

Research application:	AI and the everyday political-economy of global health
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Motivation for the position, including research area, level of ambition and novelty (6000 characters):

Of all the societal effects from Covid-19, least understood but likely to be most long-lasting is the rapid proliferation of artificial intelligence (AI) based technologies in global healthcare. AI has been portrayed as the 'solution' for containing the spread of the pandemic and saving human lives. Despite concerns over privacy and surveillance, the current state-of-exception has created a new terrain for what is politically acceptable in which the global political-economy of private health data combined with AI and autonomous systems has significant implications for the individual person and society.

Transnational ownership of private health data

In many countries, not only has the state acquired access to new troves of data, but private health data has been passed over to transnational corporations on the grounds that their algorithms designed to steer consumption habits, logistics networks, or voter behaviour, may be adapted to create precision solutions for controlling and suppressing the spread of the pandemic. In response, civil society groups have demanded transparency to know the terms of the agreement by which, for example, the medical data of the UK population has been handed over to large technology multinationals, some with alleged links to vested interests (<https://www.opendemocracy.net/en/digitaliberties/we-cant-let-tech-companies-use-algorithms-to-police-us-after-covid-19/>).

The political-economy of private health data

The question of who controls the data and for what ends has significance for not just healthcare but also the distribution of power within and between societies. Human health is often seen as statecentric, healthcare governed by national regulations – including whether access requires private health insurance – and treated as indicative of a state’s development. The prominence of AI in healthcare challenges that statecentrism, because of gross inequalities in the global political-economy of the digital industry. In stark contrast to much of the rest of the economy that has faltered during Covid-19, the digital industry has seen a period of unprecedented growth that has only strengthened those inequalities and left regions, including the European nations, in the position of being service users rather than controllers and providers of that industry. Where unable to rely on domestic actors to offer similar services, political leaders are left to decide whether to ignore the promises of AI or embrace them and hand sovereignty of the most sensitive population data to private interests beyond their oversight.

Regulatory capacity

The importance of AI in healthcare contrasted with a geographically imbalanced digital industry creates a challenging regulatory environment at the global level, in which health data and the application of AI crosses borders, but the capacity to regulate is still confined to the nation. Healthcare is not easily regulated at the global level; the human body and the cultural norms through which we live are much more often thought of in national terms. To develop global institutional mechanisms by which AI can be used to achieve optimal outcomes for human health means we need to somehow straddle the gap between the everyday realm of the individual and the increasingly global reality of contemporary healthcare.

Ensuring the potential of AI in global healthcare

Global healthcare sits at the intersection of numerous fields of research, including the Medical Sciences, Public Health Sciences, Ethics, International Law, Politics, Sociology, Science & Technology Studies (STS), Economics, and International Relations. It is where we see societies constituted, providing one of the main arenas in which we define what

it is to be a healthy and well-functioning human. Handing that definitional exercise over to algorithms does not negate human agency since we have created those systems, but it does pose significant challenges where the algorithms are opaque, as well as risking a legitimacy crisis for healthcare providers if at the everyday level we find it increasingly difficult to relate to our own healthcare, particularly where AI exceeds the regulatory capacity of any single state. The public is likely to initially accept AI in healthcare if it improves diagnosis and treatment, for example, and so garners output legitimacy. Yet, evident and unresolved power imbalances without global policies able to mitigate the worst effects of that inequality risk obstructing the potential benefits of AI in global healthcare.

Research question

The above issues lead us to identify the central question as follows: How are governance structures emerging in response to the rapidly accelerating role of AI in global healthcare, and what are the implications for the distribution of power in global politics? The question includes two key issues.

First, we need to know how institutional actors (i.e. states and international governmental organisations), are responding, and their relationship to private actors currently leading these developments. This requires tools from International Relations, Law, and Global Politics, but to assess their democratic credentials one should relate closely to the Public Health Sciences, including critical literature from Patient-Public Involvement (PPI) studies.

Second, to understand the role of society and the individual person within these developments, research needs to look at the wider social context in which civil society, professional medical associations, as well as everyday individuals relate to, and experience, both the proliferation of AI and autonomous systems in global healthcare and emergent governance regimes. This relates to several fields, including Sociology, Politics, Participatory Design, as well as the STS literature.

The associate senior lecturer will work on the central research question, with the PhDs each concentrating on one of the two key issues identified and collaborating where relevant.

Description of how this position contributes to the vision and plans of the university in the area of AI, autonomous systems, humanities and society (2000 characters).

