

Poster Programme

All posters will be displayed for the duration of the conference, with discussion and questions taking place according to the schedule below:

Poster Session 1 – P.001-P.062
Sunday 25th November – 14:00-15:00

Poster Session 2 – P.063-P.123
Monday 26th November – 14:00-15:00

Poster Session 3 – P.124-P.183
Tuesday 27th November – 14:00-15:00

1.1 What is happening in cities; from models and frameworks to assessment

- [P.001] **A conceptual model to measure indigenous communities' perception of association with a place and cultural capital in an urban context**
H.S. Lakra*, P. Garg, *Indian Institute of Technology Roorkee, India*
- [P.002] **Alternative form of urban street network without conflict movements at intersections: A comparative study with the Barcelona network via microscopic traffic simulation**
S. Pravinongvuth*, S. Juisoei, *Asian Institute of Technology, Thailand*
- [P.003] **Road traffic accidents and traffic safety in Saudi Arabia: A review**
H.M.A. Al-Mattarneh*^{1, 2}, M.A.H. Dahim¹, *¹King Khalid University, Saudi Arabia, ²Yarmouk University, Saudi Arabia*
- [P.004] **Multicriteria evaluation of the binomial: 'Vegetation-water' in the requalification project of Oued El Harrach in Algiers**
A. Benbrahim*¹, S. Abdou¹, *¹University of Constantine-3, Algeria*
- [P.005] **The use of heavy oil fly ash as a filler in asphalt pavement mixture**
M.A. Dahim, *King Khalid University, Saudi Arabia*
- [P.006] **Change in business diversity and density in commercial areas: A study based on tourist area life cycle concept**
Y.J. Jang*¹, Y.S. An¹, *¹University of Seoul, Republic of Korea*
- [P.007] **Fire vulnerability and urban space planning: An approach for rapidly urbanising Indian cities**
V. Kumar*, K. Ramamritham, A. Jana, *Indian Institute of Technology Bombay, India*
- [P.008] **Making the invisible visible: The value of missing data**
J.M. Leach*, C.D.F. Rogers, *University of Birmingham, UK*
- [P.009] **Energy-efficient building design: A proposed six-storey dormitory with roof deck**
Z. Licup, *San Beda University, The Philippines*
- [P.010] **Exploring the impact of Energy Performance Certificates in residential prices in 3 Spanish Metropolitan Areas**
C. Marmolejo-Duarte*, A. Chen, *Centre for Land Policy and Valuations ETSAB UPC, Spain*
- [P.011] **Green-spacerelated approaches to physical activity promotion (GREEN-PA): Formation of a new international research network –[Withdrawn]**
S. Kahlmeier¹, C. Fabian², R. Hunter³, N. Murphy⁴, M. Nieuwenhuijsen*⁵, K. O'Hara⁶, E. Rappe⁷, *¹University of Zurich, Switzerland, ²University of Applied Sciences and Arts Northwestern Switzerland (FHNW), Switzerland, ³Queen's University Belfast, Northern Ireland, UK, ⁴Waterford Institute of Technology, Ireland, ⁵IS Global Barcelona Institute of Global Health, Spain, ⁶University Beira Interior, Portugal, ⁷Age Institute, Finland*
- [P.012] **The suburbs value: Urban quality requirements for a process of territorial development**
A. Plaisant*, T. Congiu, V. Fais, *University of Sassari, Italy*
- [P.013] **The role of city rankings, benchmarking and indexes as urban performance measures**
L. Sáez*, I. Heras-Saizarbitoria, E. Rodríguez, *University of the Basque Country UPV-EHU, Spain*
- [P.014] **Evaluation of the impact of building energy efficiency policies in indoor environmental comfort - An experimental case**
A. Sola*, M. Sanmartí, C. Corchero, J. Ortiz, *IREC Catalonia Institute for Energy Research, Spain*
- [P.015] **Impact of housing prices from the opioid epidemic**
M. Eichinger, C. Thompson*, J. Gaber, *Clemson University, USA*

