political affiliations suggests that Republicans are indeed a minority in universities. A 2009 poll of the American Association for the Advancement of Science's members, who are mostly academics, found that only 6% identified as Republican. Fifty-five per cent of respondents said they were Democrats and 32% were independents. And a 2014 survey by researchers at the University of California, Los Angeles, found that outside of mathematics, economics and engineering, academic scientists in the United States overwhelmingly identified as liberal.

CAMPUS DIVIDE

The causes of this ideological divide are murky. Politically conservative scholars may drop out of academia because they feel unwelcome, or just because they are drawn to jobs with better pay and shorter training periods, says Richard Alley, a Republican and a geologist at Pennsylvania State University in University Park.

What is clear is that conservative and liberal scientists have trouble engaging with each other, says a biologist at a public university in the midwestern United States, who asked to remain anonymous to protect her career. Only one person at her university has ever asked her why she is a Republican, she says. "For most of my colleagues, anyone who is a conservative must fall somewhere on the continuum between stupid and evil," the biologist says.

The situation has worsened since Trump took office in January, she adds. "What you believe has come to be a stand-in for whether you are a good person."

Then there is John Tellis, a chemist at the biotechnology company Genentech in South San Francisco, California. When Tellis was studying for his PhD at the University of Pennsylvania, he tried not to reveal his Republican views. Now, ironically, the election of a Republican president has made it easier for him to talk about politics with his co-workers, he says, because they share his distaste for Trump.

"What you believe has come to be a stand-in for whether you are a good person."

Encouraging political diversity among scientists could improve research by helping people to see beyond their own views and prejudices, says Richard Freeman, a labour economist at Harvard who studies gender and racial diversity in science.

He notes that Republicans are not alone in staking out political positions contrary to mainstream science. Surveys show that Democrats tend to be more sceptical than Republicans about the safety of genetically modified organisms and nuclear power, even though many studies have concluded that the technologies are safe.

The parties' ideological differences translate into different priorities for government science funding. When Republicans control the government, they tend to increase the military's research and development budget — which includes programmes that support academic scientists in a broad range of disciplines. By contrast, Democrats tend to increase the budgets of the EPA, NASA and the Department of Commerce, which includes the National Oceanic and Atmospheric Administration.

Scientists could build bridges with conservative politicians by improving their relationship with the military, Freeman says, which is "100% pro-science". Although many of its political boosters are sceptical of global warming, the military has spent billions of dollars on green-energy technology over the past decade. The Pentagon has also warned that climate change could cause water and food shortages and unrest in unstable regions of the world.

Others say that people who dismiss all Republicans as anti-science should look deeper into the party's history. Republican president Richard Nixon created the EPA in 1970, Alley notes. And Republican congressman Newt Gingrich led an effort in the late 1990s to double the NIH budget. "There's a long tradition of support," he says, "even if it's the other way right now." ■

PUBLIC HEALTH

War on neglected diseases heats up

Global coalition sees some success in eliminating illnesses, but challenges, such as access to treatments, remain.

BY AMY MAXMEN

As a physician in Tanzania, Upendo Mwingira has little to offer people who have elephantiasis, an incurable condition characterized by swollen, wrinkled limbs. "When they enter the clinic, they smell, their wounds are oozing and, as a doctor, the best thing I can do is help them accept their situation," says Mwingira, who directs the neglected-tropical-diseases division of Tanzania's Ministry of Health in Dar es Salaam.

But people with the condition have become an increasingly rare sight in her clinics. A global effort to curb the disease that results in elephantiasis, called lymphatic filariasis, has sent the number of new cases plummeting in Tanzania and at least 18 other countries. Seven more nations, including Cambodia and Sri Lanka, have eliminated it in the past year. The prevalences of other neglected tropical diseases that affect the world's poorest people have been dropping, too. But health officials are not resting on their laurels. Even as they celebrate these victories, they are meeting this week in Geneva, Switzerland, to ramp up their efforts to combat the diseases.

They will make plans to treat the hundreds of millions of people who still need it, and to come up with ways to reach communities located far from health services. Several groups will also announce extra funding to fight neglected diseases. The Bill & Melinda Gates Foundation in Seattle, Washington, plans to commit another US$335 million to the cause, and the UK Department for International Development (DFID) will contribute £360 million (US$450 million).

Neglected tropical diseases affect roughly 1 billion people worldwide and kill about 534,000 each year, according to the US Centers for Disease Control and Prevention (CDC).

The Gates Foundation threw its energy into fighting these illnesses starting in 1999, when it realized that a relatively small investment could dramatically improve millions of lives, says co-founder Bill Gates.

BETTER TOGETHER

Gates told *Nature* that recent successes are the result of global partnerships between governments, companies and non-governmental organizations that have formed over the past decade. Multiple groups, including the Gates Foundation, the US Agency for International Development (USAID) and DFID, signed a global agreement in 2012 called the London Declaration on Neglected Tropical Diseases to eliminate or reduce the prevalence of ten neglected diseases by 2020. Five of the targeted maladies, such as lymphatic filariasis and leprosy, can be prevented with drugs. Treatments are the only option for the other five, including visceral leishmaniasis (or kala-azar) — a potentially fatal disease spread by sand flies — and river blindness.

Pharmaceutical companies have been donating drugs for these illnesses for over a decade, ▶

MAGGIE STEBER/*THE WASHINGTON POST*/GETTY

Elephantiasis is the result of a neglected tropical disease that overwhelmingly affects poor people.

but the lack of reliable distribution systems has often kept people from receiving treatment. Since 2006, USAID has been trying to fix that issue. One way is by funding non-governmental organizations that ensure community workers in remote towns have the tools they need to treat people who are ill.

As a result of this and other efforts, disease transmission has slowed. More than 300 million people who required treatments for at least one neglected tropical disease five years ago no longer need them.

But millions of people around the world still need therapies and cures. Scientists could speed up progress by considering the challenges in places where neglected diseases occur, says David Molyneux, a parasitologist at the Liverpool School of Tropical Medicine, UK. For example, strategies to train and pay health workers to spot early signs of infection might save more lives than sequencing parasitic genomes.

And simple tests for detecting several neglected diseases would also be advantageous for people around the world, says Tom Frieden, a former CDC director.

All of this work requires money, which might be a problem if the US Congress approves President Donald Trump's request to cut the budget of the state department and USAID by 37%. "Any drop of funding in this area will lead to more death and more suffering," Gates says.

However, the partnerships formed over the past five years provide a kind of safety net. And the fact that the United Nations chose alleviation of poverty as its first Sustainable Development Goal — a list of targets for 2016–30 made by global leaders to improve the world — gives researchers such as Molyneux hope. "Unless you are going to do something about these diseases, people in poverty will continue to be constrained by poverty." ■

CORRECTION

The News story 'Cassini's science swan-song' (*Nature* **544,** 149–150; 2017) erred in implying that the inner rings are known to contain propeller-shaped gaps. The gaps are known to exist in outer rings, but no hints have yet been seen of them in the inner ones.