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Talks

Society & Health

Dialogue Cafe: An Innovative Research Method For Active Involvement Of Young People

Presenting Authors and Affiliations

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Abstract

The Dialogue Café is a participatory method that facilitates discussions and idea-sharing in informal settings. This presentation gives insight into the design and implementation of Youth Dialogue Cafés (YDCs), addressing young people’s perspectives into social work and global health research, while supporting their mental health and well-being. By adopting a strength-based approach, YDCs foster growth, self-advocacy, and positive social connections. This approach not only enhances the relevance and impact of research but also equips youth with transferable skills that can be applied in other areas of their lives.

Nearly 20% of young people aged 20 to 29 in Arctic Norway face exclusion and are neither employed nor enrolled in education often due to personal challenges, family vulnerabilities, health issues or low income. For some, exclusion becomes a daily reality, compounded by the emotional toll of isolation, which can lead to substance use as a form of self-medication.

The Arctic Youth Research Center (AYRC) prioritizes engaging young people in discussions about mental health, substance use, safety, and boundary-setting as part of preventive efforts in social and global health contexts. In collaboration with youth organizations, Save the Children, and a local Upper Secondary School, AYRC organized a YDC as an innovative platform to unite organizations, researchers, and youth. This initiative

explored strategies to improve well-being for young people facing challenges related to substance use, mental health, and social exclusion. YDCs represent an innovative method for fostering open conversations and co-creating solutions, emphasizing active involvement in addressing critical issues such as mental health and substance use. By involving local youth, the YDC demonstrated the value of participation and a sense of belonging as key strategies for preventing exclusion. This approach serves as a model for empowering young people and addressing the interconnected challenges of mental health, substance use, and social exclusion.

From Lab to Health Systems: How Neuroscience Research on Parkinson’s Can Inform Sustainable Healthcare

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Abstract

Mutations in the human PARK7 gene, encoding the protein DJ-1, cause familial Parkinsonism, yet the molecular function of DJ-1 has remained unclear despite decades of research. In our work, we identify and characterise a novel cytoprotective role of DJ-1 that directly links cellular metabolism to neurodegeneration. We show that DJ-1 acts as an efficient hydrolase for a highly reactive glycolytic intermediate, cyclic 3-phosphoglyceric anhydride (cPGA), thereby preventing aberrant acylation of proteins and the accumulation of 3-phosphoglyceroyl-lysine residues. Experiments in DJ-1-null cells confirm that loss of this activity increases biomolecular damage, providing a mechanistic explanation for how DJ-1 mutations sensitise dopaminergic neurons and may contribute to both Parkinson’s disease and cellular ageing. Using this case study, the talk will argue that such fundamental, “bench-level” insights are essential for building more sustainable healthcare systems. Today, pharmaceutical pipelines often generate large numbers of partially effective, off-target

drugs, consuming vast resources and contributing to medical waste and treatment burden. By contrast, a precise understanding of proteins like DJ-1 enables rational design of targeted therapies and biomarkers for earlier, more accurate diagnosis, reducing trial-and-error prescribing, polypharmacy, and associated costs. I will discuss how integrating mechanistic neuroscience with global health perspectives—ageing populations, constrained health budgets, and environmental footprints of care—can guide the development of interventions that are not only effective for patients with neurodegenerative diseases, but also more sustainable for health systems and the planet.

Upcycling & Sustainability

“Consuming Less But Better” When It Comes To Food Sufficiency

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Abstract

As the largest contributor to the transgression of five planetary boundaries, food systems must be transformed to preserve the Earth system while providing sufficient and healthy food for all. The transition to sufficiency must be socio-ecological, requiring changes to our production and consumption patterns, particularly in the Global North. To be accepted by consumers, food sufficiency needs to be seen not as deprivation, but as source of Food Well-Being (FWB), conceptualised as “a positive psychological, physical, emotional, and social relationship with food at both the individual and societal levels” (Block et al., 2011, p. 62). However, the “double dividend” of both biospheric/altruistic and egocentric benefits

is difficult to achieve due to structural and cultural constraints, and the conflict between satisfying immediate wants and the delayed ecological consequences. Rethinking food consumption in terms of sufficiency requires us to question our essential needs and to learn to moderate our food practices accordingly. This research talk aims to present the consumer approach to food sufficiency, drawing on Epicurean philosophy and examine how consumers can consider sufficiency in their quest for FWB. To address the second point, a qualitative study, conducted with 19 French and 10 Danish young adults, highlight their perceptions and experiences of food sufficiency. The findings are examined through the lens of Max-Neef’s Human-Scale Development (HSD) and the concept of “satisfier”.

Sustainable Pharmacy: Reducing The Environmental Footprint Of Pharmaceuticals Through Supramolecular Formulation Design

Presenting Author and Affiliation

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Abstract

Pharmaceutical pollution poses increasing risks to global health, making the transition toward more sustainable practices an essential component of modern pharmacy. The key pathways through which pharmaceuticals enter the environment include wastewater effluents, improper disposal of unused medicines and emissions generated during manufacturing. Implementable strategies for reducing this burden include rational prescribing to minimize unnecessary medication use, improved patient education on safe disposal methods, sustainability-oriented procurement practices, and the adoption of eco-design principles in drug development aimed at reducing persistence, toxicity, and bioaccumulation. Special emphasis is placed on the role of academic institutions in preparing future pharmacists for global health and sustainability challenges. By integrating environmental considerations into pharmacy curricula, universities can

strengthen awareness of pharmaceutical pollution, enhance students' competencies in evaluating environmental risks, and promote responsible decision-making throughout the pharmaceutical life cycle. Sustainable pharmacy practices, when grounded in scientific evidence and supported by education and policy, can significantly reduce the environmental footprint of pharmaceuticals and contribute to broader planetary health goals

Environment & Health

Environmental Exposures And Mental Health: A Population-Based Longitudinal Study From The German National Cohort (NAKO)

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Abstract

Background: Environmental exposures such as air pollution, population density, and climate-related stressors are increasingly recognized as important determinants of mental health. However, large-scale longitudinal evidence remains limited.

Methods: We analyzed data from over 70,000 adults aged 19-74 years enrolled in the German National Cohort (NAKO) baseline examination (2014-2019), with repeated survey assessments in 2020 and 2022 of depression (*Patient Health Questionnaire-9 [PHQ-9]*), anxiety (*Generalized Anxiety Disorder 7-item [GAD-7]*), and stress (*Patient Health Questionnaire-stress [PHQ-stress]*) scores. The annual mean of environmental exposures, including nitrogen dioxide (NO₂), particulate matter (PM), black carbon, air temperature, precipitation, relative humidity, greenness (Normalized Difference Vegetation Index (NDVI)), and indicators of the built and social environment, were assessed at participants' residences at baseline and standardized using their interquartile range (IQR). Longitudinal associations with mental health outcomes were evaluated separately for each exposure using covariate-adjusted linear mixed models. Subgroup analyses were conducted stratifying by urbanization level, obesity, lung disease, and cardiovascular disease (CVD) status.

Results: Higher mean air temperature (per IQR increment) was associated with higher mean PHQ-9 ($\beta = 0.07$, 95% CI: 0.03–0.12), GAD-7 ($\beta = 0.05$, 95% CI: 0.01–0.09), and PHQ-stress ($\beta = 0.05$, 95% CI: 0.01–0.09) scores. Exposure to NO₂ was associated with higher mean PHQ-9 scores ($\beta = 0.08$, 95% CI: 0.03–0.14). A higher population density within 100m was related to higher mean scores of PHQ-9, GAD-7, and PHQ-stress. In contrast, levels of greenness, precipitation, and relative humidity were inversely associated with PHQ-9. Most of the associations with symptoms of depression or anxiety were stronger in people with obesity and those living in cities.

Conclusions: The findings suggest that exposure to NO₂, air temperature, and population density are associated with increased risks of adverse mental health outcomes, whereas higher precipitation, relative humidity, and greenness may serve as protective factors.