- [P.016] **Are patterns of vacant building lots random? Empirical study in Chiba prefecture, the suburbs of Tokyo**
H. Usui, *The University of Tokyo, Japan*
- [P.017] **Urban-residential resilience and sustainability strategies according to settlements typology in metropolitan areas. First steps for a diversified investment policy and subsidies on social housing in Guadalajara, Mexico**
M.A. Cortés Lara, *Jesuit University of Guadalajara, Mexico*
- [P.018] **Segregation and urban speculation: The closed housing development model as an unsustainable alternative to urban development in the Metropolitan Area of Guadalajara**
M.A. Cortés Lara, *Jesuit University of Guadalajara, Mexico*
- [P.019] **The territory with high concentration of single industry towns: The case study for Kemerovo region, Russia**
I. Antonova*¹, E. Pchelintsev², ¹*Tomsk Polytechnic University, Russia*, ²*Tomsk State University, Russia*
- [P.020] **The UK Collaboratorium for Research on Infrastructure and Cities - A new model for the delivery of urban research**
B.S. Collins¹, W. Powrie², D.J. Richards², C.D.F. Rogers³, P.J. Jeffrey*⁴, ¹*University College London, UK*, ²*University of Southampton, UK*, ³*University of Birmingham, UK*, ⁴*Cranfield University, UK*
- [P.021] **Transdisciplinary approaches to urban infrastructure engineering: When emergence and predictability collide**
J.M. Leach¹, C.D.F. Rogers¹, P.J. Jeffrey*², C.A. Taylor³, ¹*University of Birmingham, UK*, ²*Cranfield University, UK*, ³*University of Bristol, UK*
- [P.022] **The urban drainage system in transition: A framework for identifying technical, social and institutional uncertainties**
E.M. Nieuwenhuis*¹, E.H.W.J. Cuppen¹, J.G. Langeveld^{1,2}, J.A. de Bruijn¹, ¹*Delft University of Technology, The Netherlands*, ²*Partners4UrbanWater, The Netherlands*
- [P.023] **Health impact of the indoor environment and benefit of sustainable design solutions for low-income dwellings in Delhi**
K. Belesova*¹, E. Nix², J. Paulose³, H. Altamirano², R. Khosla³, M. Davies², P. Wilkinson¹, ¹*London School of Hygiene and Tropical Medicine, UK*, ²*University College London, UK*, ³*Centre for Urban and Regional Excellence, India*
- [P.024] **Informal settlements and urban management: The case of Bangkok, Thailand**
T. Endo, *Saitama University, Japan*
- [P.025] **Informal urban development in Latin American urban peripheries. Spatial assessment in Bogotá, Lima and Santiago de Chile**
L.I. Inostroza^{1,2}, ¹*Ruhr University Bochum, Germany*, ²*Universidad Autonoma de Chile, Chile*
- [P.026] **Investigating the potential of a systematic low-cost way to collect data on slum conditions**
A. Kallergis, *New York University, USA*
- [P.027] **The right to work for women workers affected by the No Slum Cities National Program (National Slum Upgrading Project) in Jakarta: Fulfilment and protection of rights in the perspective of gender justice -~~[Withdrawn]~~**
J.T. Pardosi, *Universitas Indonesia, Indonesia*
- [P.028] **Strategic street vending in Silom district, Bangkok**
S. Sereerat, *Chulalongkorn University, Thailand*
- [P.029] **Health impact assessments as a tool to inform transportation related air pollution mitigation strategies**
L. Sprague Martinez*¹, E. Reisner², L. Lowe³, S. Ron⁴, B. Keppard⁴, D. Brugge⁵, ¹*Boston University, USA*, ²*Somerville Transportation Equity Partnership, USA*, ³*Chinatown Community Land Trust, USA*, ⁴*Massachusetts Area Planning Council, USA*, ⁵*Tufts University, USA*
- [P.030] **Diversified transition of historic areas in urban renewal of Shanghai**
F. Zhou*¹, J. Li^{2,1}, ¹*Shanghai Jiao Tong University, China*, ²*Disaster Reduction and Human Renovation Institution, Japan*
- [P.031] **Re-vitalizing urban streets by the functional transformation of small-lots**
J.A. Lee*, J.A. Park, *Hanyang University, Republic of Korea*
- [P.032] **Sustainable mobility and urban planning at Barcelona's Metropolitan Area**
J. Ortigosa, *Area Metropolitana de Barcelona, Spain*
- [P.033] **Competition, co-operation or both? Managing urbanisation for innovation at the local level**
A. Parment*¹, S. Brorström², ¹*Stockholm Business School, Sweden*, ²*University of Gothenburg, Sweden*

- [P.034] **Governance of the water-energy-food nexus: Challenges for Metropolitan Region of São Paulo, Brazil**
A.M. Urbinatti*, L. Giatti, C. Carvalho, A.M. Bedran-Martins, I. Santos, S.L. Omori-Honda, *University of São Paulo, Brazil*
- [P.035] **How the urban street classification system affects the physical environment of the street and its design**
N. Alanazi, *University College London, UK*
- [P.036] **Selection of travel demand management package using hybrid MCDM method: Combining DEMATEL based ANP (DANP) and VIKOR**
K. Kavta*, A. Goswami, *Indian Institute of Technology Kharagpur, India*
- [P.037] **MUV: Changing unsustainable mobility behaviours**
A. Vesco*¹, S. Di Dio², J. Barroca³, J. Veenkamp⁴, F. Ferrero⁵, B. Gastón⁶, *¹Istituto Superiore Mario Boella, Italy, ²PUSH, Italy, ³BAG, Portugal, ⁴WAAG Technology & Society, The Netherlands, ⁵Luxembourg Institute of Science and Technology, Luxembourg, ⁶Fundació Privada I2CAT, Spain*
- [P.038] **Environmental impacts and cost of degradation-remediation resulting from the different activities of the urban community of Fes (Morocco)**
B. Antouh*, M. El Qandil, *Université Sidi Mohamed Ben Abdellah, Morocco*
- [P.039] **Determining the uncertainty of the urbanization index method based on image information and eye movement data**
A. Lipovits, *University of Pannonia, Hungary*
- [P.040] **Strengthening urban environmental protection - An environmental perspective on sustainable urban development**
D. Reißmann*, U. von Schlippenbach, S. Bartke, *German Federal Environment Agency, Germany*
- [P.041] **Applying the understanding of kinetic façade in modifying the thermal performance of using fixed louvered façade in the tropic.**
N. Taib*, H.L. Lee, R. Prihatmanti, *Universiti Sains Malaysia, Malaysia*
- [P.042] **Drivers of sustainable construction in developing countries: The perspective of Kazakhstan**
S. Tokbolat*¹, F. Karaca¹, S. Durdyev², R.K. Calay³, *¹Nazarbayev University, Kazakhstan, ²Ara Institute of Cantenbury, New Zealand, ³The Arctic University of Norway, Norway*

2.1 Connecting land use, transport planning and transport behaviour

- [P.043] **Urban accessibility for connective and inclusive cities**
T. Congiu*, E. Occhini, A. Plaisant, *University of Sassari, Italy*
- [P.044] **Public Transport Accessibility indicator for urban development at Barcelona's Metropolitan Area**
J. Recio*, L. Pretel, J. Ortigosa, *Area Metropolitana de Barcelona, Spain*
- [P.045] **Strategic choice of measures: A coordinative task force at the interface of land use and transportation**
P. Tornberg*, J. Odhage, *Royal Institute of Technology, Sweden*
- [P.046] **Informal transportation in India – [Withdrawn]**
N. Yati*, G. Agrawal, *Shiv Nadar University, India*
- [P.047] **Analysis of linear and nodal infrastructure in the context of sustainable development of urban freight transport**
S. Iwan*¹, J. Korczak², K. Kijewska¹, *¹Maritime University of Szczecin, Poland, ²Koszalin University of Technology, Poland*
- [P.048] **Analysis of the unloading bays efficiency based on utilization of cellular automata simulation**
S. Iwan*¹, K. Malecki², K. Kijewska¹, *¹Maritime University of Szczecin, Poland, ²West Pomeranian University of Technology, Poland*
- [P.049] **From intention to behavior: Development of a randomized control trial targeting the motivational levers of transport mode choice to decrease car use**
A. Chalabaev², S. Chardonnel¹, H. Bouscasse*¹, S. Duche², S. Isoard-Gatheur², S. Mathy¹, E. Ployon¹, P. Sarrazin², R. Slama³, A. Risch², *¹CNRS, France, ²UGA, France, ³INSERM, France*
- [P.050] **Speed limit, parking space, and co. - How to reduce car use in urban areas**
J. Jarass*¹, S. Becker², *¹Institute of Transport Research, German Aerospace Center, Germany, ²Institute of Advances Sustainability Studies, Germany*
- [P.051] **Evaluating an impact of Shared-Park and Ride on shopping center in Bangkok, Thailand**
P. Sanit*¹, P. Mansiri¹, F. Nakamura², *¹Chulalongkorn University, Thailand, ²Yokohama National University, Thailand*

