

第6回

One Welfare教育研究センター
セミナー「Harnessing Big Data in
Advancing One Health」

日時：12月13日（水）16:00～17:00

場所：iCover 101号教室

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The One Health paradigm, recognizing the intricate interdependence of human, animal, plant, and environmental health, necessitates a holistic, transdisciplinary approach to understand and mitigate threats to public health. This seminar, titled "Harnessing Big Data in Advancing One Health," delves into the pivotal role of data-driven methodologies in enhancing our predictive, preventative, and responsive capabilities against zoonotic diseases, antimicrobial resistance, and environmental calamities, including harmful algal blooms. We will explore how Big Data serves as the cornerstone for unravelling the complex interplays within the global ecosystem, thereby enabling more effective early warning systems.

Central to this discussion is the challenge presented by the heterogeneous nature of data, varying collection methodologies, and diverse reporting standards. These factors often make datasets less usable immediately, posing significant barriers to data integration and analysis. Recent advancements in data science have revolutionized research and industry and we propose innovative solutions for integrating and interpreting complex datasets within the One Health framework.

The seminar will spotlight specific case studies, such as the application of advanced analytics in tracking and controlling the spread of harmful microorganisms in the ocean. These examples will underscore the transformative potential of data-driven approaches in veterinary and environmental sciences. We aim to provide attendees with a deeper understanding of the current landscape of Big Data in One Health, equipping them with insights into leveraging these tools to foster more resilient healthy ecosystems.

Our discussion will not only address the technical aspects of data science in One Health but also emphasize its practical implications. We aspire to inspire collaborative efforts across various disciplines, encouraging seminar participants to contribute to and lead in the evolving field of One Health. Join us in this enlightening exploration of how Big Data can redefine our approach to global health challenges, paving the way for a more integrated, informed, and impactful One Health strategy.