Evan Peck

Interview

Faith in the Halls of Science

A Conversation with Ian Hutchinson

*Evan Peck and Karl Giberson**

Photo: Amanda Egolf

Karl Giberson

Cambridge, Massachusetts, home to Harvard, MIT, and other leading schools, is the educational epicenter of the United States and perhaps of the world (with apologies to Oxford). Like many leading educational centers, Cambridge is notoriously liberal and has historically led the charge in the cause of secularization.

I [Evan Peck] first visited Cambridge at the height of the 2004 election fever that returned George Bush to the White House. New to Boston, new to academia, and very new to politically charged communities, I wandered naively into a café near Harvard Square with my friend, Paul. My friend, seemingly oblivious to where he was, paraded an enormous George W. Bush pin on his chest.

Within minutes of our arrival, the manager approached our table. I thought he might want to advertise a new drink. Instead, he challenged Paul's sincerity in endorsing George Bush.

Evan Peck *graduated from Gordon College with a degree in computer science and a minor in creative writing. He is enrolled in a doctoral program at Tufts University, working with the Human-Computer Interaction group. Evan's past research has focused on combining human and distributed computing with casual online gaming. He plans to continue investigating the intersection of science and faith in the greater Boston area. In his spare time, Evan makes friends with coffee baristas, plays the electric violin, and obsesses over PowerPoint presentations.*

Karl Giberson *directs the Forum on Faith and Science at Gordon College in Wenham, MA, and is a professor at Eastern Nazarene College in Quincy, MA. He has published over a hundred articles, reviews, and essays and written or co-written four books:* Worlds Apart: The Unholy War Between Science and Religion; Species of Origins: America's Search for a Creation Story; The Oracles of Science: Celebrity Scientists Versus God and Religion; *and* Saving Darwin: How to Be a Christian and Believe in Evolution. *Giberson has lectured on science and religion at Oxford University and the Vatican as well as at many American universities and colleges.*

Welcome to Boston

I revisited Cambridge four years later to interview Ian Hutchinson, professor of physics at MIT and a deeply committed Christian. Hutchinson heads up the leading nuclear science program in the United States. But, while his interests lie in controlled fusion energy, he has accepted the role of a public intellectual believer, writing and lecturing about his faith, and orchestrating events like the Faith of Great Scientists forum at MIT.

I found myself thinking back to that night in Harvard Square. There is something peculiar about searching for religion in Cambridge—MIT of all places. I am a computer scientist and so MIT is my Athens. I felt strangely insecure and uncertain—fearful that the truth might not turn out the way I wanted.

I sat down with Hutchinson to chat about this improbable Cambridge intersection of science and faith—a conversation he cannot escape, as his office is located in one of the modern world's most powerful and symbolic centers of science.

As we carried on our improbable conversation, so different from those taking place in offices and classrooms up and down the hall, I grew increasingly impressed with Hutchinson's articulate, thoughtful, and never over-simplified insights into some of the most pressing and important issues of our time.

**The interview was conducted by Evan Peck, while he was doing a science writing project with Karl Giberson at Gordon College.*

Q You've been around intellectual communities in several different cultures. Has the tension between science and faith changed at all in the places you've been—whether that's England, Australia, or the United States?

A I've said on a number of occasions in the past, and I think it is still true (although maybe less true than it was a number of years ago), that the tensions between science and faith are worse in the US than almost any other culture I've been in.

Obviously, the cultures I've lived in have tended to be English language places—Australia, England, and so forth. But I would say that in Australia and England—and I would say that this is true in a number of other countries too—there isn't quite the same level of warfare mentality between science and faith as there is in the US. There are lots of reasons for that, which is a long story. But I think that's the case.

Q What was it that formed your interest in the intersection between science and faith?

A When I came to America, I didn't know if I was going to stay. I stayed for three years, and then I went back to England. I was working on fusion research. It was probably during that period that I first wrote down the way I felt science and faith came together for me.

A big part of that was the recognition that science asks rather specific types of questions about the world. Those questions give you only certain types of answers. And yet there are lots of far more interesting questions—or at least questions that are *as* interesting (not that I'm not interested in science. It's great. That's why I'm in science). But there are other questions which are just as important.

To a large measure, the world around us in the late twentieth, early twenty-first century, has reached a point of paying attention only to the questions that are scientific. The world is paying far less attention, or at least giving a lot less credence to answers to the questions that are about the bigger things of life—the things we associate with religious faith, as well as with some other related things, like history, the law, and so forth.

Q You mentioned that there are nonscientific questions. Where do you put people who are trying to understand spirituality from a scientific perspective, like evaluating which parts of the brain are triggered during spiritual encounters? Do questions like that blur the line between scientific and nonscientific questions?

A No, I don't think they do. The heart of my approach to those kinds of questions is to say that you *have to* give credence and value and significance to descriptions of the world at a whole range of different levels. You have to accept that those descriptions can be simultaneously true. The best example that I know is to think about a person,

On Stanley Jaki

I remember vividly when Stanley Jaki was invited by one of the Catholic groups to speak at MIT. He spoke about the idea that the Christian faith was a fertile soil in which the ideas of modern science, as we now know it, grew. I think that was a turning point for me.

Up until that point I had always thought, "Yes, there is a tension, but science and faith are addressing different questions. The questions that science addresses are important but limited questions. The questions that faith addresses have much more similarity to the kind of questions that arise in the humanities."

I didn't see a constructive level of mutual support between science and faith. Even though I felt that these were folks who could live together, I didn't really think that the two sides of the coin were closer together than that.