- [P.052] **Exploring the relation between touristic activities and the usages of Foursquare POIs: A case study of Barcelona**
L. Yang*¹, C. Marmolejo-Duarte¹, P. Martí-Ciriquián², A. Chen¹, ¹Technical University of Catalonia, Spain, ²University of Alicante, Spain
- [P.053] **Impact of road layout patterns on the processes of runoff generation and concentration: Case study of a collection of residential areas in Tianjin, China**
Y. Han*¹, D. Yang¹, B.C. Anderson^{1,2}, L. Cao¹, Y. Liu¹, ¹Tianjin University, China, ²Queen's University, Canada
- [P.054] **Maintaining a balance in public space: The difficulties of designers and the visually impaired in designing and using inclusive facilities**
K.W.M. Siu*, Y.L. Wong, J.X. Xiao, *The Hong Kong Polytechnic University, Hong Kong*
- [P.055] **Measuring the global walkability index with fuzzy analytic hierarchy process: Halaskargazi Street example**
S. Ozgun*, K.S. Oguť, *Istanbul Technical University, Turkey*
- [P.056] **Analysis of fatal and injury crashes by geographical information systems: A case study of Gaziantep**
S. Özgün*¹, Y.K. Demir², ¹Istanbul Technical University, Turkey, ²Nigde Omer Halis Demir University, Turkey
- [P.057] **Advanced measures for providing healthy and safe mobility in Ruse (Bulgaria)**
L. Ilieva, *CSDCS, Bulgaria*
- [P.058] **Feedback of analysis of the road de-icing agents: The issue of updating the normative specifications for preventing risks on environment, buildings and population safety**
L. Friteyre, C. Franck-Neel*, *CEREMA, France*
- [P.059] **Can modelling of systems dynamics help decisions of NBS maintenance towards more resilient and healthy cities?**
C. Franck-Neel*¹, D. Goutaland¹, F. Cherqui², ¹CEREMA, France, ²INSA-Lyon, France
- [P.060] **Addressing complexity of soil quality in urban planning: Review of existing tools and remaining challenges**
C. Franck-Neel*¹, C. Le Guern^{2,5}, C. Keller^{3,6}, B. Bechet^{2,4}, P. Branchu¹, ¹CEREMA, France, ²IRSTV, France, ³AMU, France, ⁴IFSTAR, France, ⁵BRGM, France, ⁶CEREGE, France
- [P.061] **Associating walkability to local urban indicators: The case of Berlin metropolitan area**
A. Bartzokas-Tsiompras*, Y. Photis, *National Technical University of Athens, Greece*
- [P.062] **Walk this way! An autoethnographical study of urban walkability**
M. Hynes, *National University of Ireland Galway, Ireland*

2.2 Greening of cities

- [P.063] **Seasonal dynamics in regulatory ecosystem services of urban green structure in Manchester, UK.**
F. Baker*, G. Cavan, *Manchester Metropolitan University, UK*
- [P.064] **Green roofs vs. cool roofs: Economic evaluation of private and public benefits derived from industrial buildings retrofit in Italian different climate conditions**
R. Berto*, C.A. Stival, P. Rosato, *University of Trieste, Italy*
- [P.065] **Adaption planning for urban coastal environments**
C. Considine*, J. Behr, *Old Dominion University, USA*
- [P.066] **Quantifying the local cooling effects of urban green spaces - Evidence from Bengaluru, India**
A. Shah*¹, A. Garg¹, V. Mishra², ¹Indian Institute of Management, Ahmedabad, India, ²Indian Institute of Technology, Gandhinagar, India
- [P.067] **Residents' preferable option for Green infrastructure: A case study of disaster-stricken urban areas, Japan**
A. Tashiro*, Y. Uchiyama, R. Kohsaka, *Tohoku University, Japan*
- [P.068] **Study on the multifactor models of green space community density based on living vegetation volume**
X-J. Yang, J. Ye*, L-P. Zhang, Q. Li, *Tongji University, China*
- [P.069] **The influence of green space and urban furniture on older adults' presence in city**
M. Zandieh*, M.M. Senemari, *Imam Khomeini International University (IKIU), Iran*
- [P.070] **Sustainable managements of green and blue infrastructures in urban areas with rapid aging: Citizens' attitudes toward their neighbouring environment**
Y. Uchiyama*, A. Tashiro, R. Kohsaka, *Tohoku University, Japan*
- [P.071] **Evolution of innovation ecosystems from a Triple Helix perspective**
H. Etzkowitz¹, J.M. Piqué², J. Berbegal-Mirabent*³, F. Miralles², ¹Stanford University, USA, ²La Salle – Ramon Llull University, Spain, ³Universitat Internacional de Catalunya, Spain

- [P.072] **Municipal urban biodiversity managements with participation of citizens and collaboration of multiple sectors: Challenges and potentials**
R. Kohsaka*, Y. Uchiyama, *Tohoku University, Japan*

