

报告

结合环境与健康促进可持续城市研究

Linking Environment and Health for Sustainable Cities Research

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讲者介绍 Biography

关美宝教授是香港中文大学太空与地球信息科学研究所所长以及地理与资源管理学卓敏教授。当选英国社会科学院院士、美国科学促进会会士、英国皇家地理学会会士和美国地理学家协会会士。荣获美国地理学家协会多项卓越的学术荣誉，包括杰出学术成就奖、Wilbanks 地理学变革性研究贡献奖、Stanley Brunn 地理创意奖、Edward L. Ullman 交通地理学杰出贡献奖和 Melinda Meade 健康与医学杰出贡献奖等，以及美国地理信息科学大学联盟研究奖。主持科研项目累计经费达 6100 余万美元，在 20 多个国家发表主旨演讲、特邀讲座与报告 340 余次。近期研究项目主要关注个人环境暴露（噪音、空气污染和绿色空间）的健康影响、城市和移动问题、新冠疫情的时空动态性以及基于虚拟地理数据飞地（GVDE）的隐私保护。关教授的研究一直致力于地理隐私的方法研究，以寻求空间分析准确性与隐私保护的权衡，并研究公众对隐私问题与社会利益的看法，及其对新冠疫情防控措施接受程度的影响。

Professor Kwan Mei-Po is Director of the Institute of Space and Earth Information Science and Choh-Ming Li Professor of Geography and Resource Management of The Chinese University of Hong Kong. Prof. Kwan is a Fellow of the United Kingdom Academy of Social Sciences, Fellow of the American Association for the Advancement of Science (AAAS), Fellow of the Royal Geographical Society and American Association of Geographers. She was awarded many Outstanding Academic Achievement Awards by the American Association of Geographers, including the Distinguished Scholarship Honors, the Wilbanks Prize for Transformational Research in Geography, the Stanley Brunn Award for Creativity in Geography, the Edward L. Ullman Award for Outstanding Contributions to Transportation Geography, and the Melinda Meade Award for Outstanding Contributions to Health and Medical Research. She also received the U.S. University Consortium for Geographic Information Science (UCGIS) Research Award. Prof. Kwan has received over US\$61 million funding support as PI or co-PI and has delivered over 340 keynote addresses and invited lectures and presentations in more than 20 countries. Her recent projects examine the health impacts of individual environmental exposure (e.g., noise, air pollution, green space), urban and mobility issues, the space-time dynamics of the COVID-19 pandemic and the protection of geoprivacy via the development of a Geospatial Virtual Data Enclave (GVDE). Prof. Kwan's research has been on the trade-offs between spatial analytical accuracy and

privacy protection, the methods to address geoprivacy; and the examination of perception of privacy concerns and social benefits, and their impacts on the acceptance of COVID-19 mitigation measures.

More information can be found at: <http://www.meipokwan.org>

报告摘要 **Abstract**

通过整合地理、环境科学、生物医学科学与公共卫生的多学科知识与方法，有巨大的潜力来提升我们对建设健康城市和健康区域的理解和能力。此次汇报将讨论促进人类健康与环境交互的跨学科研究的概念与方法进展。结合我近期关于个人对空气、噪音污染和绿地暴露的研究项目，我将介绍利用先进的地理空间和移动技术（如实时移动感知和 GPS 跟踪）采集、整合和分析高分辨率时空大数据，并探讨其如何为人类日常移动、环境影响的复杂时空动态性与构建健康城市与社区提供新的认识。

There is a huge potential for enhancing our understanding of and ability to build healthy cities and healthy regions through integrating the knowledge and methods in geography, environmental science, biomedical science, and public health. In this presentation, I discuss recent conceptual and methodological developments that help advance interdisciplinary research on the interaction between human health and the environment. Drawing upon my recent projects on individual exposures to air pollution, noise and green space, I explore how the collection, integration, and analysis of high-resolution space-time big data enabled by advanced geospatial and mobile technologies (e.g., real-time mobile sensing and GPS tracking) can provide new insights on the relationships between people's daily mobility, the complex spatiotemporal dynamics of environmental influences and building healthy cities and regions.

有兴趣合作之项目 **Interested topics for future collaboration**

环境健康，可持续城市，空气污染及其健康影响，新冠肺炎与环境的关系

Environment and Health, Sustainable Cities, Air Pollution and Impacts on Health,
Relationships between COVID-19 Pandemic and Environment