From Waste To Value: Innovative Uses Of Brewing By-Products

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Abstract

Beer ranks among the most widely consumed beverages globally, and its production generates significant amounts of by-products, including spent grains, spent hops, leftover hop biomass, waste yeast, and process water. While some by-products, such as spent grains, are commonly repurposed, others, particularly spent hops and hop residual biomass, remain largely underutilized despite their high content of bioactive compounds with antioxidant, antimicrobial, anti-inflammatory, and other health-promoting properties.

This presentation will highlight the diverse potential applications of brewing residues across food, health, cosmetic, and other industries. It will showcase how these by-products can be transformed into valuable

resources, from functional ingredients and nutraceuticals to natural additives, fostering both innovation and sustainability. Beyond conventional valorisation pathways, the presentation will also address the growing field of specialty beers with added health value, including alcohol-free beers and beers enriched with natural bioactive compounds obtained through the upcycling of brewing by-products. Such products offer an opportunity to promote healthier consumer choices while reinforcing circular resource management. Participants will gain new perspectives on the possibilities of industrial residues, exploring creative ways to integrate circular economy principles into brewing and beyond. By opening these new horizons, the session aims to inspire sustainable thinking and interdisciplinary approaches in research, industry, and everyday practices.

Violence & Mental Health

Pathways Through Which Violence Against Mothers And Children Effect Mental Health Of Children In Adolescence: Analysis Of Longitudinal Cohort Data

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Abstract

Background: Globally, 1-2 adolescents in ten presents with mental disorders. Violence against women (VAW) and violence against children (VAC) are widely recognized to contribute to this.

Purposes: This study aimed to explore the pathways through which maternal victimization and VAC impact anxiety and depression of male and female adolescents.

Methods: The data came from 791 mother–child dyads from the Maternal and Infant Nutrition Interventions in Matlab (MINIMat) cohort study (2001-2020) from Bangladesh. Linear regression analysis was conducted to examine the impact of VAW and VAC on anxiety and depression of adolescent girls and boys. The pathways through which VAW and VAC impact these outcomes were identified using generalized structural equation models.

Results: VAC had a direct impact on both child anxiety (Sons: coefficient 3.03; p-value < 0.05; Daughters: coefficient 5.44; p-value < 0.05) and depression (Sons: coefficient 5.15; p-value < 0.05; Daughters: coefficient 4.16; p-value < 0.05), while maternal victimization did not directly impact these outcomes. Maternal victimization mediated through maternal stress increased son's anxiety (total effect- coefficient: 0.51, p-value < 0.05) and elevated daughter's anxiety through maternal stress, which increased violence against daughters (total effect: coefficient: 0.91, p-value < 0.05).

There was no significant effect of maternal victimization on son's depression, while it had an indirect impact on daughters' depression through two distinct pathways: one mediated by maternal distress leading to increased and the other through maternal distress alone (total effect-coefficient: 1.29, p-value < 0.05).

Conclusions: While violence impacted mental health of both sons and daughters, the daughters remained more vulnerable. Early identification of VAW and VAC is crucial to safeguard adolescent's mental health. Promoting social norm change to address gender hierarchy in the society is critical for addressing greater vulnerability of the adolescent daughters.

Mental Health, Social And Academic Outcomes Of Technology-Facilitated Gender-Based Violence Among Female Students In Higher Education: A Qualitative Study In Mwanza, Tanzania

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Abstract

Technology-facilitated gender-based violence (TFGBV) is an increasingly recognized health and social problem in higher education populations. Despite these findings, research on its mental health, social, and academic impacts on female students in sub-Saharan Africa remains limited.

To explore the mental health, social, and academic outcomes of TFGBV among female students in higher education in Mwanza, Tanzania.

We employed a qualitative design to conduct in-depth interviews with 31 purposively sampled higher education female students, aged 20 to 24 years, from four universities in Mwanza City, Tanzania. A trained female interviewer conducted the interviews in Swahili, using a semi-structured guide. Interviews lasted between 40 minutes and 1 hour and 40 minutes. Data were analysed using an inductive thematic approach.

Participants linked various encounters of TFGBV to adverse mental health outcomes, including feelings of stress, frustration, fear, worries, sadness, anger and feelings of depression and exhaustion. In severe cases, known to participants, mainly those involving revenge pornography and sextortion from ex-partners, a few victims attempted suicide. TFGBV was also associated with social consequences, such as escalating in-person

violence, damage to reputation and public image, social isolation, feelings of shame and embarrassment and decreased self-esteem among victims. Additionally, participants highlighted the negative academic impacts of TFGBV. These included lecturer perpetrators downgrading the victim's grades, reduced focus in classes and withdrawal from college. In a few instances, victims of revenge porn faced expulsion from their colleges as a disciplinary measure.

Recommendation and conclusion:

Higher education-based interventions on gender-based violence should address the outcomes of TFGBV, ensure lecturer accountability, and provide institutional support for students.

Education & Guidelines

Serious Games, Serious Health: Educational Pathways To Global Health Literacy

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Abstract

The talk explores how playful learning methods—such as game-based learning, serious games, and simulations—can make complex global health challenges understandable and engaging from an Education for Sustainable Development (ESD) perspective. By connecting knowledge, action competence, and reflection, these approaches create learning spaces where issues like health equity, pandemic preparedness, and planetary health can be explored in participatory and action-oriented ways. Drawing on concepts of transformative and experiential learning, the presentation discusses how playful formats foster empathy, systems thinking, and perspective-taking, and how cooperative game elements

make global interconnections tangible. Ultimately, it examines how such approaches can strengthen global health literacy and serve as a bridge between knowledge, values, and action in sustainability education

Improving Tuberculosis Care For Migrant Children And Adolescents: The Pediatric Migrant And Public Health Center Munich (PMPH Munich) As A Regional Implementation Of WHO Guidelines

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Abstract

In 2023, global asylum seeker numbers reached record levels, with 38% under the age of 18. Europe experienced the largest rise in international migration in decades, while childhood tuberculosis (TB) remains a major public health challenge, especially among migrant children from high-incidence countries. Following the COVID-19 pandemic, TB incidence has surged globally. Although European countries have implemented screening programs, numerous barriers persist for migrant children and

families: limited health insurance coverage, language and cultural barriers, bureaucratic hurdles, and insufficient age-adapted TB care.

Pediatric TB management differs significantly from adult care and requires early diagnosis, child-adapted tools, and specialized expertise. To address persistent gaps, the Pediatric Migrant and Public Health Center Munich (PMPH Munich) was launched in March 2023. This model integrates the Public Health Department for TB Control and the Hauner Children's Hospital, ensuring access to pediatric TB expertise and tailored support services. WHO recommendations on ending TB in children and improving refugee and migrant health in Europe served as the foundation for developing this integrated model.

PMPH Munich represents an innovative, locally adapted, and scalable model that demonstrates how international guidelines can be operationalized to improve TB care for vulnerable pediatric populations in high-income countries. It aligns with WHO's calls to scale up child-focused TB services and to create inclusive, responsive healthcare systems for migrant populations.

Technology in Health

Technology-Driven Screening For Frailty: Automated SPPB Testing To Support Healthy Aging

Presenting Author and Affiliation

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Abstract

This session explores how innovative technologies can promote healthy aging by enabling early detection of frailty in older adults, both at home and in healthcare settings. Frailty is a critical predictor of disability and dependence, making timely identification essential to prevent functional decline and maintain independence. Among other technologies, the presentation will introduce the Short Physical Performance Battery

(SPPB), a validated and widely recommended tool for screening individuals over 70 years of age, and explain its three core components: gait speed, standing balance, and sit-to-stand tests. The session will also showcase a novel multi-sensory system with intelligent software that automates SPPB testing, reducing time, improving consistency, and allowing non-specialized staff to conduct large-scale screenings. Participants will learn how this technology can be applied in primary care and home-monitoring environments to minimize variability across evaluators and centers, ultimately improving the quality of care and supporting independent living among older adults. Format: The session will feature a talk on how new technologies can support healthy aging through the early detection of frailty in older adults, along with, if possible, a practical demonstration of the Short Physical Performance Battery (SPPB) test in which attendees can participate. A 4-meter space is required for one of the tests, which can be arranged in a corridor if needed.