2.3 Planning and social impacts

- [P.073] **An equity analysis of public bus service in Dhaka**
F. Hanif*, M.I. Matin, A.K. Debnath, *Bangladesh University of Engineering and Technology, Bangladesh*
- [P.074] **Multi-scale integrated analysis of societal and ecosystem metabolism of Qatar**
A.A. Al-Tamimi*, S.G. Al-Ghamdi, *Hamad Bin Khalifa University, Qatar Foundation, Qatar*
- [P.075] **Effect of reutilizing building demolition sites focusing on block-level livability in large housing estates of Berlin**
H. Baba*¹, B.B. Walker², Y. Asami¹, ¹*The University of Tokyo, Japan*, ²*Humboldt University of Berlin, Germany*
- [P.076] **The future economic impact of damage to industry caused by climate change related heavy snowfall disasters**
J.H. Ha*, J.E. Kang, *Pusan national university, Republic of Korea*
- [P.077] **Residents' perception of the impacts of tourism in urban regeneration site, South Korea**
Y. Kang*¹, S. Kim², E. Kim³, ¹*Dong-A University, Republic of Korea*, ²*Texas A&M University, USA*, ³*KangnungWonju National University, Republic of Korea*
- [P.078] **Determining factors of citizens' perceptions about corporate social responsibility on the modern channel of retailing in Peruvian cities**
C. Pennano*, L.C. Ortigueira-Sánchez, *Universidad del Pacifico, Peru*

3.1 Urban and transport planning and health

- [P.079] **Linking urban planning practices to health outcomes: A review on indicators of public space and land use, and their health relevance**
L. Delgado Ortiz*^{1,2}, N. Mueller^{2,3}, D. Rojas-Rueda^{2,3}, M. Nieuwenhuijsen^{2,4}, ¹*Universitat de Barcelona, Spain*, ²*IS Global, Spain*, ³*Universitat Pompeu Fabra, Spain*, ⁴*CIBER Epidemiología y Salud Pública (CIBERESP), Spain*
- [P.080] **Creating healthy local environments - Decision tools and other ways to support policymakers, professionals, and citizens**
H. Kruize*, B.A.M. Staatsen, *National Institute for Public Health and the Environment, The Netherlands*
- [P.081] **Spatiotemporal variation of bicycling collision and injury in Berlin: Implications on transport policy making.**
R.M. Medeiros*^{1,2}, Q. Jammot-Paillet³, ¹*Technische Universität Berlin, Germany*, ²*Pontificia Universidade Católica, Brazil*, ³*independent Researcher, France*
- [P.082] **Urban planning, health and quality of life: Analyzing the consistency in Barcelona's Cerdà grid-orientation using LiDAR technology**
M. Pallares-Barbera*¹, A. Badia², M. Gisbert³, ¹*Universitat Autònoma de Barcelona, Spain*, ²*Universitat Autònoma de Barcelona, Spain*, ³*Universitat Autònoma de Barcelona, Spain*
- [P.083] **The impacts of urban form on cardiovascular mortality**
Y.S. Shen*, S.C.C. Lung, *Academia Sinica, Taiwan*
- [P.084] **How the environment impacts on the access of older people's health services in Chile?**
A. Fuentes-García¹, E. Duim*², ¹*Universidad de Chile, Chile*, ²*Universidad de Sao Paulo, Brazil*
- [P.085] **Inequalities in health: How the environment's impact on the perception of health in older adults living in Chile**
E. Duim*¹, J.L.F. Antunes¹, A. Fuentes-García², ¹*Universidade de São Paulo, Brazil*, ²*Universidad de Chile, Chile*
- [P.086] **Spatio-temporal analysis of the impacts of transportation projects on air quality in Lahore**
A. Baig¹, A. Adeel*², ¹*University of Engineering and Technology Lahore, Pakistan*, ²*Katholieke Universiteit Leuven (KU Leuven), Belgium*
- [P.087] **Research and planning collaboration to shift commute mode and increase physical activity in a university setting**
K. Crist*¹, R. Brondeel², C. Reuter¹, T. Benmarhnia¹, J. Kerr¹, J. Schipperijn³, ¹*University of California, San Diego, USA*, ²*Universite de Montreal, Canada*, ³*University of Southern Denmark, Denmark*

- [P.088] **Public sexual harassment mayhem on public transport in Megacities - Karachi and London: A comparative review**
S. Hoor-Ul-Ain, *University of Karachi, Pakistan*
- [P.089] **Healthy urban mobility in low income housing areas in Brazil and UK**
T. Jones*¹, B. Spencer¹, J. Vargas², ¹*Oxford Brookes University, UK*, ²*Federal University of Rio Grande do Sul, Brazil*
- [P.090] **The healthy city: Improving bicycle facilities and restricting motorized vehicles (Case Study: Isfahan)**
R. Khayamim*, H. Karimi, N. Shetab-Bushehri, *Isfahan university of technology, Iran*
- [P.091] **Sidewalk cycling: Asystematic analysis of people's movement in Santiago, Chile**
R. Mora*, R. Sanchez, *Universidad Diego Portales, Chile*
- [P.092] **Assessing the potential health implications of a traffic intervention in Toronto, Canada**
J. Brook*^{1,4}, G. Evans^{1,4}, M. Hatzopoulou^{1,4}, C-H. Jeong¹, T. Oiamo^{2,4}, D. Kuperman³, S. Gower³, ¹*University of Toronto, Canada*, ²*Ryerson University, Canada*, ³*City of Toronto, Canada*, ⁴*CANUE, Canada*
- [P.093] **The Canadian urban environmental health research consortium - A national environmental exposure data platform for integrated analyses of urban form and health**
J. Brook*^{1,4}, E. Setton^{2,4}, E. Seed^{1,4}, D. Doiron^{3,4}, M. Shooshtari^{2,4}, S. Kharol^{1,4}, M. Speck^{1,4}, ¹*University of Toronto, Canada*, ²*University of Victoria, Canada*, ³*McGill University, Canada*, ⁴*Canadian Urban Environmental Health Research Consortium, Canada*
- [P.094] **Transport and health indicators**
H. Vicioso*¹, D. Rojas-Rueda^{1,2}, N. Muller¹, M. Nieuwenhuijsen¹, ¹*ISGlobal, Centre for Research in Environmental Epidemiology (CREAL), Spain*, ²*Universitat Pompeu Fabra (UPF), Spain*
- [P.095] **Does maintain stable the energy premium in residential prices along the time? An analysis for Barcelona Metropolitan Area**
A. Chen*, C. Marmolejo-Duarte, *Technical University of Catalonia, Spain*
- [P.096] **Architectural Epidemiology: Understanding architecture as a mechanism for designing a healthier, more resilient world**
A. Houghton*¹, C. Castillo-Salgado², ¹*Biositu, LLC, USA*, ²*Johns Hopkins Bloomberg School of Public Health, USA*
- [P.097] **Comparing local governance of heat vulnerability in elderly and child care: Influences, measures and implications**
M. Hjerpe*, E. Glaas, S. Storbjörk, *Linköping University, Sweden*
- [P.098] **Keys for sustainable urban and transport development and use: Balancing social-environmental-economical and ethical approaches**
L. Liutsko*^{1,2}, C. Daher¹, M. Nieuwenhuijsen¹, ¹*ISGlobal, Spain*, ²*CIBERESP, Spain*, ³*UPF, Spain*
- [P.099] **City food systems to maximise benefits on climate, environment and human health**
R. Tirado, *Greenpeace Research Laboratory, University of Exeter, UK*
- [P.100] **A prescription for "nature" - The potential of using virtual nature in therapeutics**
M. Löhmus*^{3,4}, M. Albin^{3,4}, R. Lundstedt³, P. Vassiljev², M. Wallergård³, N. Yeo¹, M. White¹, ¹*University of Exeter Medical School, UK*, ²*Estonian University of Life Sciences, Estonia*, ³*Lund University, Sweden*, ⁴*Karolinska Institute, Sweden*
- [P.101] **Attributes of sustainable urban neighborhoods for active living: Perspectives of communities in a metropolitan city**
S. Yoo*, D.H. Kim, *Seoul National University, Republic of Korea*

