

Editorial

Scientists, do it like Al Gore

Human health has currently to face a growing series of global issues. From the spread of HIV/AIDS to a fresh outbreak of tuberculosis, increasingly drug-resistant, the world is witnessing a return, mostly unexpected, of infectious diseases. At the same time, the economic growth in many regions of the globe is generating a sort of “epidemics of wellbeing diseases”: obesity, diabetes, heart disease. The achievements of molecular biology – especially the human genes identification, sequencing and functional studies – have not been matched by an equal development ability of medicine and molecular pharmacology, i.e. the ability to find solutions to genetic pathologies. Finally, too many “poverty diseases” – ranging from malaria to malnutrition, including diarrhea – are still opposed only by “orphan treatments” and “orphan drugs”, i.e. no therapy.

Global medical issues, given their size and urgency, are not less important than global environmental issues, i.e. climate change. And, precisely as climate change, are grounded upon a solid scientific base.

However, differently from climate change, those issues are apparently unable to break into the general public’s attention, to climb the political agenda and to stand as absolute priority issues before the international community.

What can we do, together with doctors and researchers, to effectively change this situation? was the question asked in a *Science* editorial signed by Jim Wells – a professor in the departments of Pharmaceutical Chemistry and Cellular and Molecular Pharmacology at the University of California at San Francisco, USA – and Mary Woolley – president and chief executive officer of Research!America in Alexandria, VA, USA.¹

The answer was simple. Let’s do it like Al Gore. Let’s launch (or let’s try to launch) a vast populist movement for the development of basic research in the biomedical field, just like the former vice-president of the United States did for the campaign against climate change.

Global and local health issues are crucial as much as environmental issues. The instruments deployed until now to face and to try to tackle major health problems are not enough. Better scientific knowledge, increased political commitment and higher social awareness are needed.

Doctors and scientists willing to face those problems and to tackle them should realize that the major global and local problems of human health do not have a solution, if the solution is to be entrusted solely to the market forces. Indeed, the return of infectious agents, the spread of wellbeing diseases, the still pending gene therapies, the ever-present diseases of the poor are still there even though for some decades biomedicine has been the main sector for investments in research and development, especially in America.

Doctors and scientists should realize that as a category – not monolithic at all, among other things – do not have the strength to impose the health emergency as a priority issue on politics, not even in countries such as the US, where researchers are advocated by politicians and taken on by the ruling class of the country.

Hence, supporters are needed to succeed in breaking the attention wall with a stronger impact. What is needed is a policy of alliances. And in this context who is a stronger ally than public opinion, already considered by some as ranking as a major global power?

So, let’s stimulate the birth of a large populist movement – maintain Wells and Woolley – precisely as Al Gore did with climate, in order to both make clear that global health problems are urgent and spread awareness on the need to tackle them (also) through the development of basic science.

The proposition of an alliance between worried scientists and citizens put forward by Jim Wells and Mary Woolley is not a mere intellectual provocation, but rather a plastic expression of the new relations now being established between science and society. On the one hand it spurs scientists to «become political activists», precisely as it happened at the end of the second world war for atomic scientists committed to tackle the global problem of nuclear proliferation,² to develop a policy for alliances; and to consider the general public as their most direct ally, as it happened for Albert Einstein when in 1946 he was elected president of the *Emergency Committee of Atomic Scientists*,³ and also a few years later when, in 1955, he wrote along with Bertrand Russell the founding *Manifesto* of the Pugwash Movement.⁴

The proposition by Jim Wells and Mary Woolley also contains the evocation in the public opinion of an active «scientific citizenship», which is an ever more decisive part of citizenship *tout court*, which is the basis both for the solution to the major problems of society and the quality of its democracy.

And finally, the proposition by Wells and Woolley also contains the evocation of a science communication that goes well beyond a “mere popularisation” and which becomes decisive communication within the community. Quite significantly, in this period it is the magazine of the largest association of scientists in the world (the AAAS of the United States) that accepts this challenge and somehow makes it its own.

Translated by Massimo Caregnato

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Notes and references

¹ J. Wells and M. Woolley, *A Populist Movement for Health?*, *Science* **32** (2008) 15.

² K. Drueding, *The Natural Business of a Scientist. The Atomic Scientists' Movement in America*, Thesis for the Robert D. Clark Honors College and the Department of History, University of Oregon (2004).

³ A. Einstein, letter of 22 January 1947, <http://www.fas.org/sgp/eprint/einstein.html>.

⁴ Pugwash on line, *The Einstein-Russell Manifesto*, <http://www.pugwash.org/about/manifesto.htm>.

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