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Uh-oh. Now Victor Stenger disagrees with me

by PZ Myers

*I’m sticking by my guns, though. Stenger thinks that Eric Hedin, a professor at Ball State, should be fired and have his classes cancelled for teaching Christian/creationist nonsense. I don’t.*

Stenger:

*"While agreeing that the course is "bad science" and its material of "abysmal quality," in his April 25 Pharyngula article, popular blogger and biologist PZ Myers defended Hedin’s right to teach what he wants, citing academic freedom.*

*Laurence Moran, professor of biochemistry at the University of Toronto agreed with Myers in his blog Sandwalk appearing the same day. Moran said, "I defend the right of a tenured professor to teach whatever he/she believes to be true no matter how stupid it seems to the rest of us."*

*Well, Moran and Myers are wrong. Academic freedom does not imply that an instructor is free to teach material that is demonstrably false. Most campuses provide a "free-speech area" for that purpose."*

Myers:

*I think treading on the content of a university-level course sets a dangerous precedent.*

PZ, the Slippery Slope logical fallacy? Really?

*If we’re going to start firing professors who teach things that are wrong, we’re all going to be vulnerable;*

PZ, that was the Straw Man logical fallacy. Stenger didn't say or imply that teachers should be fired for merely teaching things that are wrong. The calls for the firing of Hedin are based on Hedin's decision to impose his religious opinions on his students and ignore his duty to teach proven science. The students paid to attend University ... not church.

*there are things I taught 10 years ago that have since been found to be in error.*

PZ, that is a Red Herring fallacy. Scientific advancement is normal. You of all people know this. You have stated so yourself. No scientist or teacher is held culpable for teaching what is believed to be true at the time it was taught.

PZ, is it your intention to commit every logical fallacy listed in Wikipedia before the end of this essay? If so, you're off to a pretty good start.

*Shall we encourage the right-wingers to start accumulating lecture notes and using every error and revised datum to instigate legal proceedings against professors they don’t like?*

PZ, when people lack good arguments they often construct ridiculous scenarios ... as you just did.

*Shall we inhibit discussion of material that’s controversial or on the very edge of science in our upper-level courses?*

PZ, how does that apply to Creationism? You yourself have admitted that Creationism is not controversial, from a scientific standpoint, but pure pseudoscience.

*I should think we atheist professors should be on our guard against this. I don’t promote atheism in the classroom, but I do present a strictly natural/materialist understanding of biological processes; I advocate for a well-established scientific theory called evolution that a frighteningly large fraction of the general public have judged to be wrong. Do we seriously want our courses subject to review by some podunk Republican lawyer in our towns? Do we really want to open the door to having to think about our course material from the perspective of whether it’s considered actionable by the local priesthood?*

PZ, it's too late for that. Course material IS under attack from the local priesthood.

*Going after a course for its ideology is a terrible mistake.*

PZ, you could easily see the fallacy in your position if Astrology were being taught as science in Astronomy classes. I'm stunned that you can't see it in Biology, especially given that you've devoted the last few decades of your life to combating Creationist nonsense.

*Bringing in outside lawyers to shape the curriculum of a discipline is a disaster.*

PZ, the curriculum is shaped by law and by those in the education system. Lawyers only enter when violations occur ... as in this case.

*Hedin ought to be dealt with internally, and not for being a Christian…but for being a bad teacher and colleague.*

PZ, that was another Straw Man argument. Hedin is not being attacked for being a Christian. There are many Christian biology teachers, as you well know. Hedin is being attacked for allowing his personal Christian beliefs to interfere with his teaching duties.

*He is not contributing to the education of the students in his class; if we had someone like that at my university, he’d be considered a massive problem who was disrupting the progression of our student’s education. And if the university refuses to deal with it, if the rot spreads, it should be publicized so that prospective students know they won’t get adequate instruction, and it should also be brought to the attention of accreditation agencies.*

PZ, so your solution is to allow the ruin of your school's reputation? To publicize it so that your school loses students and the money their tuition provides? To try to remove your school's accreditation? Those are your solutions?

Well, I guess you just answered those questions, didn't you?

*I want the evaluation of university faculty to be in the hands of our peers, not the local tea party chapter, the local council of churches, or for that matter, the local Democrats or atheist meetup.*

PZ, the problem isn't about tea parties, churches, Democrats, or Atheists. It is about a renegade teacher who is depriving his students of the education they paid for.

When Stenger suggested termination, what makes you think he meant firing based on recommendations from tea parties, churches, Democrats, or Atheists?

I think we can be pretty sure Stenger meant firing based on the recommendation of school officials and peers.

*I’m really surprised that any professor would want their work opened up to criticism by a public that isn’t equipped to understand the topics, and welcomes circumventing peer review.*

PZ, name such a professor. If you can't ... that's another Straw Man.

*Scratch my opening comment:*

PZ, a better decision would have been to scratch this entire tirade.

*he doesn’t want him fired, just to have his class cancelled.*

PZ, what about the students? What if his replacement also places more importance on personal religious beliefs than their duty to their students? Do they keep replacing teachers until they find one who actually does the job they were hired to do?

If the professor refuses to abide by the standards set forth by the school, then termination would seem to be the most logical step.

*That’s less disastrous, but again, that’s also still taking to legal measures to interfere with what should be an internal matter.*

PZ, you didn't finish your sentence: an internal matter ... that has not been handled.

*I’m also not clear on what standing anyone other than a student in the class has to take legal action.*

Well PZ, if administrators did their jobs and actually administered education, students wouldn't be put in a position, they shouldn't be in, to begin with.