4.1 Built environment, physical activity and physical and mental health

- [P.102] **Correlates of 'healthy' vs. 'unhealthy' profiles of modes of transport to and from school in Hong Kong adolescents**
A. Barnett*¹, M. Akram¹, M. Nieuwenhuijsen^{1,2}, E. Cerin^{1,3}, ¹*Australian Catholic University, Australia*, ²*ISGlobal, Spain*, ³*University of Hong Kong, Hong Kong*
- [P.103] **Creating European cities to a greater extent sustainable and liveable; The bicycle in the transport network; A study programme protocol**
O.A. Bjørkelund*¹, E. Bere², M. Nieuwenhuijsen^{3,4}, ¹*Aalborg University, Denmark*, ²*University of Agder, Norway*, ³*ISGlobal, Spain*, ⁴*Universitat Pompeu Fabra, Spain*
- [P.104] **Characterizing built environments citywide, the first step in order to link it with electronic health record data**
A. Colom*^{1,2}, M. Compa³, M. Fiol^{1,2}, D. Romaguera^{1,2}, M. Ruiz⁴, ¹*CIBER Fisiopatología de la Obesidad y Nutrición (CIBEROBN), Spain*, ²*Institut de Investigació Sanitària Illes Balears (IDISBA), Spain*, ³*Instituto Español de Oceanografía (IEO), Spain*, ⁴*Universitat de les Illes Balears (UIB), Spain*

- [P.105] **The relationship between land-use distribution and moderate to vigorous physical activity in a Mediterranean metropolis. Evidence from GPS and accelerometer data among young adults in Barcelona**
X. Delclòs-Alió*, G. Vich, C. Miralles-Guasch, *Universitat Autònoma de Barcelona, Spain*
- [P.106] **Innovative models of individual activity spaces: Challenges and opportunities for environmental health promotion research**
K. Hasanzadeh*, T. Laatikainen, M. Kyttä, *Aalto University, Finland*
- [P.107] **Systematic review of the environmental, health, wellbeing and equity effects of urban green space interventions: Recommendations for policymakers, practitioners and researchers**
R.F. Hunter*¹, C. Cleland¹, A. Cleary², M. Droomers³, B.W. Wheeler⁴, D. Sinnett⁵, M. Nieuwenhuijsen^{6,7}, M. Braubach⁸, ¹Queen's University Belfast, UK, ²Griffith University, Australia, ³University of Amsterdam, The Netherlands, ⁴University of Exeter, UK, ⁵University of the West of England, UK, ⁶ISGlobal, Spain, ⁷Universitat Pompeu Fabra (UPF), Spain, ⁸WHO Regional Office for Europe, Germany
- [P.108] **Study design of a community-based participatory open space intervention in a Swedish neighbourhood to promote active living among migrant communities**
M. Khan*¹, A.S. Merritt², M. Friberg², R. Bell¹, ¹University College London, UK, ²Public Health Agency of Sweden, Sweden
- [P.109] **What makes a city walkable? Thinking beyond urban structures**
D.H. Kim*, J. Lee, S. Yoo, *Seoul National University, Republic of Korea*
- [P.110] **Impact of the built environment on active mobility and physical activity**
C. Koszowski*, R. Gerike, S. Hubrich, R. Wittwer, *Technische Universität Dresden, Germany*
- [P.111] **Childhood obesity and organized sport participation: A view of the gender gap from a perspective of local sports availability in Coimbra, Portugal**
H. Nogueira*^{1,4}, A. Gama^{2,4}, A. Machado-Rodrigues⁴, I. Mourão^{3,4}, M. Pereira⁴, V. Rosado^{2,4}, C. Padez^{1,4}, ¹University of Coimbra, Portugal, ²University of Lisbon, Portugal, ³University of Trás-os-Montes e Alto Douro, Portugal, ⁴Research Centre for Anthropology and Health, Portugal
- [P.112] **Identifying the urban built environments influencing the activation of the neighborhood units**
Y.J. Ock*¹, S.G. Lee², ¹Seoul National University of Science & Technology, Republic of Korea, ²Hanyang University, Republic of Korea
- [P.113] **KAP survey of sedentary lifestyle: Investigating knowledge, attitude, practice as determinants of sedentary behavior among Indian young adults**
U. Perishetty*, S. Das, *MLR institute of pharmacy, India*
- [P.114] **Ethnic differences in coping with risk for health in selected urban environments in Israel**
I. Schnell*¹, D. Saadi², K. Agay-Shay³, E. Tirosh¹, ¹Tel Aviv University, Israel, ²Bar Ilan University, Israel, ³Bnei Zion Medical Centre, Israel
- [P.115] **Template_PA&D-GE_CatalinaCruz**
C. Cruz*, A. de Nazelle, *Imperial College London, UK*
- [P.116] **Template urban agriculture-Catalina Cruz**
C. Cruz*, A. de Nazelle, *Imperial College London, UK*
- [P.117] **Investigating the relationship between changing urban form and mental health in Denmark**
T. Chen*, C. Sabel, P. Frederiksen, *Department of Environmental Science, Aarhus University, Denmark*
- [P.118] **Brownfields to greenfields: A spatial analysis of environmental health justice in Glasgow, Scotland**
J.A. Maantay*¹, A.R. Maroko², ¹City University of New York, Lehman College, USA, ²City University of New York, Graduate School of Public Health and Health Policy, USA
- [P.119] **Association between blue and green space density with mental health and wellbeing**
A. Mizen*¹, S. Rodgers¹, R. Fry¹, J. Song¹, A. Akbari¹, B. Wheeler², J. White³, M. White², R. Lovell², R. Lyons¹, ¹Swansea University, UK, ²Exeter University, UK, ³Cardiff University, UK
- [P.120] **Urban built environment, environmental exposures and mental health in a dense Mediterranean city**
W.L. Zijlema*¹, P. Dadvand¹, X. Bartoll², M. Cirach¹, C. Borrell², M. Nieuwenhuijsen¹, ¹Barcelona Institute for Global Health, Spain, ²Agència de Salut Pública de Barcelona, Spain
- [P.121] **A comparative study between objective and subjective measurement of walkability: The Rome case**
R. Rafiemanzelat, D. Valeri, L. Appolloni, M.V. Corazza*, D. D'Alessandro, *Sapienza University of Rome, Italy*
- [P.122] **The relation between social factors and children's health in urban areas**
M. Brenck¹, J. Schicketanz*², S. Kabisch², ¹Humboldt-University of Berlin, Germany, ²Helmholtz-Centre for Environmental Research - UFZ, Germany

