Registry	Domain 2	ORAL
00:10 00:05 quest	6976	Kamran Khan and Thomas Henschel	A Life Cycle Thinking Based Framework for the Assessment of Sustainability: From the Perspective of Literature Review	Domain 2	ORAL

## **PART 2- Nature Based solutions - 15.30 - 17.00**

### **Domain Topics:**

- Nature-based solutions (multidimensional approach)
- Air quality and healthier cities
- Metabolism of cities and implications on health

## **Keynotes and Guests 15.30 CEST (13.30 UTC)**

**Ingrid Coetzee**, ICLEI

**Francesco Petracchini**, CNR-IIA

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## Presenters Session

**From 16.00 to 17.00 CEST**

Chairs:

**Stefania Romano**, ICLEI

**Gabriela Fernandez**, Metabolism of Cities Living Lab, San Diego State University

**Valerio Paolini**, CNR-IIA

Time (min)	#	Authors	Title	Track	Presentation
00:10 00:05 quest	1317	Julia Nawaro, Lorenzo Gianquintieri, Andrea Pagliosa, Alessandra Silvaroli, Giuseppe Maria Sechi and Enrico G. Caiani	Heat waves and cardiovascular events in Milan, Italy: a geospatial case-crossover approach using data from emergency medical services	Domain 2	ORAL
00:10 00:05 quest	4232	Antonio Cristaldi, Rosalia Pellitteri, Paola Dell'Albani, Gea Oliveri Conti, Chiara Copat, Alfina Grasso, Maria Fiore, Giuseppa Milletari, Sebastiano Cavallaro and Margherita Ferrante	Preliminary data on the effects of PM2,5 on Olfactory Ensheathing Cells (OECs)	Domain 2	ORAL
00:10 00:05 quest	6976	Kamran Khan and Thomas Henschel	A Life Cycle Thinking Based Framework for the Assessment of Sustainability: From the Perspective of Literature Review	Domain 2	ORAL

## CONCLUSIONS of The Domain from Chairs

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## Domain 3: One health as part of adaptation and human rights

### Domain topics

- Health as a part of adaptation
- Resilient health care systems
- Community health and resilience
- Child and maternal health as element of resilience
- Human rights and health (Vaccine and immunization)
- Health strategies and application for minorities and disadvantaged people
- SDG 3 and related SDGs

Keynotes and Guests - 17.00 CEST (15.00 UTC)

**Giulia Bosi**, PhD. candidate in Public International Law (PhD. programme in Human Rights and Global Politics)

**Cristoforo Pomara**, Full Professor of Forensic Medicine at the University of Catania, SIMA

### From 17.30 to 19.00 CEST (UTC)

Chairs:

**Melissa Jimenez Gomez Tagle**, Technical University of Munich (TUM)

**Maria Grazia Elfio**, Giornalista Biomedicina e Salute

**Graziella Machado**, Federal University of Health Sciences of Porto Alegre (UFCSPA)

Time (min)	#	Authors	Title	Track	Presentation
00:10 00:05 quest	3677	Sara Simeone, Severino Romano, Mauro Viccaro, Frans Sijtsma, Maria Consiglia D'Angelo and Mario Cozzi	Understanding the role of nature in urban-rural linkages: identifying the potential role of rural nature-based attractive clusters that serve human well-being	Domain 3	ORAL

