

PRESS RELEASE

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EU-funded PANDASIA project reduces risk of pandemics and enhances health literacy in Thailand and Europe

Thailand, Khon Kaen - The PANDASIA project investigates how infectious diseases are transmitted between animals, humans and environment and how potential pandemics emerge. The findings will be used to enhance health literacy in different target groups in Thailand and Europe

Emerging infectious diseases, which are caused by zoonotic pathogens such as viruses and bacteria are transmitted between animals and humans, pose an increasing threat to global health. Zoonoses occur primarily where wild animals and humans come into regular contact. Due to its species diversity, human population density, and movement, Southeast Asia is considered as hotspot for the emergence of new zoonoses and subsequent pandemics. Climate change and loss of biodiversity accelerate the risk of new pandemics. The EU-funded, transdisciplinary scientific project PANDASIA investigates potential risks of new pandemics in Thailand and develops preventive measures. Findings will be used to enhance health literacy of different target groups and communities.

From 13-17 February 2023, the Kick-Off-Meeting of the EU PANDASIA project took place in Khon Kaen in northeastern Thailand. Hans J Overgaard, the project coordinator from the Norwegian University of Life Sciences, says: "How does a local pandemic develop into a global threat and how can this process be avoided or stopped in time? PANDASIA is a new, transdisciplinary EU project by universities and research institutions in Europe and Thailand with the aim of investigating the origin of pandemics guided by the `One Health` approach. This transdisciplinary approach applies human, animal and environmental health and social science". Biologists, veterinarians, mathematicians, sociologists and human medical doctors from Norway, Sweden, United Kingdom, Germany, and Thailand are working closely together to understand the dynamics of so-called zoonotic "spillover infections" and to develop a predictive

framework with effective preventive measures. PANDASIA will collect data from local communities in Thailand to determine their exposure to wildlife and livestock. Biodiversity specialists will sample the relevant biodiversity which virologists will then examine for viruses that have the potential to spill over to humans. Based on these data, models will be developed which aim to predict the future risk of the spread of new infectious diseases. A pandemic preparedness and prevention literacy (3PL) intervention will be developed, implemented and tested to improve the knowledge and practices of local communities and to reduce and prevent possible zoonotic transmission from animals to humans, thus reducing the risk of local outbreaks becoming global pandemics. Since pandemics first occur at the local level, it is extremely important for the scientists of this project to work closely with local government units and communities, non-governmental organisations and environmental and agricultural authorities in Thailand to improve their pandemic health literacy. The consortium partners of the PANDASIA project aim to expand their current understanding of the drivers of emerging infectious diseases and the interaction of viruses between humans, animals and the environment.

The PANDASIA project is funded by the EU HORIZON.2.1 - Health programme “European Union Research and Innovations Actions” (<https://cordis.europa.eu/project/id/101095444>). This programme explores new technologies and new methods or improve existing ones. PANDASIA is coordinated by the Faculty of Science and Technology of the Norwegian University of Life Sciences (NMBU) and includes the following consortium members:

Norwegian University of Life Sciences (NMBU); Norwegian Veterinary Institute (NVI); Khon Kaen University (KKU); Leibniz Institute for Zoo and Wildlife Research in Berlin (Leibniz-IZW); Universitätsklinikum Heidelberg (UKHD); Queen Mary University of London; Center of Excellence for Emerging and Re-emerging Diseases in Animals (CU-EIDAs) at the Faculty of Veterinary Science; Chulalongkorn University (CU); Umeå University; Faculty of Environment & Resource Studies, Mahidol University (MU); and SUPA71 Co., Ltd.

Boiler plates - consortium members

Norwegian University of Life Sciences (NMBU)

NMBU's mission is to contribute to the well-being of the planet. Our interdisciplinary research and study programmes generate innovations in food, health, environmental protection, climate and sustainable use of natural resources. NMBU's research and study programmes are enabling people all over the world to tackle the big, global challenges regarding the environment, sustainable development, how to improve human and animal health, renewable energy sources, food production, and land- and resource management. <https://www.nmbu.no/en>

Norwegian Veterinary Institute (NVI)

The Norwegian Veterinary Institute is a national biomedical institute delivering research-based knowledge and contingency support in the fields of animal health, fish health and food safety. The NVI is the national leading centre of expertise in biosecurity in fish and land animals. The aim of the Institute is to become Norway's centre of preparedness for One Health.

