

MCC Press Release

Stopping climate change protects human health – a major project helps to pool the knowledge

The Wellcome Trust has commissioned a consortium led by MCC researchers to push the boundaries of research synthesis through artificial intelligence.

Berlin, 05/12/2024. The moral obligation to protect people around the world against the climate crisis as best as we can motivates an unprecedented research project: “DESTINY” is a high-profile international research consortium with partners in Europe, Africa and Australia, developing new tools powered by artificial intelligence (AI) to sift through and summarise the vast research literature. The project is led by researchers from the Berlin-based climate research institute MCC (Mercator Research Institute on Global Commons and Climate Change).

A symbol for this endeavour, DESTINY is also an acronym for “Digital Evidence Synthesis Tool Innovation Yielding Improvements in Climate & Health”. The funding body – providing 12 million euros over four years – is the Wellcome Trust, founded in 1936 by pharmaceutical entrepreneur Henry Wellcome and now the largest charitable foundation in the UK. The generation of knowledge from countless individual studies is particularly well developed in the health sector, and this is [considered a model](#) for research synthesis in the no-less-vital field of climate action.

“Stopping climate change is critical for securing human health,” says [Jan Minx](#), head of the MCC working group Applied Sustainability Science and principal investigator of the DESTINY project. “Policymakers need the best and most recent scientific evidence to support their decisions, but the ready-to-hand evidence is often anecdotal and outdated. This project is pushing the boundaries of what is possible by using the latest advances in AI. It will demonstrate that the scientific knowledge needed for health-centred climate action can be synthesised and provided almost instantly. Speed and scientific rigour can go hand in hand – this is key to efficiently solving the big issues of our time.”

This large-scale project will develop novel AI-driven tools to make evidence synthesis faster, cheaper, more useful and living. The tools will automate and streamline tasks such as detecting relevant individual studies, extracting and synthesising their respective findings and identifying overarching insights. The project will showcase the transformational power of these tools for the delivery of rigorous living evidence on effective health-centred climate action. To ensure that tools are fit-for-purpose and work for all, work is organised in communities of practice with decision-makers around the globe and across scales.

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Despite all the modern tools, one resource remains central: human judgement. “No matter how agile AI can make research synthesis, the end product – namely scientific policy advice – must not be based on a black box,” emphasises MCC postdoc [Max Callaghan](#), who is leading one of the project’s six work packages. “DESTINY will develop AI-driven evidence synthesis tools responsibly, with humans in control to safeguard methodological standards.”

The project takes place in the context of a wider investment into evidence-gathering infrastructure, recently the subject of a [report in the journal Nature](#), with a total of almost 70 million euros in funding. DESTINY will start in early 2025, when MCC [will be a part of the Potsdam Institute for Climate Impact Research](#). The consortium partners are University College London, The London School of Hygiene & Tropical Medicine, the ACRES Center for Rapid Evidence Synthesis, Future Evidence Foundation, the African Synthesis Centre for Climate Change, Environment and Development, Effective Basic Services (eBase) Africa, the Campbell Collaboration and Cochrane. “Having a diverse community of partners will ensure equity and inclusion in global evidence infrastructures,” says Patrick Okwen, Co-Investigator from eBase Africa.

Further information

DESTINY project website: <https://destiny-evidence.github.io/website/>

About MCC

MCC explores and provides solution-oriented policy portfolios for climate mitigation, for governing the global commons in general, and for enhancing the many aspects of human wellbeing. Our six working groups are active in fields like economic growth and development, resources and international trade, cities and infrastructure, governance, and scientific policy advice. Co-founded by the Mercator Foundation and the Potsdam Institute for Climate Impact Research. | www.mcc-berlin.net/en | https://twitter.com/MCC_Berlin

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