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Time (min)	#	Authors	Title	Track	Presentation
00:10 00:05 quest	9883	Laura Kadile and Marina Loseviča	Healthcare quality indicators as a tool for safeguarding patient with limited capacity and physician rights	Domain 3	ORAL
00:10 00:05 quest	3841	Rachel Koshy, Nazrila Hairizan Nasir, Samsiah Awang and Kamaliah Mohamad Noh	PRIMARY HEALTH CARE ASSESSMENT: VITAL SIGNS PROFILE FOR MALAYSIA	Domain 3	ORAL
00:10 00:05 quest	7148	Antonietta Alfia Maria Torrisi, Rosalia Ragusa, Carlo Sciacchitano, Antonella Ippolito, Eleonora Irato, Alessia Anna	A growing problem: incidence of cancer in foreign citizens residing in the provinces of CT-ME-SR-EN (2003-2017)	Domain 3	ORAL
00:10 00:05 quest	8168	Elena Alonzo, Carmelo D'Urso, Rosanna La Carrubba, Fabrizia Minciullo, Simona Santa Trillè and	Schoolchildren empowerment and resilience through "Active Breaks"	Domain 3	ORAL
00:10 00:05 quest	4476	Ioannis Adamopoulos and Niki Syrou	WORKPLACE ENVIRONMENT AND BURN-OUT IN PUBLIC HEALTH WORKFORCE INSPECTION SERVICES IN GREECE DURING COVID-19	Domain 4	ORAL

## CONCLUSIONS of The Domain from the chairs

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## DAILY OPENING 9.00 - 10.00 CEST (UTC +2)

Chairs: Margherita Ferrante, Gea Olivieri

Opening Keynotes speakers and institutional guests
<p><b>Alessandra Stefani</b> - Forestry Branch General Manager <i>Ministry of Agricultural and Forestry Policies</i></p> <p><b>Davide De Laurentis</b> - Deputy Commander of the Forestry Carabinieri</p> <p><b>Giovanni Salerno</b> - Director of the Sicily "Corpo Forestale" Regione Siciliana</p> <p><b>Luca Ferlito</b> - Commander of "Corpo Forestale" Provincia Catania</p>
<p><b>Marina Romanello</b> - <i>The Lancet Countdown</i></p>
<p><b>Marco Ricceri</b> - EURISPES</p> <p><b>Walter Pollina</b> - DASOE Regione Sicilia</p>
<p><i>One-Health 22 - Partners Associations representatives</i></p> <p><b>Rocco Chiriaco</b> - Movimento Azzurro</p> <p><b>Giovanni Barbagallo</b> - Ecosezione Frigia</p> <p><b>Monica Marchese</b> - Plastic-free</p>
<p>"La Consulta Giovanile di Catania" Council of Youths of Catania - Piersalvo Catania, Giuseppe Melita</p> <p>Youth Students Associations - Simone Scalia</p>

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## Domain 4: One-health vision on environmental hazards, toxicology and epigenetics

Start :10.00 CEST (UTC+2) End : 14.00 CEST (UTC+2)

### PART 1 - Human effects on environmental hazards

#### **Domain topics**

- Toxicology and Microplastic, Dioxins
- Nanotoxicology
- Analysis and monitoring microplastic

#### Keynotes and Guests h10.00 CEST (8.00 UTC)

**Antonio Moreda Piñeiro.** *Santiago de Compostela - USC-nanoparticelle metalliche*

**Mohamed Banni,** University of Sousse - microplastiche

#### Presenters Session

**From 10.30 to 11.45 CEST**

Chairs:

**Carol Maione** , Politecnico di Milano

**Gea Oliveri Conti** University of Catania

**Chiara Copat,** University of Catania

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	#	Authors	Title	Track	Presentation
00:10 00:05 quest	181	Filippo Vaccari, Leilei Zhang, Gianluca Giuberti, Alfina Grasso, Francesca Bandini, Pascual García-Pérez, Chiara Copat, Luigi Lucini, Margherita Ferrante and Edoardo Puglisi	Exposure to metallic nanoparticles can modulate gut metabolome and microbiome in in-vitro digestion model	Domain 4	ORAL
00:10 00:05 quest	2097	Chongshan Dai, Shusheng Tang and Zhanhui Wang	Cadmium triggers apoptotic and ferroptotic cell death in human L02 cells by inhibiting ATF-5-mediated mitochondrial unfolded protein response	Domain 4	NOT DECLARED
00:10 00:05 quest	4994	Pauline Owiti, Rahmina Paullete and Miriam Kinuthia	Local Solutions available on Marine Litter and Plastic Pollution in Lake Victoria	Domain 4	NOT DECLARED
00:10 00:05 quest	7061	Ramiro Schiavo	New Diagnosis and Population Monitoring	Domain 4	ORAL
00:10 00:05 quest	6357	Antonio Carlo Barbera and Rosario Iacono	Emerging evidence on rice ( <i>Oryza sativa</i> L.) irrigated with water contaminated by residual pharmaceutical chemicals	Domain 4	ORAL
00:10 00:05 quest	4755	Giuseppe De Marco, Margherita Ferrante, Mariachiara Galati, Tiziana Cappello, Gea Oliveri Conti and Maria Maisano	Short-term exposure to polystyrene microplastics (PS-MPs) in marine mussels: does it induce pro-oxidant and neurotoxic effects?	Domain 4	ORAL
00:10 00:05 quest	3934	Ioannis Adamopoulos and Niki Syrou	Occupational Hazards Associated with quality and training needs in Public Health Inspectors in Greece	Domain 4	ORAL



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## PART 2 - Ecosystemic effects of environmental hazards

### Domain topics

- Effects on animals and fauna [fish, bovines] (biomagnification, food chain)
- Microplastic accumulation in dunes
- Exposomic
- Epigenomics (epigenetici, rumore città non controllo sul rumore)

### Keynotes and Guests h 11.45 CEST (9.45 UTC)

Peter Van Hazel . *ISDE International*

Alberto Izzotti, Unige - epigenetica

### Presenters Session

#### From 12.15 to 14.00 CEST

Chairs:

**Margherita Ferrante**, University of Catania

**Paolo Lauriola**, RIMSA

**Alfina Grasso**, University of Catania

	#	Authors	Title	Track	Presentation
00:10 00:05 quest	9654	Carol Maione	Standard Operating Procedure for the Analysis of Microplastics in Larval Fish Diets	Domain 4	ORAL
00:10 00:05 quest	3170	Siwar Abouda, Tiziana Cappello, Mohamed Banni, Maria Maisano, Omayma Missawi, Giuseppe De Marco and Iteb Boughattas	Impact of environmental microplastics and Benzo[a]pyrene on cellular and molecular responses of <i>Hediste diversicolor</i>	Domain 4	ORAL

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00:10 00:05 quest	4559	Francesco Tiralongo, Ioannis Giovos, Maria Violetta Brundo, Nikolaos Doumpas, Sara Ignoto, Zoi Kazlari, Dimitrios Loukovitis, Dimitrios	Potential risks from consumption of fishes: A trace elements study in edible tissue of elasmobranchs from the Aegean Sea	Domain 4	ORAL
00:10 00:05 quest	6092	Sebahattin Ergun, Arya Vazirzadeh, Murat Yigit, Sevdan Yilmaz, Murat Erdem, Bilge Erdem and Yesim Buyukates	Evaluation of Microplastic in Caged Fish from Turkish and Iranian Waters with Health Risk Assessment for Human Consumers	Domain 4	ORAL
00:10 00:05 quest	7717	Tiziana Cappello, Gea Oliveri Conti, Giuseppe De Marco, Margherita Ferrante and Angela Mauceri	Early mechanisms of polystyrene microplastics (PS-MPs) cytotoxicity assessed in marine mussels after short-term exposure	Domain 4	NOT DECLARED