Contagion 2.0: AI Joins The Fight - Unless The Law Says Otherwise

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Abstract

As the world recovers from the COVID-19 pandemic, one fact is clear: the next pandemic is inevitable, and we need smarter tools to identify health threats. Artificial intelligence (AI) is already reshaping how we track and respond to disease outbreaks. AI-powered disease surveillance systems can combine various sources of information, such as clusters of unusual health counselling contacts and official population registers, to detect early signs of epidemics. They help predict where and when outbreaks occur and tailor responses to the needs of specific communities. As the experience of COVID-19 pandemic reminds, the responses to the identified

health threats can be of a very invasive nature and limit our privacy and freedom of movement.

Developing such tools to protect public health requires understanding the legal requirements for their use. Under the newly adopted EU AI Act, AI systems are classified into prohibited, high-risk, and non-high-risk categories, with multiple advanced obligations created for high-risk AI. It is important to ask the question if the AI systems for epidemiological surveillance should be treated as high-risk AI under the EU's AI Act, because of their profound influence on public health and human rights, and hence, are held to the highest standards of legal protection with multiple requirements imposed on them.

In our presentation, we introduce a research project, *Explainable and Just AI in Data-Driven Disease Surveillance*. We examine and problematise how current EU regulation addresses AI for infectious disease surveillance. We also highlight the risks, blind spots, and the urgent need for clearer rules. Keywords: Artificial intelligence, Disease surveillance systems, High-risk AI, Epidemiological surveillance, AI Act.

Workshops

Society & Health

Little Lives, Big Climate Challenges

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Abstract

Children bear a disproportionate burden of climate-sensitive health risk due to physiological and behavioral vulnerabilities. These vulnerabilities demand educational strategies that both are protective and empowering. Despite the strong commitments to sustainability in Denmark, Sweden and

Germany, there remains a slight gap in translating climate adaptation into child-focused health and education strategies. This 90-minute interactive workshop brings together participants from health, education and environmental sectors to co-create interventions translated into education systems. We intend to begin the session by framing the specific risks (increase in pollen, heatwaves and increased pluvial) and existing guidelines (WHO, UNICEF), and highlighting pioneering policies from Denmark and Sweden. Following this introduction, we will present essentials for communication with children during crises, here we want to highlight what is important to address to children in the age from 7 till 12 years. The core activity is hands-on design sprint where teams will need to map aspects of a climate challenged environment e.g climate risk, health vulnerabilities, educational barriers and existing strengths/ resilience factors. The groups will then develop targeted interdisciplinary interventions. The cases will be built around four different child profiles, representing diverse socioeconomic background (high income vs. low income families) and living environments (urban vs. rural settings). At the end of the workshop participants will engage in a gallery walk for peer feedback, focusing on innovation, equity, and feasibility. The workshop concludes by a reflection circle where participants share one key insight and one actionable step they can bring to their own institutions or fields

Build a Thriving Community: The Sustainable Health Crisis Challenge

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Abstract

The participants will work in 5 teams, with the objective of designing a sustainable community where a balance between health, environment, and economical factors must coexist. Using cardboard and dispensable materials, the teams will construct a small community while managing limited resources (tokens given with materials). Several consecutive crises

happen, presenting challenges to which teams must adapt. Each team's decision will trigger consequences that will impact the future decisions, making the interconnections between health, sustainability, and equity more tangible for the participants. Structure Phase 1: Initial Briefing and Setup (up to 5 min) Each team receives a cardboard (the city/community), materials for construction, cardboard tokens (resources) and markers. There is an objective sheet, with the directive to build a community focused on a sustainable hospital, a water supply system and a renewable energy source. The moderators give the initial instructions: "You have 90 minutes to design a community that is healthy and sustainable. However, be aware that you have limited resources (tokens) and crises happen. Your decisions will have an impact in your city's future." Phase 2: Initial design (up to 10 min) All the teams design simultaneously, putting the infrastructure (farms, hospital, homes, factories and energy sources) in the cardboard slots (downtown, different places of the river (which starts in the mountain)). The two moderators hover the teams asking about the choice of placements and making suggestions. Phase 3: Waves of crises and responses/adaptations (up to 45 min) Cascading crises test the community's resilience; each team redesign community based on the crisis proposed (e.g.: water contamination, disease cascade, flood/dry). For example, the water contamination will affect the health of teams which had the hospital downstream from the factories, while the flood will affect the downtown of the city and the structures each team placed there. Teams will be encouraged to trade resources between each other and manage their resources thinking about the future of their city (next round). Moderator 1 focus on promoting pro-health solutions, while moderator 2 focus on promoting proenvironmental solutions. Both will pose questions and pressure the teams, while also guiding for rational solutions for re-designs. The teams will be awarded tokens according to the quality of their responses. Both moderators will keep a visible score judging which team best responded to each crisis. Phase 4: Presentation and reflection (up to 30 min - 5 minutes per team presentation and 5 minutes for voting) Each team will present the final iteration of their city and reflect upon what they could have done better. The teams will vote for the cities that best fit the

different categories: most creative city, most sustainable city, best response to crisis (they can't vote for themselves). Finally, both moderators will talk about the trade-offs made during the workshop and briefly discuss the one health approach to the problems.

WELCOME – Supporting Families Of Newborns With Increased Care Needs After Hospital Discharge Through Telemedicine

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5. Dr. von Hauner Children's Hospital, LMU Hospital, Munich, Germany.

Abstract

The transition from hospital to home care for newborns with increased care needs can be a challenging time for parents. While these families receive reliable round-the-clock care in German hospitals, they are faced with the responsibility of 24/7 care once they leave the hospital. Instabilities in the infant's vital signs or the need for intensive medical care can add further stress to the situation. However, the outpatient aftercare system is often fragmented and faces a shortage of skilled professionals, which means that comprehensive care cannot be guaranteed. The WELCOME project aims to address these challenges by developing and evaluating a digital video-based transition care concept. Pediatric nurses will provide families with virtual consultations via video and will also

supply them with a tablet and necessary digital devices. If necessary, neonatologists and interpreters can also be consulted. The Project consortium is led by the Clinical Nursing Research and Quality Management Unit of the University Hospital LMU Munich, in collaboration with the Institute for Clinical Nursing Science (CC01) of the Charité Berlin, the Chair of Public Health and Health Services Research and Medical Faculty of the LMU Munich, the Techniker Krankenkasse (health insurance), and the Cliniserve GmbH. Through an interactive workshop during the Global Health Days at the LMU Munich, the scientific staff of the LMU Munich wants to get into conversation with the general public regarding the chances and limitations, facilitators and barriers of telemedicine in follow-up care. Participants will get the possibility to try out video consultations and other digital services that are offered within the WELCOME project. Inputs will be collected on a pinboard with post-it notes. The results of the workshop can make a valuable contribution to improving the existing telemedicine concept for future use beyond the project period.

With Your Eyes – Exploring The Effects Of Different Perspectives And Attitudes Towards Health And Climate In Science Communication

Presenting Authors and Affiliation

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Abstract

Your engaged friend, your disinterested neighbours, even your sceptical uncle – how will they perceive your super-important piece of information on climate change or health? More abstractly, which strategies promise to enter in effective dialogues on climate or health related topics? In light of climate change increasingly affecting health and well-being, our workshop addresses the question how evidence-based climate communication that considers the dialogue partners' perspectives can foster social resilience and sustainable actions. Our interactive workshop provides the

opportunity to experience climate communication examples through someone else's eyes. Participants will take on different pre-scribed personas (roles) with specific perspectives on health and climate change. In their role, they will participate in a gallery walk displaying a broad range of climate and health-related communication materials. Afterwards, the impressions and conclusions will be discussed in a group puzzle format. The activity will initiate reflections on how various audiences perceive scientific information, different narratives, messages, and media. Besides, we will discuss which communication strategies promise to be successful in supporting sustainable transformation processes. The workshop aims at raising awareness for the integral part that impactful climate communication plays in Global Health and sustainable development amidst the ongoing global health and climate crisis. In addition, we encourage scientists who (would like to) engage in communication to explore (fundamentally) different perspectives and attitudes towards their topics among their dialogue partners. The workshop thus contributes to the transdisciplinary discussion on effective approaches to climate and health communication.

