

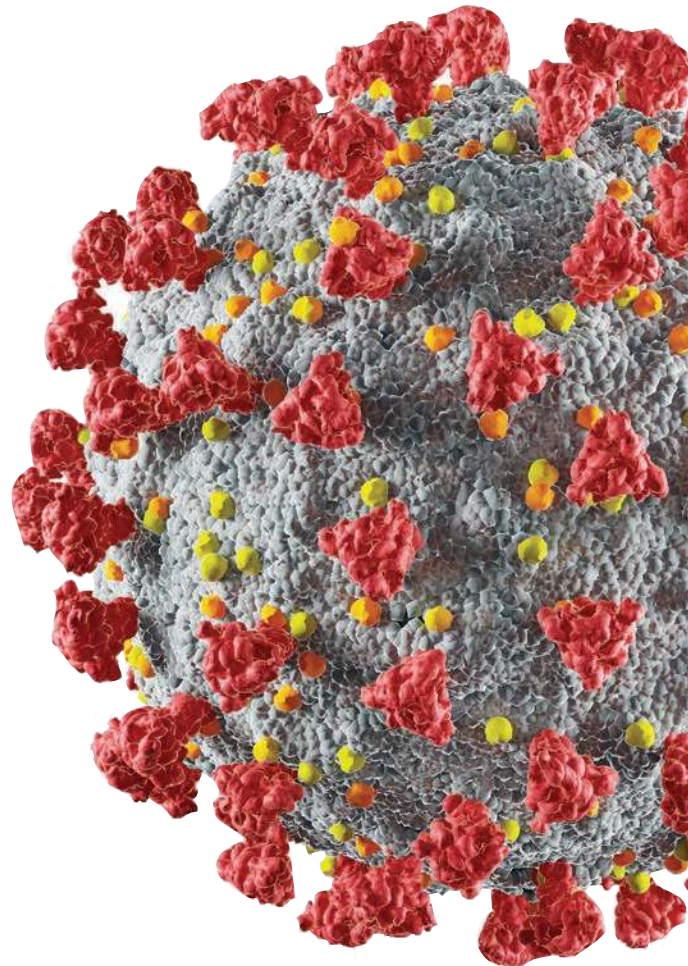
COVID-19:

What would Osler say?

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Sir William Osler (1849–1919) wrote about the human condition, was voted “the most influential physician in history” in a recent poll, and remains an avatar of humanism and wisdom in medicine^{1,2}—hence, the question, “What would he say were he alive today?” Concerning COVID-19, I shall hazard three suggestions consistent with Osler’s evolving views of science and the future of humanity.





Sir William Osler at his desk in Oxford, 1907. Osler Library of the History of Medicine, McGill University

Pride in scientific medicine

COVID-19 would reinforce Osler's pride in scientific medicine and the worldwide community of health care workers.

In 1896, speaking in Atlanta on "The Fevers of the South," Osler began:

Humanity has but three great enemies, Fever, famine and war; of these, by far the greatest, by far the most terrible, is fever.

Although fever "in its various forms is still with us," he concluded:

...it is of equal importance to know that the way has been opened, and that the united efforts of many workers in many lands are day by day disarming this great enemy of the race.³

The current pandemic would not surprise Osler but he would find a silver lining in the medical response.

I surmise that Osler would have been among the first to congratulate the team of Chinese researchers led by Na Zhu for their article, "A Novel Coronavirus from Patients with Pneumonia in China, 2019," published in the February 20, 2020 issue of *The New England Journal of Medicine*. From the article, it took the Chinese only about two months to propagate the causative virus in tissue culture, visualize it with electron microscopy, sequence its genome, assign it a place within the phylogeny of known betacoronaviruses, and share their observations.⁴

I believe that Osler would rejoice that so many health care workers have stayed at their posts while mourning the hundreds fallen in the line of duty. The response to COVID-19 would validate his claim that medicine is "the only world-wide profession, following everywhere the same methods, actuated by the same ambitions, and pursuing the same ends," offering "a fuller hope for humanity than in any other direction."⁵ In scientific medicine Osler glimpsed "man's redemption of man."⁶

Wake-up call

COVID-19 would reinforce Osler's warnings about the long-term prognosis for humanity.

In 1915, speaking in Leeds, England, on "Science and War" as the Battle of Loos raged in France, Osler lamented that "some of us had indulged the fond hope that in the power man had gained over nature had arisen possibilities for intellectual and social development such as to control collectively his morals and emotions, so that the nations would not learn war anymore."