## CONCLUSIONS OF THE CONFERENCE

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## POSTER SESSION

Poster Session will held into a Virtual Room

#	Authors	Title	Track
415	Zeinabou Maman Noura, Mamane Daou, Laminou Ibrahim Mamane, Maman Bachir Alasan Goni, Haboubacar Maman Manzo, Eric Omar Adéhossi and Boubacar Kaouge	Study of malaria morbi-mortality variation associated to climate change from 2010 to 2019 in Niger	Domain 1
906	Elena Maria Scalisi, Roberta Pecoraro, Antonio Salvaggio, Giuliana Impellizzeri, Maria Violetta Brundo.	Effects of TiO <sub>2</sub> -NPs on Gallus gallus domesticus Chorioallantoic Membrane (CAM)	Domain 4
1460	Paola Rapisarda, Antonio Cristaldi, Claudia Favara, Maria Fiore, Maria Castrogiovanni, Gea Oliveri Conti, Margherita Ferrante and Eloise Pulvirenti	Ecotoxicity analysis on the urban WWTPs water sam-ples for the monitoring of wastewater quality released in sea water	Domain 2
2520	Olajumoke Joseph and Olatunde Dahunsi	Identification of circulating non - SARS – CoV2 coronaviruses: An important tool for prevention and control of future coronavirus disease outbreaks	Domain 1
2808	Martina Contino, Greta Ferruggia, Roberta Pecoraro, Elena Maria Scalisi, Gianfranco Cavallaro, Carmela Bonaccorso, Cosimo Gianluca Fortuna, Antonio Salvaggio, Fabiano Capparrucci, Teresa Bottari and Maria Violetta Brundo	Toxicological effects of Polystyrene nanoplastics on the early life stages of Danio rerio: an in vivo and in silico approach.	Domain 4
3922	Silvia Bonetta, Ileana Federigi, Marina Tesauro, Francesco Bagordo, Sara Bonetta, Michela Consonni, Gea Oliveri Conti, Osvalda De Giglio, Giusy Diella, Margherita Ferrante, Alfina Grasso, Manuela Macri, Maria Teresa Montagna, Marco Verani and Annalaura Carducci	Antimicrobial resistance in water used for human consumption: a literature review	Domain 1
5013	Gabriela Fernandez, Arash Jahangiri, Sahar Ghanipoor Machiani, Ming-Hsiang Tsou, Bitu Etaati and Christian Mejia	Pedestrian and Bicycle Safety Visualization in Chula Vista, California	Domain 2
5127	Imad Krikech, Eloise Pulvirenti, Gaël Le Pennec, Mohammed Ezziyyani, Gea Oliveri Conti, Margherita Ferrante and Tiziana Cappello	Occurrence and distribution of microplastics ( $\leq 10 \mu\text{m}$ ) in marine sponges from the southern Mediterranean coasts	Domain 4
5872	Claudia Favara, Gea Oliveri Conti, Eloise Pulvirenti, Antonio Cristaldi, Chiara Copat, Alfina	The ShazzAn project for the One Health approach	Domain 2

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	Grasso, Paola Rapisarda, Maria Castrogiovanni, Mimmo Scollo, Luciano Falqui and Margherita Ferrante	implementation through the biochemical decarbonization.	
7216	Hongrui Zhao, Ileana Federigi, Marco Verani and Annalaura Carducci	Emerging organic pollutants adsorbed to plastic debris in marine environment: a systematic review of analytical methods, occurrence, and characteristics	Domain 4
7897	Xiaonan Wang, Kai Wen and Zhanhui Wang	Preparation of a broad-specificity monoclonal antibody for Aristolochic acids and development of Indirect competitive enzyme-linked immunosorbent assay in flour and soil samples	Domain 4
9357	Marina Tesauro, Michela Consonni, Giovanni Lodi and Roberto Mattina	Antibiotic resistance in <i>Pseudomonas aeruginosa</i> and <i>Pseudomonas</i> spp. in dental unit water (POSTER)	Domain 1



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## STUDENT CONFERENCE AND AWARDS

h16.00 aula 1 comparto 10 - Via S. Sofia, 87, 95123 Catania CT

Time	Topic
16.00 CEST (UTC+2)	Introduction
16.15 CEST (UTC+2)	Presentation of the Students associations
16.45 CEST (UTC+2)	The youth council "Consulta dei Giovani" of Catania
17.00 CEST (UTC+2)	A call for strengthening climate change education for all health professionals
17.15 CEST (UTC+2)	One-Health World Cafe Session
18.30 CEST (UTC+2)	Awards Best Paper and Poster

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### Organizing Partners



Università  
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### Supporting Partners



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for Sustainability



Cities Biodiversity  
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