<https://www.vetinst.no/en>

Khon Kaen University (KKU)

The Khon Kaen University is the first medical school in the northeast region of Thailand and the leading academic centre. Interdisciplinary and integrative teaching and research are the focus of training medical practitioners as well as a range of complementary support scientists and lecturers to serve Thailand. KKU focuses on family medicine, community health, wellbeing, endemic health problems, tropical disease research. <https://m.kku.ac.th>

Leibniz Institute for Zoo and Wildlife Research in Berlin (Leibniz-IZW)

The Leibniz Institute for Zoo and Wildlife Research (Leibniz-IZW) is an internationally renowned German research institute of the Leibniz Association. Its mission is to examine evolutionary adaptations of wildlife to global change and develop new concepts and measures for conservation. To achieve this, the Leibniz-IZW uses its broad interdisciplinary expertise in conducting research for conservation in close dialogue with the public and stakeholders.

<https://www.izw-berlin.de/en/home.html>

Heidelberg University Hospital and Faculty of Medicine (UKHD)

Internationally renowned patient care, research and teaching.

Heidelberg University Hospital (Universitätsklinikum Heidelberg, UKHD) is one of the largest and most prestigious medical centers in Germany. The Medical Faculty of Heidelberg University (Medizinische Fakultät Heidelberg, MFHD) belongs to the internationally renowned biomedical research institutions in Europe. Both institutions have the common goal of developing new therapies and implementing them rapidly for patients. Heidelberg University Hospital and the Medical Faculty of Heidelberg University employ around 14,500 employees and are committed to provide trainings and qualifications. Every year around 86,000 patients and more than 1,100,000 outpatient cases are treated in more than 50 clinical departments with almost 2,500 beds.

<https://www.klinikum.uni-heidelberg.de/>

Queen Mary University of London

As a leading research-intensive University, we believe that when views collide, disciplines interact, and perspectives intersect, truly original thought takes form. Throughout our history, we've fostered social justice and improved lives through academic excellence. Our reformer heritage informs our conviction that great ideas can and should come from anywhere. It's an approach that has brought results across the globe, from the communities of east London to the favelas of Rio de Janeiro. We continue to embrace diversity of thought and opinion in everything we do, in the belief that when views collide, disciplines interact, and perspectives intersect, truly original thought takes form.

<https://www.qmul.ac.uk/>

Center of Excellence for Emerging and Re-emerging Diseases in Animals (CU-EIDAs) at the Faculty of Veterinary Science, Chulalongkorn University (CU)

The mission of the Faculty of Veterinary Science at CU is to enhance veterinary medicine by academic excellence in education, research, and service to the profession. As the premier educator of veterinary medicine in the country, the faculty conducts cutting-edge research for the benefit of society and the region and educates graduates with the knowledge, skills, and ethics necessary to deliver quality service to society. The Center of Emerging and Re-emerging Infectious Diseases in Animals (CU-EIDAs) is a research excellence centre located at the Faculty of Veterinary Science's Department. The centre is organised by competent and well-trained research scientists and students and focuses on emerging and re-emerging

illnesses in animals and humans. CU-EIDAs research generates fundamental and new knowledge, as well as preventative and control strategies for emerging and re-emerging illnesses in humans and animals. Additionally, the centre works on capacity building and laboratory networking in order to prepare for future pandemics caused by emerging and reemerging illnesses.

<http://www.eidas.vet.chula.ac.th>

Umeå University, Sweden

Formally established in 1965, Umeå University is a comprehensive university covering research and education in medicine, science and technology, social sciences, arts and humanities, and educational sciences. As a knowledge-driven organisation, Umeå University is striving to provide students and staff with unique opportunities for learning and development – whilst simultaneously serving society with new knowledge and creative citizens.

<https://www.umu.se/en/department-of-public-health-and-clinical-medicine/>

Mahidol University, Thailand

The Mahidol University builds excellence in education, research and academic services in the field of environment, natural resources, medical and health science. The University wants to be the number one institution for environmental study in Thailand in 2025, and in the top three in the ASEAN region in 2031.

<https://en.mahidol.ac.th/index.php/about-eng>

SUPA71 Co., Ltd, Thailand

SUPA71 helps organisations across the Greater Mekong Subregion (GMS) countries to meet their research and capacity building needs. SUPA71 is a private research firm based in Bangkok, Thailand with highly qualified professionals providing research technical expertise in the GMS offering research-related services in education, risk communication, children, migration, social behaviour change communication, technology, innovation, marketing, population health, epidemiology, and infectious emerging and re-emerging infections. SUPA71 is currently working on several malaria-related projects and on COVID-19 prevention and control measures at Thai and migrant Points of Entry.

<http://www.supa71.com>

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