Contained within its Strategy 2022, Malmö University is committed to boundary-crossing research and teaching. The applied for positions – one associate senior lecturer and two PhDs (one funded via MAU’s co-financing) – will greatly benefit from, as well as enhance, MAU’s strength as a multidisciplinary university. The positions will be supported by an existing research group – ‘**Precision Health and Everyday Democracy**’ (PHED) – working across the faculties of Culture & Society, Health & Society, and Technology & Society, in

which we are focused on the role of healthcare in society and its link with democracy. PHED is engaged in research, having attracted external funding, and is currently central coordinator of a recently submitted international consortium bid for EU Horizon 2020 funds that includes development of an AI-based app to enhance healthcare access for marginalised migrants. The positions being applied for here will sit within that active environment but be based at the department of Global Political Studies (GPS) for the reason that we see an urgent need for new research in the above-stated topic area that connects well with the field of Global Politics in which we have developed a successful MA and PhD programme and publish internationally.

To maintain our multidisciplinary strength, the associate senior lecturer will be required to provide teaching in multiple faculties to students working in health and technology, as well as other fields. To ensure the same for the PhD candidates, part of their supervisory team will be made of colleagues based within either Health or Technology Studies. This is a model already developed for an existing PhD student, which was enabled via PHED, with a student being supervised by colleagues from both the Political and Health Sciences. For the field identified above, that relates to both Global Politics, AI, and Healthcare, it is essential to further invest in MAU's multidisciplinary research and teaching.

Description of how the position contributes to the vision of WASP-HS (2000 characters).

The positions applied for here, as well as that to be supplemented by MAU, speak directly to the stated vision of WASP-HS by identifying the consequences and challenges of AI and autonomous systems for humanities and societies, as well as moving further to study current attempts to ensure the promise of AI in global healthcare is realised on an egalitarian basis to maximise human welfare. The proposal identifies a gap in existing research in which new enquiry is able to both enhance academic knowledge but also directly benefit society through helping us to produce better public governance in this increasingly central but poorly understood empirical field.

Sweden is globally recognised for its welfare society with a highly inclusionary healthcare system, and yet in recent years there has been growing concern that it is becoming less open to marginalised groups with the threat of growing inequality and disenfranchisement. Also, like other European nations, Sweden has little domestic capacity to lead in the adoption of AI in healthcare when compared to international competition and is therefore in future years likely to face significant pressure to relinquish domestic sovereignty over its healthcare. Failure to understand these issues undermines not only the chances for Sweden to achieve outcomes beneficial to society and the individual person, but also challenges the democratic basis of society by losing control over a central function of the Swedish state.

Industry within Sweden is much more technologically-capable than in many other parts of Europe, meaning there is also the chance that businesses either existing now or to develop in the near future may be able to play an important role developing AI-based healthcare in a way that benefits the Swedish population whilst opening new markets.

The proposed positions will produce knowledge able to help Swedish entrepreneurs better anticipate these developments.

Description of the multidisciplinary aspects of the position (2000 characters).

The role of AI in the everyday political-economy of global health requires researchers able to work beyond the confines of a single discipline. All three positions will include teaching commitments that strengthen MAU's multidisciplinary Swedish and European training in AI and autonomous systems, with the associate senior lecturer expected to become a long-term part of our university with commitments to multiple programmes. S/he will do much of their teaching at GPS within our Political Science BA, International Relations BA, and Global Politics MA and PhD programmes, providing expertise on the specific themes outlined in this proposal and, more broadly, the societal impact of AI and the relationship to the state and global governance, including the political-economy of AI and autonomous systems. In our Human Rights programme, students will benefit from debating how to balance the promotion of the right to health with respecting the right to privacy. We also envisage teaching within the Communication for Development programme where there is a shared interest in studying global inequality within the digital industry.

Elsewhere at Malmö, new knowledge on the impact of AI within healthcare is of value to both our Nursing education at the department of Care Sciences, and several programmes within the faculty of Technology & Society (e.g. Interaction Design, Innovation for Change in a Digital Society). Several colleagues from the mentioned education programmes have established strong multidisciplinary relations through the PHED research group.

Overall, we are justifiably confident that the proposed positions will connect to teaching and research at MAU, where we have established experience in communicating across disciplines. The proposal forms part of MAU's continuing investment in multidisciplinary, which is essential for producing, as well as communicating, new knowledge on societal shifts like the proliferation of AI and autonomous systems in global healthcare.

**The application text is published here as a research protocol report authored by Michael Strange, Department of Global Political Studies, Malmö University
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