*Let me repeat, too, that I’m not saying what Hedin is doing is OK: it’s godawful incompetent teaching and bad science. My concern is with how we take action against it.*

PZ, remember how you started this essay?

"I'm sticking to my guns."

That reminds me of your 'Dictionary Atheist' fiasco. Countless members of your horde tried to argue sense into you. But you refused to yield. Sticking to your guns is the proper course of action when the arguments support your position. But when they don't ... you should disarm.

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THE SCIENCE SEGMENT

MAPPING THE EMBRYONIC EPIGENOME

After an egg has been fertilized, it divides repeatedly to give rise to every cell in the human body—from the patrolling immune cell to the pulsing neuron. Each functionally distinct generation of cells subsequently differentiates itself from its predecessors in the developing embryo by expressing only a selection of its full complement of genes, while actively suppressing others. By applying large-scale genomics technologies researchers can explore how genes across the genome are turned on and off as embryonic cells and their descendant lineages choose their fates, determining which parts of the body they would generate.

One way cells regulate their genes is by DNA methylation, in which a molecule known as a methyl group is tacked onto cytosine—one of the four DNA bases that write the genetic code. Another is through scores of unique chemical modifications to proteins known as histones, which form the scaffolding around which DNA winds in the nucleus of the cell. One such silencing modification, called H3K27me3, involves the highly specific addition of three methyl groups to a type of histone named H3.

Researchers found in their analysis of those modifications across the genome—referred to, collectively, as the epigenome - that master genes that govern the regulation of early embryonic development tend largely to be switched off by H3K27me3 histone methylation. Meanwhile, those that orchestrate the later stages of cellular differentiation, when cells become increasingly committed to specific functions, are primarily silenced by DNA methylation.

Histone methylation is relatively easy to reverse. But reversing DNA methylation is a complex process, one that requires more resources and is much more likely to result in potentially deleterious mutations. So it makes sense that histone methylation is largely used to silence master genes that may be needed at multiple points during development, while DNA methylation is mostly used to switch off genes at later stages, when cells have already been tailored to specific functions, and those genes are less likely to be needed again.

Researchers also found that the human genome is peppered with more than 1,200 large regions that are consistently devoid of DNA methylation throughout development. It turns out that many of the genes considered master regulators of development are located in these regions, which the researchers call DNA methylation valleys. Further, they found that these DNA methylation valleys are abnormally methylated in colon cancer cells. While it has long been known that aberrant DNA methylation plays an important role in various cancers, these results suggest that changes to the cell’s DNA methylation machinery itself may be a major step in the evolution of tumors.

Further, the researchers catalogued the regulation of DNA sequences known as enhancers, which, when activated, boost the expression of genes. They identified more than 103,000 possible enhancers and charted their activation and silencing in six cell types. Researchers will in all likelihood continue to sift through the data generated by this study for years to come, putting the epigenetic phenomena into biological context to investigate a variety of cellular functions and diseases.

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FAMOUS QUOTES

Winston Churchill (1874 – 1965) 90 years

He was a British politician who was the Prime Minister of the United Kingdom from 1940 to 1945 and again from 1951 to 1955. Widely regarded as one of the greatest wartime leaders of the 20th century, Churchill was also an officer in the British Army, a historian, a writer, and an artist. He is the only British Prime Minister in history to have received the Nobel Prize in Literature, and was also the first person to be made an Honorary Citizen of the United States.

Churchill was born into an aristocratic family as the grandson of the 7th Duke of Marlborough. His father, Lord Randolph Churchill, was a charismatic politician who served as Chancellor of the Exchequer; his mother, Jennie Jerome, was an American socialite. As a young army officer, he saw action in British India, The Sudan, and the Second Boer War. He gained fame as a war correspondent and wrote books about his campaigns.

At the forefront of politics for fifty years, he held many political and cabinet positions. Before the First World War, he served as President of the Board of Trade, Home Secretary, and First Lord of the Admiralty as part of the Asquith Liberal government. During the war, he continued as First Lord of the Admiralty until the disastrous Gallipoli Campaign caused his departure from government. He then briefly resumed active army service on the Western Front as commander of the 6th Battalion of the Royal Scots Fusiliers. He returned to government as Minister of Munitions, Secretary of State for War, and Secretary of State for Air. After the War, Churchill served as Chancellor of the Exchequer in the Conservative (Baldwin) government of 1924–29, controversially returning the pound sterling in 1925 to the gold standard at its pre-war parity, a move widely seen as creating deflationary pressure on the UK economy. Also controversial was his opposition to increased home rule for India and his resistance to the 1936 abdication of Edward VIII.

Out of office and politically "in the wilderness" during the 1930s, Churchill took the lead in warning about Nazi Germany and in campaigning for rearmament. On the outbreak of the Second World War, he was again appointed First Lord of the Admiralty. Following the resignation of Neville Chamberlain on 10 May 1940, Churchill became Prime Minister. His steadfast refusal to consider defeat, surrender, or a compromise peace helped inspire British resistance, especially during the difficult early days of the War when Britain stood alone among European countries in its active opposition to Adolf Hitler. Churchill was particularly noted for his speeches and radio broadcasts, which helped inspire the British people. He led Britain as Prime Minister until victory over Nazi Germany had been secured.

After the Conservative Party lost the 1945 election, he became Leader of the Opposition to the Labour (Attlee) government. After winning the 1951 election, he again became Prime Minister, before retiring in 1955. Upon his death, Elizabeth II granted him the honour of a state funeral, which saw one of the largest assemblies of world statesmen in history. Named the Greatest Briton of all time in a 2002 poll, Churchill is widely regarded as being among the most influential people in British history.

"Men occasionally stumble over the truth,

but most of them pick themselves up

and hurry off as if nothing ever happened."