Accessing Healthcare Around The World: An Interactive Comparison Of Patient Experiences

Presenting Author and Affiliation

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Abstract

This interactive workshop invites students from different countries to explore and compare how individuals access healthcare within their respective health systems. Students often have limited opportunities to reflect on how their experiences in accessing healthcare relate to broader international variations. Through structured group discussions, participants will share and analyse key dimensions of healthcare access in their home countries, including ease of obtaining medical appointments,

waiting times, administrative barriers, insurance requirements, and out-of-pocket costs. The workshop will begin with a brief introduction to the concept of healthcare access in global health, followed by small-group exchanges where students map their personal experiences along common indicators. Through interactive dialogues with their peers, participants will better understand how access to their health system differs from country to country. The insights will empower them to create innovative solutions to addressing problems in healthcare access, because they will be able to learn about the advantages and disadvantages of each healthcare system around the globe. The workshop prioritizes student participation, comparative learning, and the co-creation of insights relevant to global health. Brief example of how students sharing can be beneficial: In France, we can use doctolib to book appointments with specialists, even without a referral from a generalist doctor. In Germany, users cannot book (on doctolib) direct appointments with specialists without a referral. In the UK, there is not a comparable platform, and there is a long wait before a patient will be able to see a specialist

Mission (Global) Health: Connected Funding Opportunities In The EU And Germany

Presenting Authors and Affiliation

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Abstract

This workshop is aimed at researchers working on issues of (global) health and sustainability who wish to contribute their expertise to international or national top-down collaborative projects. Its goal is to provide an overview of current funding opportunities within the European Framework Programme Horizon Europe as well as relevant calls from the German Federal Ministry of Research, Technology and Space (BMFTR). Particular

attention will be given to the intersections of health and sustainability, as well as to the strategic opportunities for researchers to position their projects between international and national funding landscapes. The focus will be on global health topics, with a special emphasis on sustainability aspects in line with LMU's sustainability strategy. A key objective is to support researchers in aligning their projects with suitable funding structures. The workshop will present relevant funding formats, highlight synergies between European and national funding, and provide a platform for networking – both among researchers themselves and with LMU's research support services. For this program point, experts from the DLR Project Management Agency in the field of health research will be invited as speakers. Workshop Objectives:

- Provide an overview of current and upcoming funding lines in Horizon Europe and national funding schemes related to health and sustainability
- Promote exchange among exchange and networking among researchers
- Inform about LMU's research support services and opportunities for assistance

Programme elements:

- Presentation of current national and European funding calls related to Global Health and sustainability topics
- Experience reports from successful applicants to national and international funding programs
- Q&A session for both format

Intercultural Competence In Global Health: Designing Sustainable, People-And-Planet-Centered Communication

Presenting Author and Affiliation

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Abstract

Global health projects rely on English as a lingua franca more than ever before to connect professionals, patients, and communities around the globe. However, misunderstandings arising from cultural and linguistic differences can undermine trust, equity, and the sustainability of health interventions. Sometimes misunderstandings have detrimental impacts from understanding and describing symptoms to diagnosis and prescriptions. This interactive workshop explores how intercultural competence (IC) can support more sustainable, people- and planet-centered health communication. Building on current research in English applied linguistics and IC, the workshop introduces participants to key concepts such as intercultural attitudes (openness, curiosity), skills of interpreting and relating, and critical cultural awareness in health-related encounters. Through case studies of global health campaigns and small-group role-plays simulating multilingual, cross-cultural health scenarios, participants will analyse how communication choices affect comprehension, adherence, and perceptions of fairness and respect. We will together co-design practical communication guidelines for global health contexts, focusing on: (1) adapting language and metaphors for diverse audiences, (2) negotiating meanings and values in culturally sensitive ways, and (3) integrating sustainability themes (e.g. environmental impact, long-term community wellbeing) into health messages. The workshop aims to familiarise students and professionals from health, social sciences, and related fields with concrete tools to communicate more ethically and effectively across cultures. In turn, this type of communication contributes to more equitable and sustainable global health solutions.

Environment & Health

Get-Together In The LMU Main Building – Short Historical Introduction To The LMU Main Building, Followed By A Discussion On Exhibiting Science In The Pioneering New Format Ludwig, Max+U

Presenting Authors and Affiliation

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Abstract

The session begins with a brief overview of the history of the University, including references to the White Rose exhibition, which addresses the antifascist resistance movement that emerged within the University during the National Socialist period. This movement represents an important example of political and moral engagement from within the academic community.

Participants are first given time to walk through the exhibition in the Thomas-Mann-Halle individually. This is followed by a short introduction to the conceptual framework of the exhibition.

Subsequently, a brief group activity takes place in which participants exchange ideas about their own research projects and discuss how these could be presented in an exhibition context. This discussion is linked to the different levels of the exhibition, providing a structure for reflecting on how academic research can be translated into spatial and visual forms of presentation.

Surveilling The Environment, Safeguarding Health

Presenting Authors and Affiliation

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Abstract

Environmental surveillance is emerging as a critical tool for detecting and responding to public health threats in real time, being a safeguard to resilient health systems and social justice. As climate change accelerates disease dynamics and amplifies inequities, timely detection of pathogens and environmental signals is essential for safeguarding communities, especially those in low-resource and historically underserved settings. This workshop examines how environmental data streams – such as wastewater monitoring, air-quality indicators, and ecosystem health metrics – can be integrated to identify emerging threats including endemic outbreaks, antimicrobial resistance (AMR), and other climate-sensitive diseases before they escalate. Participants will engage in applied case studies and hands-on simulations to design scalable and context-responsive strategies for a healthier and more sustainable future. Learning Objectives: 1. Assess how environmental surveillance strengthens preparedness for climate-sensitive health risks and advances social justice in global health programming. 2. Apply interdisciplinary decision-making frameworks to interpret environmental signals to develop timely and equitable responses. 3. Integrate policy and community-centered perspectives to design interventions that enhance resilience in low-resource contexts. Methods / Format: The workshop employs a multimodal, analytical pedagogy.

Part 1 - Framing and Presentation: Short presentations from international development and public health perspectives. Interactive polls to surface participants' assumptions about environmental data sources.

Part 2 - Design Laboratory: Structured small-group work in a design lab format. Groups analyze real-world case studies, conduct rapid policy diagnostics, and develop integrated strategies for environmental surveillance in low-resource settings. Facilitators provide methodological prompts. Light icebreakers to support trust and collaboration.

Part 3 - Interactive Simulation: A simulation exercise that models decision-making in response to emerging environmental signals

One Health And Climate Change – A Role-Playing Game

Presenting Authors and Affiliation

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Abstract

How does climate change impact the health of humans, animals, and the environment?

As the “biggest health threat facing humanity,” climate change is already changing people’s lives, as well as animal habitats and environments. In different countries and regions of the planet, surging health problems pose challenges to health care providers, policy makers, and governance. Such health challenges are inextricably linked to the decay of natural habitats and frequent occurrence of catastrophic weather events, the emergence of new pathogens and infectious diseases, and hardships caused by environmental problems, such as heat exposure, respiratory problems, malnutrition and mental health issues. These problems are already affecting most global populations and will continue to do so in the future, calling for holistic forms of mitigation, control, and prevention on local, regional and global levels.

One Health is an approach that looks at humans, animals, and the environment as connected and interdependent entities. Within this holistic and interdisciplinary approach, climate change is of critical importance because it unfolds severe and ever-increasing impacts on the health of humans and more than-humans alike. This workshop will bring a climate change problem through the One Health perspective, exemplifying its potential for the prevention and mitigation of impacts and the continuation of solutions. In a role-playing game, participants will personify and explore the standpoints of different actors and generate ideas to help a city suffering from climate change-related health issues.

Beyond The Selfie: Is Your Global Health Placement Actually Sustainable?

Presenting Author and Affiliation

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Abstract

International student mobility is a cornerstone of global health education, yet its long-term sustainability is often overlooked. While clinical electives offer profound learning opportunities, they can inadvertently place a "supervision tax" on host health systems, draining local human resources. This 90-minute interactive workshop moves beyond traditional lectures to immerse participants in the systemic complexities of international health placements through a High-Fidelity Mobility Simulation.