He asked rhetorically, "And what shall be our final judgment—for or against science?"⁷ World War I claimed Osler's son, dashed his optimism that science would steadily improve the human condition, and prompted his participation in discussions about the relative roles of the sciences and the humanities in British education.

On May 16, 1919, speaking in Oxford on "The Old Humanities and the New Science" as president of the Classical Association, Osler confessed that WWI "changed me into an ordinary barbarian," adding that "it has yet to be determined whether Science...can rule without invoking ruin." Indeed, "there must be a very different civilization or there will be no civilization at all."^{8,9} Thus, Osler, who in 1902 had called nationalism "the great curse of humanity,"¹⁰ fired an early shot across the bow against the myth of human exceptionalism (the idea that we will escape the common fate of other species). His call for "a very different civilization" is eerily prescient of *One World or None*, a 1946 report by scientists and opinion leaders in the wake of the atomic bomb.¹¹

Virus has more recently become the default metaphor for just about anything with pandemic potential. The British scientist James Lovelock developed the Gaia hypothesis (the idea that Earth behaves as a living organism), which suggests Earth has a febrile illness and we are the causative virus.¹²

Journalist Alan Weisman began his thought experiment *The World Without Us* with a fictional scenario that "a *Homo sapiens*-specific virus—natural or diabolically engineered—picks us off but leaves everything else intact."¹³ SARS-CoV-2 (the virus that causes COVID-19) was almost certainly not diabolically engineered; rather, it almost certainly represents a zoonosis, a self-inflicted consequence of mounting human pressure on Earth's ecosystems.¹⁴ From a species perspective, the "new normal" induced by COVID-19 is but a mild foretaste of the "democracy of suffering," as Canadian philosopher Todd Dufresne puts it,¹⁵ likely to result from global warming.

Osler, if alive today, might emend the opening sentence to his 1896 address on fevers to read, "Humanity has but four great enemies...and by far the greatest, by far the most terrible is the human race."

Wherewithal

For Osler, COVID-19 would strengthen his conviction that in "humanized science" we might yet find the wherewithal to survive and flourish.

In 1894, speaking in Philadelphia on "The Leaven of Science," Osler argued that proper appreciation of science encourages us to rely more on reason, and less on emotion, in public discourse and decision-making.¹⁶ He joined a long-running debate, whether emotion should be subservient to reason, as posited by Plato, or the other way around, as argued by the Scottish philosopher David Hume (1711–1776). Hume, it appears, was correct, at least operationally.¹⁷ Most of us most of the time marshal facts and reason to justify what we have already decided emotionally. Through science, Osler suggested, "Reason is at least free, or nearly so; the shackles of dogma have been removed," sparing us "from the toils of self-deception and half-knowledge."¹⁶

In 1919, in *The Old Humanities and the New Science*, Osler alluded briefly to "the New Humanism" then being developed by Belgian chemist George Sarton (1884–1956), acknowledged as the founder of the history of science as an academic discipline. Osler cited a paper by Sarton that reads in part:

No essential progress in the management of human affairs can be expected so long as the scientific methods and the scientific spirits are not more systematically applied to them. My own efforts are passionately bent on explaining that the brute knowledge of uneducated experts ... [is] a source of danger to our civilization...

...To reconcile efficiency and happiness it is necessary and sufficient that science remain closely allied with beauty and charity. The establishment of this alliance is the whole program of the New Humanism.¹⁸

In "the New Humanism," the scientific method comprises the core for all activities but must always be informed by humanistic concern for fellow creatures.¹⁹ To justify this model we need to contrast the beneficent objectivity of the team led by Na Zhu, and thousands of scientists like them, with the cacophonous polemics and pseudoscience pertaining to COVID-19 that flood the news media on a daily basis.

Osler's triadic formula

In December 1919 Sir William Osler died of complications of pneumonia. In the closing paragraph of in *The Old Humanities and the New Science*, he paraphrased the familiar Hippocratic aphorism about *philanthropia* (love of humanity) and *philotechnia* (love of science and technology), adding “that perhaps in this combination the longings of humanity may find their solution, and Wisdom—*philosophia*—at last [may] be justified of her children.”⁸

Osler's triadic formula—*philanthropia*, *philotechnia*, *philosophia*—corresponds to the one recently developed by Steven Pinker in his book, *Enlightenment Now: The Case for Reason, Science, Humanism, and Progress*.²⁰

COVID-19 affords time to stop, think globally, and find in humanized science a pathway to collective survival and flourishing.

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