



Defend Science Statement

— Comments from Signatories —

The following comments from a cross-section of our signatories provides a glimpse at the the depth of concern to Defend Science, the broad support for this initiative, and the diversity of viewpoints that gives strength to this effort.

It is a sad commentary on the current political and social climate, that, despite recent and breath-taking advancements in science and medical technology, we find ourselves having to defend science, the only mechanism we have for gaining new information about the natural world. In the face of increasingly complex social, environmental, and medical problems, seeking solutions while ignoring the insights that science can provide is pure folly.

- *Ola Fincke, Professor, Dept. of Zoology, U. of Oklahoma*

I am a retired science teacher in Kansas. For several years we put stickers in the front of science textbooks and then took them out the next year. Teaching science we could only say, "It happened a long time ago." Teaching the "Big Bang" theory one had to accept that "God created the earth" and as answer to test questions. I had several parents come talk to me about this issue. Basically the teachers still taught the same content and only the parents got upset not the kids. Kansas students were the ones to suffer as they graduated from high school with limited knowledge of science.

- *Marion McElroy, retired public school science teacher, Kansas*

All people must employ critical thinking, must understand the scientific method, and discern clearly between fact and opinion, between truth and theory, and between understanding and belief. It is essential for the progress and truly for the life of humanity that we educate and inspire with science. It is our responsibility to do so, as scientific and educated and motivated people. This fire is not a mystical gift we were given, rather it is of our making and in it humanity should take its greatest pride. The fire of science as a gift will also not be given to others supernaturally, rather we must share the warmth, force, and light of it. When threatened by mass fear of the unknown, we must stand up with courage and defend the bravery of discovery, the human will to demystify, to know, and to understand.

- *Brian Glanz, Software Developer*

Scientific materialism is the basis of how we understand the biological mechanisms that define life on earth. Creationism, intelligent design and fundamentalism are philosophical arguments that should not interfere with the progress of science.

- *Sarah Myhre, Biological Researcher*

The assault on science and the scientific method must be stopped. The only way to do that is to change the government that is subverting scientific ideas, and in the process turning back the clock of human progress by hundreds of years. The future of humanity requires scientific inquiry and scientific progress - let the scientific process go forward without a political agenda.....

- *William Gary Smith, Engineer*

I left Texas in the 90's to escape a school where I was told to leave the chapters on Evolution and Archaeology out of my science classes. Seattle was much more enlightened, but I still encountered "obstructionists"...determined to omit any science that contradicted their particular beliefs. I fear that this upswelling of ignorance foreshadows a violent effort to destroy scientists, artists, and philosophers that oppose the ruling class (they still exist). The German, Polish, (etc.) intellectuals didn't believe it would happen to them.

- *Steve Burge, teacher/retired*

The effect of years of non-scientific government policies on HIV and AIDS are plain to see in South Africa. Medical Scientists should not hesitate to speak out at every opportunity against this type of influence on their work.

- *Antoine Van Gelder, Internal Medicine, University of Pretoria, South Africa*

Six years ago I took the 'defence of science' seriously and formed a nonprofit California Corporation with the mission to promote science education by encouraging existing institutions to sponsor and produce EVENTS to celebrate Darwin, Science and Humanity. The events are held each year on, or near Feb.12, Darwin's Birthday and are open to the public. In addition, are promoting a GLOBAL celebration in 2009 for Darwins bicentennial birthday. I invite all scientists who support the 'Defence of Science' to visit our website and participate in by developing their own EVENT each year. We must cooperate in this important effort to Defend Science!

- *Robert Stephens, President, Darwin Day Celebration*

The defense of the scientific method should be viewed as part of a larger fight to protect basic civil liberties from the onslaught of corporate-funded, right-wing extremism.

- *Matthew LaHaye, Caltech, Department of Physics*

Science education at all levels below graduate training has been reduced to memorizing formulas with little or no understanding. The rising illiteracy in the sciences, and physics in particular, within the US population makes the attacks on science so plausible and acceptable to many. After all, most students know more about Shakespeare than about Newton. While the increase in animosity between the major religions and cultures is reducing the freedom of thought, the scientific debate is becoming the real victim. Scientific facts are treated as "just another opinion" that can be swept aside when not conforming to the prevailing ideology. When societies are no longer aware of the benefits received from the scientific effort to their past and present existence, they will no longer support the effort, unfortunately to their own peril. To survive on this planet, we will need all the scientific understanding obtainable, to prevent an unintended destruction of our ecosystem.

- *Waldemar de Rijk, Director of Dental Biomaterials Division, U. of Tennessee, Memphis*

Without science, there is no better tomorrow. We can look forward to a new Dark Ages. The actions of the Bush Administration both against science and the structure of society as we understand it have been deplorable. If no one else will speak out against the encroaching darkness, then it is up to us to do so.

- *Brandon Tingley, Institute of Astronomy, University Libre de Bruxelles, Belgium*

I agree whole heartedly with the mission of Defend Science and am frightened and appalled at the current administration's systematic efforts to impede scientific progress at a time when science is truly critical in so many issues that threaten life on earth and human-kind.

- *Stephan J. Schoech, Department of Biology, University of Memphis*

The definition of science is not open to debate. Science is not "a marketplace of ideas" in which consumer behavior dictates truth. Scientific findings may, at times, challenge the status quo, be unpopular, or even counter-intuitive. But, scientific findings are ALWAYS demonstrable, testable, and measurable.

- *Brian Bolea, Grand Valley State University, Michigan*

Let us always remember that science has continually been faced with the decision to expose the truth to those who are not ready to hear it. The choice to do so today is, sadly, becoming a dangerous endeavor once again.

- *Darren O'Connor, Senior Systems Electrical Engineer*

I really fear the future of a theocracy and a corporate government. Science and dissent are the last weapons we have against that future. The last time religion ruled government, people were burned as witches. If it happens again, we will end up destroying the health of every human being and the fragile health of the whole environment of the Earth.

- *Elizabeth Thompson, Clayton's College of Natural Health, South Carolina*

As a professor of psychiatry and psychoanalysis I confront daily the damage to hope that lack of understanding causes. There are all too many medical and environmental agonies the cause and cure of which we don't yet know, and we must bear the often overwhelming emotional burden such ignorance imposes. Such are cancer, Alzheimer's disease, schizophrenia, global warming.

But there are many other medical and environmental agonies whose cause and cure -- or at least prevention -- we now DO know. To be deprived by anti-science zealots of this understanding -- and the possibility of averting these blights by appropriate action -- is the grimmest tragedy. Such are AIDS, tuberculosis, rickets, unplanned pregnancies.

We must not succumb to efforts by ignorant zealots to return us to the pre-scientific dark ages, in which much human hopelessness was perpetuated for centuries longer than necessary, by the arrogant imposition of faith-based doctrines of anti-science.

Aside from the injury and death that they guarantee, they produce another and equally unnecessary blight: prolongation into our adult life of the sense of helplessness with which we are all born. Every baby is a scientist desperately struggling to become a strong and safe grownup by figuring out the truth. Whether he or she becomes a professional scientist or remains an amateur, we must preserve the freedom of everyone to observe, think, discuss, apply, and celebrate that scientific quest. For, next to love, the scientific quest is the most powerful protector of hope.

- *Roderic Gorney Professor of Psychiatry, UCLA*