Participants are assigned high-pressure roles—including local health directors, visiting students, and sustainability auditors—to navigate three "Sustainability Minefields":

1. The Human Resource Burden: Balancing student teaching against urgent local patient care.
2. The Carbon vs. Clinic Trade-off: Evaluating travel costs versus direct investment in local infrastructure.
3. Knowledge Reciprocity: Ensuring data benefits the host community long after the student departs.

The workshop culminates in a facilitated debriefing where participants develop a "Sustainability Toolkit"—actionable strategies to ensure future engagements are ecologically conscious, ethically sound, and systemically reciprocal. This session challenges the next generation to move beyond "medical tourism" and commit to mobility that serves as a tool for genuine, sustainable global development

The Next Pandemic: A Multisector Simulation For A Sustainable And Coordinated Response

Presenting Authors and Affiliation

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1. University of Szeged

Abstract

This workshop introduces an interactive, decision-based simulation that explores how different sectors of society might react to the next global pandemic. The idea is to give participants the chance to experience the complexity of real health emergencies by stepping into the roles of key actors: Researchers, Politicians, Media professionals, and Industry/Lobby representatives. Each group operates with distinct goals, pressures, and responsibilities, similar to what the world observed during COVID-19. The simulation begins with a fictional outbreak scenario and gradually intensifies through a series of crisis updates such as unclear scientific data, supply shortages, misinformation, and rising pressure on health systems. After each development, the groups must discuss their internal priorities, negotiate with other sectors, and make decisions under limited time. This immersive format highlights how political interests, scientific uncertainty, communication challenges, and economic considerations shape public health responses. The final part of the workshop brings all stakeholders together to create a coordinated pandemic strategy that balances public health, sustainability, equity, and social stability. By experiencing these interactions firsthand, participants gain insight into global health governance, crisis communication, trust-building, and the importance of sustainable long-term planning.

Education & Guidelines

Sustainable Development For Health Professions Education - A Trilateral Alliance For Medical Education

Presenting Author and Affiliations

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Abstract

We have set ourselves three goals:

a trilateral, fully reciprocal medical undergraduate student exchange programme, combined with a trilateral virtual undergraduate student exchange;

innovative methods in postgraduate surgical education (EPA's);

research and faculty development in the field of health professions education.

These initiatives aim to bolster teaching, research capabilities, and institutional governance across partner universities, fostering sustainable educational and research frameworks to meet global health challenges effectively.

Health professions education must become competency-oriented and evidence-based.

The focus on competencies, rather than just knowledge, was a key postulation of the WHO as early as 1978. Although evidence-based

medicine is now widely accepted, evidence-based education still seems to be unexplored.

In an interactive session, we will involve undergraduate students from the 3 partner institutions and demonstrate innovative ways of learning about cultural differences and sustainable development goals.

Participatory Methods In Global Health

Presenting Authors and Affiliations

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Abstract

Participatory methods have gained increasing importance in today's qualitative research landscape, as they allow not only to gather the perspectives of a vast array of participants, but also to have them as co-creators of knowledge and at the forefront of advocating for their needs and priorities. Developed to conduct research among populations with low literacy rates, they allow participants to shape the research questions and goals, as well as to increase inclusivity, obtain local insights and see reality through the participants' eyes. Examples of participatory research methods include Daily Routine Maps, Mobility Maps, Photovoice, and seasonal calendars/timelines. In this workshop, we will present tangible examples of these techniques being employed in research settings, for a research project with pregnant women in Bangladesh and for a research project with older men in Tanzania. In the second half of the workshop, participants will be able to partake in activities showcasing the principles of participatory methods.

Part 1 (60 minutes)

- Intro to Participatory Methods and why they matter – Joanna Krajewska (15 mins)

- Daily Routine Maps and Mobility Maps – Antu Jannatul Ferdous (20 mins) Photovoice in Bangladesh and Tanzania – Rebecca Brambilla (20 mins)
- Q&A (5-10 mins)

Part 2 (30 minutes)

- In small groups (3-5 people) depict your daily routines around the LMU (main) building(s)
- A “ranking and scoring” exercise similar to daily routine map

Best Practices And Learning From The Global Health Day 2026 For EUGLOH

Presenting Author and Affiliations

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Abstract

This exploratory closing workshop aims to reflect on and critically assess selected workshop formats of the Global Health Day with a specific focus on their relevance for the European University Alliance for Global Health (EUGLOH), particularly within the Focus Area *Sustainability and Biodiversity*. Bringing together workshop leaders and participants, the session provides a structured space to identify best practices, discuss synergies between different formats, and explore potential for further development and transfer within an international university alliance context.

The workshop seeks to identify pathways for co-creating future flagship initiative(s) within EUGLOH’s Focus Area on Sustainability and Biodiversity by drawing on experiences and insights from the Global Health Day. It will address key questions such as:

- Which elements of Global Health Day workshops are particularly suitable for a collaborative, challenge-based alliance like EUGLOH?

- Which pedagogical, thematic, or methodological approaches proved especially effective?
- What opportunities exist for scaling, adapting, or further innovating these approaches across institutions and disciplines?

The session is designed as an interactive and participatory exchange, combining moderated discussions with reflective inputs from participants. While the workshop will include a short informative introduction into EUGLOH, participants should have prior knowledge about / experience with EUGLOH.

Technology in Health

Engineering Decisions As Global Health Interventions: Prevention, Quality, And Sustainable Systems

Presenting Author and Affiliation

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Abstract

Engineering and management decisions play a decisive role in shaping global health outcomes through product safety, working conditions, environmental impact, and system resilience. Approaches such as process control, quality management, and preventive design - commonly used in industrial contexts - can function as powerful but underrecognized public health interventions. This 90-minute interactive workshop explores how principles from Industrial Engineering and Management can bridge global health and sustainability, emphasizing prevention rather than correction, in line with quality management philosophies such as ISO 9001. Participants will engage in a fictionalized production and supply-chain scenario inspired by real industrial systems, focusing on how process variability, material choices, maintenance strategies, and speed-oriented production models influence human health, environmental sustainability, and social equity. The session consists of three hands-on, low-tech

activities designed for participants from various disciplines: a rapid risk-mapping exercise to identify health, environmental, and occupational hazards within a production process; a process and quality control simulation that illustrates how small defects or control failures can escalate into health and sustainability risks; and a collaborative redesign challenge in which groups propose preventive engineering, organizational, or policy-based improvements that improve safety, sustainability, and system robustness. The workshop encourages interdisciplinary collaboration among engineers, health professionals, environmental scientists, social scientists, and policy-oriented participants, without requiring prior technical knowledge. Through guided discussion and collective reflection, participants will co-create a set of Health-Centered Engineering Principles applicable to education, industry, research, and governance. The overarching goal is to demonstrate that engineering decisions are inherently health decisions and that preventive, quality-oriented system design is essential to achieve sustainable and equitable global health outcomes.

Posters

Society & Health

Politics Of Electronic-Waste Policy In Ghana: Governing Informality And Its Health Impacts

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5. CSO - Centre de sociologie des organisations (Sciences Po, CNRS)

Abstract

Ghana's informal electronic waste sector sits at the intersection of global waste and recycling value chains and is central to circular economy implementation. The sector faces severe environmental and health risks, and policy approaches to regulate these risks differ. This study investigates sectors and actors, power relations, and collective dynamics in management processes in Ghana's e-waste sector and focuses on stakeholders' perceptions.

Fourteen semi-structured interviews with representatives from non-governmental, governmental, and private actors, as well as informal sector associations and collectors, were conducted in Ghana in February and March 2025. Observations from field visits and photography enriched the results.

The study shows how two policy approaches in Ghana's e-waste sector profoundly differ: The coercive approach fails, whilst the incentive-based system struggles to be maintained. The framing of informality and sustainability impacts the narrative these policies pursue. This case study adds to the literature, highlighting that the informal sector's resistance or compliance impacts the success or failure of policy and that the sectors' recognition and strengthened local governance are key to moving environmental and health protection forward. Whilst at the same time, health policy and research can contribute to preventing urgent health hazards in communities. Scaling a systemic approach that is sensitive to

local knowledge and power dynamics with broader health protections beyond air pollution offers a viable path to transform Ghana's e-waste sector and rebalance unequal global circular-economy relations.