- [P.123] **Developing a strategy to mitigate the indoor environmental quality effects of electromagnetic radiation emissions in buildings**
Y.W. Weldu*, S.G. Al-Ghamdi, Hamad Bin Khalifa University, Qatar Foundation, Qatar

4.2 Urban environmental exposure and epidemiology: air pollution, noise, temperature and green space

- [P.124] **Spatial distribution and temporal behaviour of black carbon in an elementary school catchment area of Milan during the warm season**
L. Boniardi*¹, E. Dons², L. Int Panis², S. Fustinoni¹, ¹Università degli Studi di Milano and Fondazione IRCCS Ca' Granda Ospedale Maggiore Policlinico, Italy, ²VITO & Hasselt University, Belgium
- [P.125] **The maps mi project: Design and early results**
L. Boniardi*¹, V. Bollati¹, F. Borghi², L. Campo¹, A. Cattaneo², E. Dons³, L. Int Panis³, F. Longhi¹, S. Manni¹, S. Fustinoni¹, ¹Università degli Studi di Milano and Fondazione IRCCS Ca' Granda Ospedale Maggiore Policlinico, Italy, ²Università degli Studi dell'Insubria, Italy, ³VITO & Hasselt University, Belgium, ⁴Coop Onlus ABCittà, Italy
- [P.126] **Participatory approach to raise awareness on air pollution among schoolchildren**
L. Boniardi*¹, S. Manni², C. Zanelli², S. Fustinoni¹, ¹Università degli Studi di Milano and Fondazione IRCCS Ca' Granda Ospedale Maggiore Policlinico, Italy, ²ABCittà Coop Onlus, Italy
- [P.127] **Assessing the impact of adopting electrically powered vehicles on air quality**
N. Alhajeri*, A. Aly, F. Al-Fadhli, Kuwait University, Kuwait
- [P.128] **Population, road traffic, land use, and the spatial distribution of background air pollution**
S. Behm, M. Fritsch*, H. Haupt, University of Passau, Germany
- [P.129] **A global quantitative synthesis of air pollution exposure in different modes of transport**
S. Heydari*, G. Northover, J.P. Orjuela, A. de Nazelle, Imperial College London, UK
- [P.130] **The PMF project: Towards magnetic and chemical characterisation of airborne particles from different urban PM sources and associated early-health effects**
J. Hofman*, A. Castanheiro, G. Nuyts, S. Joosen, R. Blust, K. De Wael, R. Samson, University of Antwerp, Belgium
- [P.131] **A machine-learning method to forecast the constituent concentration of atmospheric aerosols –[Withdrawn]**
Y.K. Jia*, X. Zheng, G.L. Feng, Tsinghua University, China
- [P.132] **High resolution data on community health risks from PM_{2.5}**
P. Kinney*¹, Y. Liu², K. Lane¹, M. Castillo¹, R. Celsi¹, ¹Boston University, USA, ²Emory University, Togo
- [P.133] **Characterisation of particulate matter at sites within a busy cargo and passenger cruise port**
N. Easton, M. Cooper, S. Bray, F. Bulot, S. Cox, D. Teagle, S. Johnston, G. Foster, M. Loxham*, University of Southampton, UK
- [P.134] **Novel cellular effects of ultrafine particulate matter from an underground railway station uncovered through RNAseq**
M. Loxham*¹, J. Woo¹, A. Singhanian¹, N. Smithers¹, A. Yeomans¹, G. Packham¹, A. Crainic¹, R. Cook¹, F. Cassee^{2,3}, C. Woelk¹, ¹University of Southampton, UK, ²National Institute for Public Health and the Environment (RIVM), The Netherlands, ³Utrecht University, The Netherlands
- [P.135] **Estimation of pollutant emissions from the road traffic in a port area: The Ravenna case study**
G. Napoli*, L. Andaloro, S. Micari, G. Dispenza, N. Randazzo, V. Antonucci, National Research Council of Italy-Institute of Advanced Energy Technologies, Italy
- [P.136] **Integrated modelling of the impact pathway approach in support of urban energy planning: A comparison of DIDEM and the new EcoSense model**
M. Ravina*¹, D. Schmid², D. Panepinto¹, M.C. Zanetti¹, ¹Politecnico di Torino, Italy, ²University of Stuttgart, Germany
- [P.137] **Spatial modelling of urban growth and its influence on air pollution: Evaluation of vertical versus horizontal growth of the city of Quito**
V. Valencia, Aarhus, Denmark
- [P.138] **Does access to urban green space moderate the noise - Annoyance relationship?**
G.M. Lund¹, G. Aamodt¹, B. Oftedal², G.M. Aasvang², N.H. Krog*², ¹Norwegian University of Life Sciences, Norway, ²Norwegian Institute of Public Health, Norway
- [P.139] **Advanced smartphone-based sensing of objective and subjective environmental exposure with task automation**
M. Ueberham*¹, F. Schmidt¹, U. Schlink², ¹Helmholtz Centre for Environmental Research, Germany, ²LeanERA GmbH, Germany

