

Biden time

Unlike their predecessors in the White House, Joe Biden and Kamala Harris are placing research and development at the centre of their policy agenda. This change was as sorely needed as it is welcome, but the stakes for the new US administration remain high.

For those of us that were saturated with the unpredictable, immature and kleptocratic antics of the Trump presidency, the inauguration of Joe Biden represents a welcome return to a more dignified and consensual mode of government for the United States.

Although the transition period between the election and Biden's swearing-in ceremony itself was marred by baseless accusations of electoral fraud that culminated with the outgoing president's disgraceful incitement of the storming of the US capitol on 6 January, scientists can breathe a collective sigh of relief. For all the policy disagreements that we shall inevitably see in the coming four years, there will at least be common ground in acknowledging the physical reality that exists around us.

On his first day in office, Biden signed a series of executive orders that marked a sharp break from Donald Trump's policies on immigration, the environment and racial justice. In particular, he will bring his nation back into the Paris climate agreement, and has acted to reverse the domestic environmental deregulation pursued by his predecessor. Moreover, he announced a task force of public health specialists who will counsel him on a strategy to curtail the coronavirus pandemic.

Perhaps the biggest signal of scientific intent is the elevation of the director of the Office of Science and Technology Policy (OSTP) to serve as a member of Biden's cabinet — a first for this position. The nominee for this appointment is MIT and Harvard geneticist Eric Lander, and should he be approved by the Senate, he will be in charge of coordinating science policy and priorities across US federal agencies.

In a letter to Lander that provides a hint of what might lie ahead for US science, Biden outlined five key questions he wants the OSTP to address and provide advice on: how the administration could draw lessons from the pandemic that could inform public health policy more broadly, how science and technology breakthroughs could be used to mitigate the impact of climate change, keep the country a world leader in innovation, use science to improve social equity and strengthen the US research enterprise.

Biden's letter invokes former president Franklin Roosevelt's 1944 letter to his



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science administrator Vannevar Bush. This reference should excite scientists, because Bush's response was his famous 1945 report *Science — The Endless Frontier*, a document that set forth the fundamental tenets of a science and technology policy that has, broadly, been followed by the United States ever since, and indeed helped to cement the wider notions that public funding for research is a vital government function and that the advances of science should benefit most people in the world.

At the same time, however, the comparison to a policy that was largely shaped by the experience of the Second World War should remind scientists and policymakers of the stakes that are at play. If Biden governs well, by administering vaccines that will bring the coronavirus pandemic to an end, by healing a ravaged economy that is blighted by entrenched inequality and perverse outcomes, and by calming the societal tensions so evidently on display in the streets of the United States in the past year, he can stem the sense of decay in US (and by extension Western) credibility since the turn of the millennium.

If, however, Biden fails, it becomes difficult to see how a wider secular decline can be averted. Should the terrain become ripe for a populist comeback in the 2024 election, the

doom loop of questioning and dismantling vital institutions and then blaming others when their very absence becomes painfully apparent could be reactivated. Biden, and therefore the wider scientific establishment he is placing so much trust in, will be judged on their competence and their ability to deliver a better future.

The 75 years that have passed since Bush's report have coincided with the most consequential scientific advances in human history, and in his letter to Lander, Biden is right to note that the United States has been leading the way throughout this time. Indeed, it is no exaggeration to suggest that it is partly as a result of this pioneering spirit that his country remains the anchor of the international system. But if we accept that is the case, we must therefore also recognize that as the United States refreshes and reinvigorates its national science and technology strategy for the next 75 years, it also carries the responsibility of shoring up liberalism's good name.

There are good reasons to be optimistic about this presidency. But it must not be complacent of the task that lies ahead. □

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