Demographic Transitions And Global Health Perspectives: Insights From Georgia's Trends And Projections

Presenting Author and Affiliation

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Abstract

Fertility and birth rates are critical indicators of demographic dynamics, showing the economic and social development of societies. Georgia, like many countries in the South Caucasus and Eastern Europe, has experienced a significant decline in fertility rates over the past decade. This study aimed to analyze temporal trends in fertility and birth rates,

examine maternal characteristics, and forecast future demographic changes in Georgia.

Data on live births (543,662) and total and female population were obtained from the National Statistics Office of Georgia for the period 2014–2024. From the Georgian Birth Registry, we extracted data on maternal characteristics for 366,684 births during 2017–2024. Temporal trends in the total fertility rate (TFR), crude birth rate (CBR), and maternal characteristics were analyzed using Prais-Winsten regression models. Future projections of the TFR and CBR for 2025–2034 were generated using Autoregressive Integrated Moving Average (ARIMA) models.

Between 2014 and 2024, Georgia's TFR declined from 2.30 to 1.68 children per woman per year, and the CBR dropped from 14.5 to 10.7 births per 1,000 population per year. Fertility rates decreased most significantly among women aged <20 and 20–24-years-old, while rates among women ≥35-years-old increased. The proportion of Georgian mothers declined from 2021 to 2024, while the share of Azerbaijani and other nationality mothers increased. Advanced maternal age increased in both nulliparous and multiparous women. ARIMA models forecasted a continued decline in the TFR to 1.09 children per woman and CBR to 7.07 births per 1,000 population by 2034.

Georgia is undergoing a demographic transition marked by declining fertility rates and delayed childbearing. Future projections indicate a continuous decline by 2034 that may bring further demographic challenges for the country.

Violence & Mental Health

Society & Health Ethical Bridges: Mental Health And Justice In Vulnerable Contexts

Presenting Author and Affiliation

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1. University of Porto

Abstract

This study explores the ethical, clinical and legal intersections between mental health and justice in vulnerable contexts, with a particular focus on low and middle-income countries. Building on the concept of ethical bridges, the project seeks to identify mechanisms that connect bioethical principles, forensic mental-health practices and human rights protections to reduce inequities and prevent unjustified coercion. Through a comparative qualitative methodology, comprising documentary analysis, semi-structured interviews with forensic and legal professionals and multiple case studies from Portugal, Brazil and Mozambique, the research examines how different legal and clinical systems address autonomy, dignity, capacity, compulsory treatment and vulnerability. Using thematic analysis and grounded theory, the project aims to uncover ethical gaps, contextual challenges and convergences across jurisdictions. The expected outcome is the development of a theoretical model of ethical bridges that offers practical recommendations for strengthening global mental health, promoting justice and enhancing the protection of individuals with mental disorders in diverse socio-legal environments

Environment & Health

Effect Of Pesticides On Stingless Bee (Meliponini) Fitness In Bolivian Agroecosystems: Implications For Sustainability And Global Health

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Abstract

Stingless bees (Meliponini) are essential pollinators in tropical ecosystems and a cornerstone for food security and biodiversity maintenance. Moreover, many rural populations in Bolivia consume their honey and pollen for nutritional and medicinal purposes. However, increasing and often unregulated pesticide use poses a growing threat to their survival, with consequences that extend far beyond environmental health. This project investigates how locally used pesticides affect stingless bees in their behavior and microbiome composition, as well as the presence of pesticide residues in honey and pollen produced by these bees. By combining field assessments with controlled experiments, the study evaluates pesticide impacts on adult mortality, navigation, movement and orientation. Additionally, residue analyses using GC-MS determine whether contaminated floral resources lead to pesticide accumulation in honey and pollen, creating potential risks for human health and bee larvae. Beyond the ecological and toxicological dimensions, this project integrates a strong socio-economic component: co-developing guidelines for sustainable pesticide use, strengthening local meliponiculture practices, empowering women beekeepers, and generating evidence-based inputs for future regulations on stingless bee management and honey commercialization in Bolivia. Although the project is still in progress, it intends to highlight the interconnectedness of ecosystem integrity, agricultural sustainability, and human well-being, thus contributing to resilient food systems, reduced environmental contamination, and healthier rural communities.

Prevalence, Resistance Genes And Risk Factors For ESKAPE Pathogens In Hospitalised Patients In South East Nigeria: An Interim Report Of Study Relevance And Sustainability Challenges

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Abstract

The Enterococcus species, Staphylococcus aureus, Klebsiella pneumoniae, Acinetobacter baumannii, Pseudomonas aeruginosa, and Enterobacter species (ESKAPE) and their multidrug-resistant forms are leading causes of healthcare-acquired infections and mortality globally. They also pose an economic and financial burden. The public health threat posed by antimicrobial resistance (AMR) pathogens highlights the need to preserve the antibiotic armamentarium especially in resource-limited regions where the burden of infectious diseases lies. This study investigates the prevalence, resistance gene profiles, and risk factors of MDR ESKAPE pathogens among hospitalised patients in South-East Nigeria to inform locally tailored antibiotic guidelines and improve antimicrobial stewardship.

This ongoing prospective observational cohort study is being conducted in two Nigerian tertiary hospitals: University of Nigeria Teaching Hospital and Alex Ekwueme Federal University Teaching Hospital. Ethical approval was granted by both institutions' review boards. Adults 18 years and above hospitalised with suspected bacterial infection as determined by the managing clinician, are approached consecutively to participate after obtaining informed consent. Information such as sociodemographic, clinical data and hospitalisation outcome are collected via an electronic-based questionnaire deployed on KoboCollect. Participants are followed up at day 30. Samples from suspected site(s) are collected with bacterial isolates identified by conventional methods. Sub-cultured isolates are

stored at -80 °C for further confirmation and molecular testing. Analysis will be conducted on R.

Twenty-nine participants have been recruited and 17 follow-up completed. Five bacterial isolates were identified, of which three were ESKAPE. Recruitment remains ongoing although this is being hampered by fragile health systems and frequent disruptions in health services delivery due to health worker strike actions.

Despite minimal recruitment due to health system challenges, this study remains vital to identifying and characterising virulent pathogens in the healthcare setting. Its potential to influence institutional and national antibiogram should be leveraged in addressing threats posed by AMR

Integrative Analysis Of Pediatric Sepsis Care In The Democratic Republic Of Congo: Epidemiology, Clinical Risk, And Healthcare System Evaluation

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5. Division of Infectious Diseases and Tropical Medicine, Medical Center of the University of Munich (LMU), Munich, Germany

Abstract

Paediatric sepsis is a leading cause of morbidity and mortality in low- and middle-income countries. In South Kivu, Democratic Republic of Congo (DRC), delayed healthcare access, self-medication, limited diagnostics, and scarce resources contribute to poor outcomes, underscoring the need for locally generated evidence to improve paediatric sepsis care. Objective: This study aims to improve pediatric sepsis management and outcomes by analyzing quality of care assessment, epidemiology, clinical features, microbiological profile, and risk factors in a resource-limited setting. Methodology: A mixed-methods approach will be used. The quantitative component is a prospective cohort study including hospitalized children aged 6 months and older with suspected sepsis, assessed using the Phoenix Sepsis Score. Demographic, clinical, laboratory, treatment, and outcome data will be collected during hospitalization. The qualitative component will involve interviews with healthcare providers and focus group discussions with caregivers to explore health system and care-seeking factors. Thematic analysis will be applied, and quantitative data will be analyzed using descriptive statistics and multivariate logistic regression models in R software. Results: The study is expected to generate critical insights into paediatric sepsis in the DRC, addressing gaps in epidemiology, risk factors, and pathogen profiles, and informing context-specific interventions to improve outcomes for children in South Kivu.