- [P.140] **Analysis of urban microclimate change in accordance with private park development: The case of Yeongheung Park in Suwon, Gyeonggi-do**
S. Kim*¹, J. Kang¹, H. Choi², ¹Pusan National University, Republic of Korea, ²Korea Environment Institute, Republic of Korea
- [P.141] **Assessment of neighbourhood qualities in slum rehabilitation housing in Mumbai, India**
B. kshetrimayum*, R. Bardhan, A. Jana, *Indian Institute of Technology Bombay, India*
- [P.142] **Imprints of urban development pattern on its thermal environment in the megacity Mumbai**
S. Mehrotra, R. Bardhan, K. Ramamritham, B. Kshetrimayum*, *Indian Institute of Technology Bombay, Mumbai, India*
- [P.143] **How does crime affect park use in low-income New York City neighborhoods?**
O. Marquet*, A. Hipp, C. Alberico, J. Huang, E. Mazak, M. Floyd, *North Carolina State University, USA*
- [P.144] **Children spatial patterns of park use and physical activity in low-income areas in New York City**
O. Marquet*, C. Alberico, E. Mazak, J. Huang, A. Hipp, M. Floyd, *North Carolina State University, USA*
- [P.145] **Urban green space and its impact on mental health**
O. Braçe*, M. Garrido-Cumbrera, D. Gálvez-Ruiz, E. López-Lara, *Health & Territory Research (HTR) - Universidad de Sevilla, Spain*
- [P.146] **A novel greenspace exposure to capture the physiological pathway: 'Green routes'**
C. Roscoe*¹, D. Fecht¹, J. Gulliver^{1,2}, S. Hodgson¹, ¹MRC-PHE Centre for Environment and Health, Imperial College London, UK, ²University of Leicester, UK
- [P.147] **Is urban sprawl linked to green space availability?**
K. Koprowska*, E. Laszkiewicz, J. Kronenberg, *University of Lodz, Poland*
- [P.148] **Subjective perception of noise exposure in relation to urban green space availability**
K. Koprowska*, E. Laszkiewicz, J. Kronenberg, *University of Lodz, Poland*

4.3 Inequalities, environment and health

- [P.149] **Is the socio-economic level associated to the environmental exposition in Donostialdea?**
A. Anabitarte*^{1,2}, J. Ibarluzea^{1,3}, A. Lertxundi^{1,2}, ¹BIODONOSTIA Health Research Institute, Spain, ²University of the Basque Country (UPV/EHU), Spain, ³Public Health Division of Gipuzkoa, Basque Government, Spain
- [P.150] **Individual-level exposure of children to tobacco retailing at a national scale in Scotland**
F. Caryl*¹, R. Mitchell¹, J. Pearce², N. Shortt², ¹University of Glasgow, UK, ²University of Edinburgh, UK
- [P.151] **Discrimination in public health coverage by law and use of health services in immigrants in Spain**
A. Moreno Lostao*¹, L. Lostao², E. Regidor³, ¹Universidad de Navarra, Spain, ²Universidad Pública de Navarra, Spain, ³Universidad Complutense de Madrid, Spain
- [P.152] **The socio-economic equity through built environment characteristics - The context of Metropolitan Area of Lisbon**
M.F. Pereira*¹, P. Santana², D.S. Vale¹, ¹University of Lisbon, Portugal, ²University of Coimbra, Portugal
- [P.153] **Environmental justice and transportation-related air pollution: Changes in exposure disparities for outdoor nitrogen dioxide in the United States, 2000-2010**
L.P. Clark¹, D.B. Millet², J.D. Marshall¹, M. Bechle*¹, ¹University of Washington, USA, ²University of Minnesota, USA
- [P.154] **A desert in the City of the Garden: Examining park disparities in a Latino community**
M. Fernandez*¹, B. Harris², ¹Clemson University, USA, ²University of Arizona, USA

5.1 Community participation in planning

- [P.155] **Participatory Geographic Information Systems (PGIS) for improvements in environmental governance in a vulnerable community of Southeast Brazil**
C. Carvalho*, A.M. Bedran-Martins, A. Urbinatti, L. Giatti, I. Santos, S.L. Omori-Honda, J.A. Santos, *University of Sao Paulo, Brazil*
- [P.156] **Urban Narrative: Concept and case studies for two New Zealand cities**
M. Dyer, R. Dyer*, T. Garcia Ferrari, A. Hinze, K. Mackness, S. Wu, *University of Waikato, New Zealand*

- [P.157] **Application of big data analysis technique to establish climate change policy in an urban area**
Y. Jung*, J. Kang, H. Hwang, *Pusan National University, Republic of Korea*
- [P.158] **Building sense of belonging and national identity in Bulgaria through architecture of 20th century**
P. Stefanoff*, N. Ellis, *University of Oklahoma, USA*
- [P.159] **Engaging citizens in Nottingham, Stuttgart and Shanghai: A comparison of the role of citizens' surveys in sustainable urban governance**
L. Xie*, H. Keding, J. Cauvain, R. Grundmann, *University of Nottingham, UK*
- [P.160] **Co-designing mobile apps for urban story telling**
A. Hinze*, M. Dyer, R. Dyer, T. Garcia Ferrari, K. Mackness, S. Wu, *University of Waikato, New Zealand*

