

projects attempts are made to understand the benefits to public health from interactions with our seas and oceans, alongside the more widely discussed risks. For instance, while a traditional approach may look at the number of hospital admissions from exposure to marine pollutants, we balance this with estimates of health care savings arising from population levels of physical activity at the coast. As well as providing systematic multi-method evidence of the various benefits of living near and interacting with the sea, the talk will also cover a range of individual, local and societal level interventions to improve access and exposure to (safe) marine settings to support and improve population health especially among more vulnerable communities.

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### **7.03.P-Tu500 The Coastal Exposome: Investigating the Link Between Sea Spray Aerosols and Human Health Benefits**

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Oceans produce sea spray aerosols (SSAs) by bursting bubbles from breaking waves. SSAs are a complex mixture of inorganic salts, marine microbiota and bioactive molecules. Inhalation of low concentrations of these marine microbiota and bioactive molecules by acute and/or chronic exposure to coastal environments can potentially interact with cell signaling pathways, leading to positive health effects. Our research group previously demonstrated potential beneficial health effects of SSAs in vitro through inhibition of the Mammalian Target of Rapamycin (mTOR) pathway. mTOR is a key cell signaling pathway, regulating cell proliferation, autophagy and apoptosis. It has been associated with cancer, arthritis, insuline resistance and osteoporosis. At present, it remains unclear however which marine microbiota and bioactive molecules have an effect on the mTOR pathway and to what extent they are able to interact with the mTOR pathway in vivo.

### **7.03.P-Tu501 The Social Structuring of Coastal Visitation Behavior**

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Half of all recreational tourism involves a coastal destination, and increasing evidence shows that coastal nature provides various benefits for health and well-being. Yet, the diverse behaviors at the coast have remained poorly mapped. Following Bourdieu's distinction theory, we hypothesized the existence of key structuring patterns in visitors' activities and social interactions at the coast and clear associations with visitors' demographic, socio-economic, and health characteristics. Using data collected in Belgium from 2022 (N=1302), we found four structuring dimensions based on visit frequency, preference for beaches vs. built environments, visits with family vs. friends/alone, and socialization vs. exploration. We also segmented five types of visitors: Salty Socializers, Family Trippers, Singles In The City, Senior Foodies, and Lone Roamers. Visitors' behavior varied with age, household situation, and level of social support. Our findings illuminate the pivotal role of citizens' social capital in understanding visitors' exposome at the coast and repercussions for health.

### **7.03.P-Tu502 Assessing the Emotional Impact of Landscape Features on Well-being: An Online Video Experiment Across Flanders**

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Both green and blue spaces play crucial roles in supporting emotional well-being. However, the specific landscape features that contribute to these benefits remain unclear, with most research relying on site-specific experiments. To bridge these gaps, our study employs an online video experiment across Flanders to investigate how the proportion of green-blue spaces and soundscapes shape individuals' emotional health. Participants (n=571) are recruited through online platforms, social networks, and offline posters. Each participant is randomly assigned to watch one of the designed videos, assess their emotional states both before and after viewing, and complete a follow-up questionnaire. We address two primary research questions: (1) How do visual and auditory characteristics independently and interactively influence individuals' emotional states in urban and natural environments? (2) Does combining blue and green