Community-Acquired Sepsis In Adult Patients In Butembo (DRC) (COMSAP-B): Epidemiology, Management, And Outcomes

Presenting Author and Affiliation

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Abstract

Community-acquired sepsis remains a major cause of morbidity and mortality in low- and middle-income countries (LMICs). In 2017, an estimated 48.9 million sepsis cases and 11 million deaths were reported globally, with approximately 85% occurring in LMICs. In Butembo, North Kivu Province (DRC), delayed care-seeking, widespread self-medication, weak referral systems, and suboptimal hospital management are likely to contribute to late presentation and poor outcomes. A detailed understanding of patient care pathways and in-hospital practices is essential to inform context-appropriate interventions.

To describe the epidemiology of community-acquired adult sepsis in Butembo, evaluate patient health-care pathways prior to hospital admission, and assess in-hospital clinical management and outcomes to identify opportunities for improving sepsis care and reducing mortality.

This prospective observational study will be conducted over 12 months (May 2025–April 2026) in two hospitals in Butembo: Matanda Hospital

(Katwa Health Zone) and the Cliniques Universitaires du Graben (Butembo Health Zone). Three hundred adult patients with suspected community-acquired sepsis will be recruited into the study over nine months and followed for three months post-discharge. Quantitative data will be collected using structured questionnaires to document symptoms, timing of care-seeking, and pre-hospital treatment. Clinical data will be extracted from medical records to evaluate triage, diagnostics, antimicrobial management, and timelines of care. Descriptive and analytical analyses will be performed using SPSS version 30 and R. The study is expected to identify multiple health care pathways including self-medication, traditional remedies care, late referrals resulting in delayed hospital presentation, and gaps in early sepsis recognition and guideline adherence at hospital level. Findings will inform context-specific training, community engagement strategies, and health system interventions to improve sepsis care.

Education & Guidelines

Medical Geography For Sustainable Global Health

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Abstract

Medical geography offers essential tools for understanding the interactions among health, environment, and place. This perspective is increasingly significant as global populations encounter climate change, evolving disease patterns, and growing social inequalities. The present work highlights the role of medical geography in advancing sustainable and equitable health solutions through the application of spatial thinking to complex global health challenges. By integrating geographic information, environmental data, and social determinants of health, medical geography identifies vulnerable populations, monitors emerging

health threats, and assesses the impact of environmental change on disease distribution. Spatial analysis offers essential evidence for designing targeted and resource-efficient interventions aligned with planetary health principles. This poster provides real-world examples demonstrating how geospatial tools, including GIS mapping and spatial-statistical modeling, facilitate sustainable healthcare planning, inform climate adaptation, and strengthen community resilience. In addition to technical applications, the work emphasizes the significance of understanding local contexts, prioritizing health equity, and fostering cross-sector collaboration. Recognizing the spatial dimensions of health enables more inclusive decision-making and improves the translation of research into policy and practice. Focusing on the spatial context of health, medical geography connects environmental sustainability with public health, contributing to long-term, systems-oriented solutions. This perspective is essential for shaping global health policies that safeguard both human well-being and planetary health.

Munich Climate School

Presenting Author and Affiliation

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Abstract

The Munich Climate School (MCS), established in 2021, is the first truly interdisciplinary summer school of its kind. Since 2022, it has also included in-person participation. The MCS offers participants the opportunity to attend high-profile lectures delivered by leading scholars in their respective fields. In addition, it features an engaging social and cultural program in and around Munich – a city with a long-standing commitment to environmental and climate protection, inspired by its close connection to nature. The MCS is entirely taught in English. The Climate Law School Plus (CLS+) is an interdisciplinary teaching program at the Ludwig-Maximilians-Universität in Munich that deals with

legal, social, and scientific challenges of climate change. It is aimed at students of all disciplines who want to deepen their knowledge of the fundamentals of climate change and climate law and broaden their perspectives. The aim of the program is to impart sound specialist knowledge and combine it with interdisciplinary approaches in order to promote a comprehensive understanding of the complex issues of sustainable development, with a particular focus on climate change. The CLS+ combines existing LMU courses with practice-oriented formats, such as the established Munich Climate School. While students from non-legal disciplines receive an introduction to the legal foundations of climate protection, law students can supplement their education with sustainability-related content from other disciplines. The program aims to offer a selection of courses as broad as possible from various faculties, thereby promoting interdisciplinary thinking and action. The CLS+ pursues the goal of sensitizing future decision-makers to the challenges of climate change and enabling them to use their professional expertise responsibly in the interests of a sustainable society. The CLS+ is mostly taught in German.

The EUGLOH Focus Areas In Global Health

Presenting Author and Affiliation

EUGLOH 2.0

Abstract

The European University Alliance for Global Health (EUGLOH) has defined a set of Focus Areas that shape its thematic profile and reflect broad key themes in Global Health. One of them is defined as ‘*Sustainability and Biodiversity*’ unfolding large overlap and strong link to the Global Health Day’s main theme “Global Health for Sustainability”. Alongside this, EUGLOH’s Focus Areas also encompass *Health in Living Contexts: Urban and Rural Health, Resilience and Disaster Preparedness, and Digital Health, AI and Medical Technology*.

About three posters will inform about EUGLOH’s Focus Areas describing its overall purpose, their key features, and opportunities for academics,

staff and students to engage with the Focus Areas. The posters will summarize all four Focus Areas giving special attention on the Focus Areas on *Sustainability and Biodiversity* reflecting its close connection to the Global Health Day’s main theme.

Sustainable Diets And Global Health: A Multicriteria Framework For Healthier People And A Healthier Planet

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Abstract

Sustainable diets are essential to address the interconnected crises of climate change, biodiversity loss, malnutrition, and the growing prevalence of diet-related noncommunicable diseases. However, validated context-specific tools to assess the diverse dimensions of sustainability of real-world diets remain limited. Aim: This research aimed to develop and validate the Diet Sustainability Score (DSS), a multicriteria measure

encompassing nutritional, environmental, economic, and sociocultural dimensions, and to explore associations between DSS, sociodemographic, economic, lifestyle factors, and adiposity indicators. Methods: Using nationally representative data from Portuguese adults, the DSS was developed through expert consultation and alignment with international sustainability frameworks. Validation included content evaluation, sensitivity analyses, and construct testing, confirming 78% of predefined hypotheses and demonstrating reproducibility (ICC=0.407). Associations between DSS and participants' characteristics were examined using regression models adjusted for potential confounders. Results: Female gender ($\beta=-0.59$; 95%CI=-0.82,-0.37), older age ($\beta=3.12$; 95%CI=2.78,3.46), higher education ($\beta=1.09$; 95%CI=0.76,1.42), and higher income ($\beta=1.22$; 95%CI=0.96,1.47) were positively associated with the DSS. Non-smoking ($\beta=-0.40$; 95%CI=-0.69,-0.12), non-alcohol consumption ($\beta=-0.56$; 95%CI=-0.92,-0.20), greater organic food intake ($\beta = 4.95$; 95% CI 1.58, 8.31), and less frequent eating out ($\beta=-1.94$; 95%CI=-2.66,-1.22) were also associated with higher DSS. Higher DSS correlated with greater nutrient density ($\rho=0.333$), lower intake of ultra-processed foods ($\rho=-0.437$), reduced greenhouse gas emissions ($\rho=-0.577$), land use ($\rho=-0.581$), and diet-related costs ($\rho=-0.556$, all $p<0.001$). Higher DSS was associated with lower odds of overweight/obesity (OR=0.91; 95%CI=0.88,0.94) and unhealthy central adiposity (OR=0.91; 95%CI=0.87,0.95).

The DSS is the first validated context-specific measure to comprehensively capture diet sustainability in Portugal. These findings demonstrate that promoting sustainable diets can simultaneously reduce obesity risk, mitigate environmental impacts, and foster equitable and resilient food systems – key priorities for advancing Global Health for Sustainability and achieving the UN Sustainable Development Goals.