5.2 Making an impact and the barriers and facilitators

- [P.161] **EIA plus HIA for the transport sector: A promising combination approach?**
B. Neuhold¹, K. Hofer¹, F. Amort¹, L. Bauer¹, R. Aschemann*², ¹*FH Joanneum University of Applied Sciences, Austria*, ²*University of Graz, Austria*
- [P.162] **Health risk assessment in an impounded vehicle scrapyard**
C.N. Lange¹, A.M.G. Figueiredo¹, L.R. Monteiro*¹, J. Enzweiler², T. Pedron³, B.L. Batista³, ¹*Instituto de Pesquisas Energéticas e Nucleares, Brazil*, ²*Instituto de Geociências, Universidade Estadual de Campinas, Brazil*, ³*Universidade Federal do ABC, Brazil*
- [P.163] **Traffic flow and vehicular lane effect analysis in emerging country**
T. Tsuboi, *Nagoya Electric Works Co., Ltd., Japan*
- [P.164] **"The whispering game": Obstacles for municipal officials to apply the best available research when mitigating urban air pollution.**
E. Lisberg Jensen*¹, K. Westerberg¹, E. Malmqvist², A. Oudin², ¹*Malmö University, Sweden*, ²*Lund University, Sweden*
- [P.165] **Understanding the gaps between the planning and the implementation of smart and eco city projects in China**
H.M. Neumann*, G. Haindlmaier, D. Jakutyte-Walangitang, S. Meyer, *AIT Austrian Institute of Technology, Austria*
- [P.166] **Local level climate policy – Scopes for action in complex structures**
J. Brasche*, W. Lang, *Technical University of Munich, Germany*
- [P.167] **The non- linear relationship between R&D intensity and corporate financial performance in the alternative energy sector**
N. Hazarika*, X. Zhang, *City University of Hong Kong, Hong Kong*
- [P.168] **Increasing the market share of public transport - Obstacles for implementing efficient policy instruments and measures**
A. Wretstrand*^{1,3}, J. Dickinson^{2,3}, ¹*Lund University, Sweden*, ²*Swedish Environmental Protection Agency, Sweden*, ³*K2 – The Swedish Knowledge Centre for Public Transport, Sweden*
- [P.169] **Ways forward: Enhancing transformative capacity of Swedish municipal storm-water planning through visualization**
E. Glaas*¹, A. Bohman¹, M. Karlson¹, C. Navarra¹, J. Olsson², ¹*Linköping University, Sweden*, ²*Swedish Meteorological and Hydrological Institute, Sweden*
- [P.170] **Something old, borrowed and new to avoid the blue: Maneuvering citizen participation in the transition of Norrköping, Sweden**
E. Glaas*, E. Wihlborg, M. Hjerpe, *Linköping University, Sweden*
- [P.171] **Residential mobility of young adults in Indonesia**
T. Hasan*, H. Winarso, *Institut Teknologi Bandung, Indonesia*
- [P.172] **Multi-sectorial decision support tool combining national reporting and local knowledge**
L. Kiel, A. Müller*, *BBSR - Federal Institute for Research on Building, Germany*
- [P.173] **Designing education system to accommodate the needs of indigenous people living in urban areas.**
H. Lakra, S. Patil*, *IIT Roorkee, India*
- [P.174] **Impact of education on environmental knowledge: A case study of urban planning course in Education**
H. Lakra, S. Patil*, *IIT Roorkee, India*

Late Posters

- [P.175] **Exploring the interoperability of rail and road transport systems for sustainable mobility in Third World cities: experiences of Gautrain and Rea Vaya in the City of Johannesburg**
T. Gumbo*, T. Moyo, *University of Johannesburg, South Africa*
- [P.176] **Drink or not drink in a baroque garden. A Viennese case of conflicting interests between economic development in gastronomy, local residents and common interests**
U. Bechtold¹, J. Becker², J. Dau², V. Klugsberger², M. Seifert¹, E. Straßer*¹, H. Wilfing¹, ¹*Austrian Academy of Sciences, Austria*, ²*University of Vienna, Austria*
- [P.177] **A three dimensional framework to assess territorial energy vulnerability: the case of Chile**
M. Billi*^{1,2}, A. Urquiza^{1,2}, C. Amigo², ¹*Universidad Adolfo Ibáñez, Chile*, ²*Universidad de Chile, Chile*
- [P.178] **A systemic and nified framework to observe urban resilience: preliminary insights from the Chilean case**
M. Billi*^{1,2}, A. Urquiza², C. Amigo², ¹*Universidad Adolfo Ibáñez, Chile*, ²*Universidad de Chile, Chile*
- [P.179] **Assessing the impact of transportation on quality of life of elderly population**
B. Aguiar*¹, R. Macário¹, ¹*Instituto Superior Técnico, Portugal*, ²*University of Antwerp, Belgium*
- [P.180] **The Impact of Urban Natural View Corridors in Hamadan City on the Citizens' Mental Health**
A. Asgari*, M. Behzadfar, A. Naghdi, *Islamic Azad University, Shahr-e-Qods Branch, Tehran., Iran*
- [P.181] **Air Pollution and the Burden of Childhood Asthma in the Contiguous United States in 2000 and 2010**
R. Alotaibi^{1,2}, M. Bechle⁴, J.D. Marshall⁴, T. Ramani¹, J. Zietsman¹, M.J. Nieuwenhuijsen^{5,6}, H. Khreis*^{1,5}, ¹*Texas A&M Transportation Institute, USA*, ²*Imam Abdulrahman Bin Faisal university, Saudi Arabia*, ³*Texas A&M Health Science Center, USA*, ⁴*University of Washington, USA*, ⁵*Institute for Global Health, Spain*, ⁶*Universitat Pompeu Fabra, Spain*, ⁷*CIBER Epidemiologia y Salud Publica, Spain*
- [P.182] **Impact assessment of shift from conventional vehicle to electric vehicle on power generation source (coal thermal power plant) and environment**
V. Nimesh, V.M. Reddy, A.K. Goswami*, *Indian Institute of Technology, Kharagpur, India*
- [P.183] **Agriparks as urban amenities**
A. Laraba*, N. Chabbi-Chemrouk, *Ecole Polytechnique d'architecture et d'Urbanisme, Algeria*