Science Debate 2016: Do Trump's or Clinton's Answers Even Matter?

By Alex Berezow, PhD — September 13, 2016

There was much excitement on Twitter after it was announced that Hillary Clinton, Donald Trump and Jill Stein answered the questions posed by Science Debate 2016 [2]. (Gary Johnson has yet to respond.) But how seriously should we take their answers?

Perhaps more so than in any election in recent memory, the two mainstream candidates have shown a shocking willingness to abandon the truth at a moment's notice. Answers to simple questions change, sometimes in the matter of hours or even minutes, as if the candidates neither realized nor cared that video cameras and instant replay can expose their duplicitousness. The problem has become so acute that, in a leader [3] published in this week's issue, The Economist laments the arrival of a post-truth world.

Fully aware that the candidates' answers to these scientific questions are likely worth very little, it is with skepticism that I attempt to analyze the ones of greatest interest to ACSH.

Innovation. On how to keep America "at the forefront of innovation," one of Hillary Clinton's proposals is:

We need universal preschool, to get our kids off to a good start... and to put higher education in reach for everyone with debt-free college.

Universal (presumably free) preschool is a nice idea. Other than the question of how it would be paid for, there exists a legitimate question of how effective it would be. Research [4] from the
University of North Carolina suggests that preschool is only worthwhile if the instruction is adequate. Debt-free college is a pipe dream that Mrs. Clinton swiped from Bernie Sanders to appeal to his voters. Not even Democratic economists took his ideas seriously. But even if it was economically feasible, the question of whether it would be beneficial to society is unclear.

Mr. Trump's answer invoked the power of the free market and "reduc[ing] barriers to entry into markets." This is a strange answer, considering that his entire campaign has been based on attacking Mexico and China for allegedly cheating America in the marketplace.

Dr. Stein's response, which concluded with her intention to prevent "innovation [from being] determined by a relative handful of corporate executives and Pentagon planners," was borderline unintelligible. (For instance, she writes, "Vast resources will be freed for investment in public R&D by reduced Pentagon spending." But programs like DARPA are at the cutting edge of innovation. The Pentagon currently spends about $70 billion on R&D.)

Research. Both Mrs. Clinton's and Mr. Trump's responses were boilerplate.

Mental Health. Once again, the answers were rather bland and predictable. Mrs. Clinton did acknowledge the ongoing suicide epidemic and her desire to create a "national initiative for suicide prevention." But the elephant in the room, mental illness that results in homelessness, went unaddressed by all candidates. Cities like Seattle have seen a surge in the homeless population. Without a coordinated effort to tackle this problem, we can only expect it to get worse.

Education. On education, both Mrs. Clinton and Mr. Trump had something interesting to say. Mrs. Clinton supports the Obama Administration’s goal that all children receive computer science education. Given that the future appears as if it will be dominated by smart phones and apps, this is probably a good policy. Mr. Trump wants the "greatest possible number of options for educating our children," which probably means he supports charter schools. However, none of the candidates discussed the importance of learning a second or third language in an increasingly globalized world.

Public Health. Mrs. Clinton believes that the country needs to spend more money on public health. Specifically, she wants to "create a Public Health Rapid Response Fund." Of course, this wouldn't be necessary if our existing public health institutions were properly funded now. Bad governance cannot be solved with more money and larger bureaucracies. Mr. Trump alludes to this in his answer: "We cannot simply throw money at these institutions and assume that the nation will be well served."

Nuclear Power. Thankfully, both Mrs. Clinton and Mr. Trump support the expansion of nuclear power. Dr. Stein's response is worth reading in full:

Nuclear fission technology is unsafe, expensive, and dirty from the mining of uranium to the disposal of spent fuel. As such we will end subsidies to the nuclear industry immediately and phase out nuclear power over a 10 year timeline. Existing nuclear waste will be handled with onsite dry cask storage of high-level waste into
Dr. Stein's policy position appears to be copied-and-pasted from Greenpeace's website [9], which states, "Nuclear power is dirty, dangerous and expensive." It's difficult to fathom how somebody trained in science could actually come to this conclusion. Anyone with an elementary understanding of physics, chemistry, and modern plant design knows that nuclear power is safe. Meltdown-proof reactors are already being built [10]. Additionally, on-site storage is probably the most dangerous solution to nuclear waste disposal. Instead of having nuclear waste sprinkled around the country, it is far safer to have it stored in one centralized location.

**Food.** Neither Mrs. Clinton nor Mr. Trump said anything noteworthy. But Dr. Stein wants to label GMOs, ban effective pesticides, support organic farming, and adopt the precautionary principle. Scientifically literate people and regular readers of ACSH will know that every single one of those ideas is pseudoscientific.

**Regulations.** Again, neither Mrs. Clinton nor Mr. Trump wrote anything worth reading. Dr. Stein insists on "evidence-based approaches," by which I assume she means "whatever Greenpeace, SourceWatch, NRDC, and CSPI tell me to do."

**Vaccination.** In 2008, Mrs. Clinton flirted with anti-vaxxers. Today, she is solidly pro-vaccine, and that was reflected by her detailed, four-paragraph answer. Mr. Trump's vague, two-sentence response indicated disinterest and boredom with the Science Debate questions. Dr. Stein pointed out the need to "build trust with hesitant parents," a strange thing to say for somebody who endorses the conspiracy theory [11] that the FDA is "controlled by drug companies." (If it was really true that the FDA is controlled by drug companies, then why is the drug approval process so incredibly long and expensive?)

**Opioids.** I was glad to see this topic discussed, as we really are suffering from a frightening overdose epidemic [12]. Mrs. Clinton wants to focus on prevention and treatment of substance abuse, while Mr. Trump prefers to focus on stopping illegal drugs from coming into the country. Neither really gets at the heart of the issue, which is our over-reliance on pain medication. We really ought to encourage development of non-addictive painkillers and pain management that does not involve popping pills. We also need to address illegal fentanyl, a drug far more potent than heroin, which is probably responsible for many of the opioid overdose deaths. ACSH's Dr. Josh Bloom referred to the drug, which killed Prince, as the "devil in the room [13]."

**Scientific Integrity.** Nothing notable was uttered by Mrs. Clinton or Mr. Trump, but Dr. Stein managed to mention a couple more conspiracy theories involving the FDA and CDC.

On the whole, Mrs. Clinton's answers were more detailed, better researched, and more specific than Mr. Trump's. Occasionally, both candidates offered something other than standard boilerplate responses. Dr. Stein's responses were, frankly, breathtaking in their ignorance and detachment from reality.