Improving Tuberculosis Care for Migrant Children and Adolescents: Implementing WHO Guidelines at local level: The Pediatric Migrant and Public Health Center (PMPH) Munich

Please see page 8: "Improving Tuberculosis Care For Migrant Children And Adolescents: The Pediatric Migrant And Public Health Center Munich (PMPH Munich) As A Regional Implementation Of WHO Guidelines"

Technology in Health

Sustainable Pharmacy: Reducing The Environmental Footprint Of Pharmaceuticals Through Supramolecular Formulation Design

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Abstract

Pharmaceutical pollution represents an increasing global health concern, driven not only by improper disposal and wastewater effluents but also by inefficient drug formulations requiring high doses of poorly water-soluble active pharmaceutical ingredients. Formulation-level interventions offer a scientifically grounded pathway to reduce pharmaceutical load at the source. This contribution focuses on supramolecular formulation strategies based on surfactants, bile salts, and cyclodextrins, based on experimental studies of drug-surfactant and host-guest systems. Fundamental aspects of drug-surfactant interactions below and above the critical micelle concentration (CMC), quantified through binding and partitioning models, highlight the importance of distinguishing

monomeric and micellar contributions to drug solubilization for rational formulation design. Experimental investigations of β -cyclodextrin–bile salt systems demonstrate competitive interactions between micellization and inclusion complexation, manifested as shifts in critical micelle concentrations and system-specific inclusion constants. These findings show that cyclodextrins can effectively modulate aggregation behavior and solubilization pathways. Broader analyses of cyclodextrin–surfactant inclusion complexes confirm that these systems are governed by hydrophobic effects and entropic contributions, while benefiting from the biodegradability and biocompatibility of cyclodextrins. Studies on non-ionic surfactants (Triton X and Brij systems) and their mixed micelles reveal non-ideality in binary and ternary systems, with negative interaction parameters (β) and excess Gibbs energies (g^E) indicating synergistic stabilization. However, excessive micellar stabilization can restrict hydrophobic core flexibility and reduce drug solubilization efficiency. Complementary preformulation studies confirm that drug partitioning, binding stoichiometry, and excipient composition critically determine solubilization performance and formulation sustainability. By linking micellization thermodynamics (CMC, β , g^E), host–guest interactions, and solubilization efficiency, this work positions supramolecular formulation design as a key strategy for reducing pharmaceutical waste without compromising therapeutic efficacy, contributing to environmentally sustainable pharmacy practice. Keywords: sustainable pharmacy; micelles; cyclodextrins; micellization thermodynamics; surfactants; pharmaceutical pollution.

Is It Possible To Recognize Emotions In Vulnerable Populations Through Voice Patterns?

Presenting Author and Affiliation

Andrea Chaves-Villota¹

1. University of Alcala

Abstract

My journey in engineering and data science has been guided by one question: how can technology help us better understand human experiences? Over the years, I have worked on methodologies using machine learning and deep learning algorithms in different fields. Today, through my doctoral thesis, I am pursuing a goal that deeply motivates me: supporting healthcare professionals so that care for vulnerable populations (particularly older adults) can become more effective, empathetic, and human-centered. Together with my research group, we are developing a multimodal AI model that can recognize emotions from the acoustic and linguistic features of the human voice. Emotion recognition research is particularly relevant, as it not only deepens our knowledge of human behavior and well-being, but also contributes to earlier diagnosis and more personalized treatment for conditions such as depression, anxiety, and autism disorders. Moreover, the potential of this approach extends well beyond healthcare, enriching areas like education, fostering social inclusion, and enhancing everyday communication. One of the most meaningful contributions of this project has been the creation of a dataset based on real conversations with older adults in nursing homes in Spain. Preparing and adapting this material for emotion recognition is both a technical challenge and a unique opportunity to give voice, literally and figuratively, to people who are often less heard in society. Through this research, we aim not only to advance the field of AI but also to generate a positive impact on mental health and quality of life for older adults. By sharing the current state of our work, we hope to open new spaces for dialogue, collaboration, and joint innovation.

AI-Driven IoT Connectivity For Sustainable Health And Environmental Monitoring

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Abstract

Advancements in digital connectivity are redefining how global health and environmental sustainability challenges are addressed. This work investigates the integration of Artificial Intelligence (AI) with Low-Power Wide-Area Network (LPWAN) technologies, focusing on LoRaWAN, to enable intelligent and energy-efficient data communication for large scale health and environmental monitoring systems. The study proposes an AI-based Adaptive Data Rate (ADR) optimization framework that dynamically adjusts transmission parameters, including spreading factor, coding rate, and transmit power, in response to varying network conditions. By applying learning-based optimization strategies, the system enhances both data reliability and energy efficiency, which are essential for sustainable IoT deployments in resource-constrained settings. Such intelligent communication frameworks have significant implications for global health applications, including remote patient monitoring, air and water quality assessment, and disease outbreak detection. The proposed approach contributes to reducing the energy footprint of IoT devices while ensuring dependable data flow across distributed networks, thus supporting the development of resilient and sustainable digital infrastructures for global wellbeing. This research demonstrates the critical role of AI-driven connectivity in advancing planetary health goals, bridging the gap between engineering innovation and societal benefit. By fostering collaboration between technology, health, and environmental disciplines it aligns closely with EUGLOH's mission of promoting interdisciplinary solutions for a healthier and more sustainable world

Booths

Shapes of the Anthropocene

Presenting Author and Affiliation

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1. Rachel Carson Center for Environment and Society, LMU

Abstract

Crafted with analog methods and devices, these visuals probe and explore miscellaneous facets of more-than-human (well)being. It is an approach that seeks to inspire alternative avenues of visualizing multispecies entanglement, socioenvironmental health and sustainability. Through the means of eclectic composition and superimposition, the aesthetics here are fed by the shattered fluidity of the socioenvironmental conundrum. Aligned with state-of-the-art concepts, notions and consequential more-than-human well-being parameters, the work tackles asymmetrical scales and intersectionalities, at a time of accelerated change and heightened socioenvironmental tension. The rationale behind the work is the notion of the 'Anthropocene' – a socioenvironmental epoch in which humans have come to significantly partake in environing fluxes and worldbuilding processes. The Anthropocene frames a compound, ambivalent reality; a complex, multifold dynamic, where nature and culture are structurally – inexorably – linked, and – as the presented work overtly suggests – for better or worse, (re)shape each other. This more-than-human relationship stands at the heart of the current socioenvironmental crisis and less harmful – sustainable – ways of socioenvironmental coexistence – can be enacted only by better grasping it.

Graduate Center^{LMU}

Presenting Author and Affiliation

Florian Kniffka¹

1. Graduate Center, LMU

Abstract

The GraduateCenter^{LMU} is the central coordination, advice and service unit for doctoral studies at LMU Munich. We have a strong interest in optimizing the conditions for all doctoral candidates at the university – both for those participating in doctoral programs and for individually supervised candidates.

Center for International Health (CIH^{LMU})

Presenting Author and Affiliation

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1. Center for International Health (LMU)

Abstract

The CIH and its partners work to improve the health conditions in low and middle-income countries by promoting medical education and research. We support the local training of medical professionals, train professors to maintain up-to-date instructing techniques, and develop innovative curricula with our partners taking into account the local conditions. This supports the partner universities in defining their own training and research content, in integrating into international knowledge networks and in implementing their research results.

EUGLOH 2.0

Presenting Author and Affiliation

Johanna Schneider¹

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Abstract

The European University Alliance for Global Health (EUGLOH) is a strategic partnership between its member universities in the context of the European Commission's "European Universities Initiative". "European Universities" are transnational university alliances that cooperate to create an integrated campus, enabling students, staff and researchers to move seamlessly across borders and institutions. Within the EUGLOH network, a balanced interfaculty consortium of researchers and students develop interdisciplinary activities especially in education and training related to Global Health.

Scavenger Hunt Through Munich

Presenting Author

Lorenz Hebertinger¹

1. Global Health Day Team

Abstract

After a day filled with academic talks and workshops, this casual scavenger hunt through Munich wants to offer the possibility to connect with your fellow researchers in a non-formal setting on the way to our dinner reservation. We will walk around 2 kilometers from the congress center to the restaurant solving small riddles and other challenges. You do not necessarily need to join the dinner in order to join the scavenger hunt and vice versa.

We will use the actionbound app, which you will need to download.

Download the app here:



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