Jaki had a much more constructive view of the relationship between science and faith. It wasn't that "they are really different, and science has been tremendously successful in describing the physical world. But, it's okay because faith is able to address important spiritual questions which go alongside." That's a reasonably constructive view. But it's *not* one in which faith and science are supportive.

Jaki was trying to make the case that it's not *just* that they can get along together. In fact, if you look harder, you realize that Christianity was, as I phrase it, this fertile soil in which modern science grew. It was in large measure some of the theological, as well as philosophical, views that Christianity brought to society—the teachings about creation that both Christianity and Judaism share—that triggered the scientific revolution.

Faith in the Halls of Science: A Conversation with Ian Hutchinson

Photo: Shaylah Deviney

Ian Hutchinson

about yourself. I am an assembly of electrons and quarks, but I'm also a mixture of chemicals and carbon and calcium and hydrogen and oxygen and so forth. I am a set of cells guided by DNA and the biochemical factories that go on to make that. I am an animal with impulses and responses and senses and hair, and I am a person with desires and loves and fears, and I am an immortal spirit loved by God—a sinner saved by grace. I am *all of these things* at the same time.

And so, if we have a description of the way brain activity works when I am thinking a certain thought, that doesn't mean that the significance of that thought is somehow removed. No one would say about a computer program, "Because I happen to know how the computer works, the calculation it does is no longer significant."

The calculation is just as significant even though I know in principle exactly how the logic of a computer program works. The significance of the software is at a different level than the workings of the electronic gates that go on to make hardware. That is a poor analogy, but still an analogy people can go along with because it is so obvious that a computer is doing more than simply turning switches on and off when it runs.

And the creation that we see around us—the overall picture of the world that I see—is not just two levels, but multiple levels. So I would say that the idea of multiple levels of description all having validity is a key to helping understand the significance of, and the relationship of, physical or chemical or biological science—descriptions of people agents, and the fact that they are still people and agents.

Q What is the motivation behind some of the more aggressive atheist critiques by, say, a Richard Dawkins?

A The new phenomenon of this vituperative approach to criticism of religion—Christianity in particular—in the last five or ten years is fascinating. I think it betrays desperation on the part of those who have a scientistic and secularistic view of the world.

I think the ongoing story in the twenty-first century by people of that mentality is that science has explained religion away—or is in the process of explaining religion away. Therefore, science will gradually gain a hold in the religious beliefs that people have because they were brought up by their religious grandmother.

Dawkins is explicit about this. He says that people of faith believe because they were indoctrinated when they were kids. So as long as we get past that indoctrination, these religious beliefs will simply evanesce—decay away. We will have an enlightened scientific view of the world.

Q Do you buy into that?

A Well, I think that in the last five to ten years, it has become crystal clear to those people that it *simply isn't happening*. In fact, if anything, things are going the other way.

It's true that, particularly in Western Europe, there has been a tremendous process of secularization. But what the Dawkinses and the Dennetts of this world realize is that, worldwide, it is certainly *not* the case that religion—Christianity in particular—is decaying. In fact, if anything, it is growing.

So people who thought that these vestigial superstitions ought to evanesce (and they're not) are thinking, "Golly, we've got to do more about this, to really make sure this stuff goes down." And so they've started to write these strongly worded critiques. Dawkins is perhaps not the worst offender in this respect. Sam Harris, for example, is a person who has written even more immoderately than Dawkins about this.

Q As a whole, how do you view the integrity of these critical atheistic responses?

A Quite honestly, many of those critiques are laughable. They are simply not credible. People start to argue that religion is fundamentally bad, has been bad for humankind from day one, and then try to point out some of the admittedly bad things that have been done in the name of the Christian faith over the centuries—the inquisition, witch hunts, and so on. They start to talk as if that somehow proves that religion is the source of all evil.

It's just not credible. If you ask simple quantitative questions: how many people were killed by the inquisition over the two hundred years of its existence? The answer is probably no more than two thousand. If you compare that to Pol Pot, or Stalin, or Hitler, or any of those secularist dictatorships, it fades into *complete insignificance*. So it is completely ludicrous to start pointing at these admitted failures of Christianity to live up to its own ideals, and then somehow try to argue, "If only religion will go away, everything would be wonderful." It's just silly.

I think that there are two views you could take. One is you could say, "It's just silly and everyone will realize it's silly." Well actually, everyone does not necessarily realize it's silly. So there are a few people who have started to give direct answers. Nevertheless, sometimes polemics needs to be answered by polemics.

Q What about the Christian literature that responds to a Dawkins or Harris?

A The more direct answers to the critics come from someone like Alister McGrath, who has written a couple of books directly addressing Dawkins. McGrath is interesting because he has a PhD in biochemistry, so he is not ignorant of scientific arguments. He has degrees in theology, has spent a lot of time thinking about the faith/science intersection, and has written prolifically about it. He has written some relatively popular books that try to answer directly some of the critics—particularly the criticisms of Dawkins.

The problem I have, though, is that while this is great theater, it's not necessarily good, or profitable for study and future truth. So, that's the distinction between polemics and more serious thought about the foundations. I certainly try not to major on the controversies, even though that's what the media loves to do. As I say, it makes great theater. I suppose that's the reason I'm an academic and not an actor. I prefer the intellectual heart of the debate as opposed to the fluff.

Q So do you think these books are helpful, or just adding more fuel to the fire?

A I think there is an aspect of adding fuel to the fire, but the books I mentioned by and large don't do that. There is another strand of Christian response to the faith/science controversies of today and earlier days which, I think, does much more harm.

Dawkins, for example, in his latest book, talks about the fact—"Is there or is there not a God? This is a scientific question," he says. "And it must be answered by science."

I think Dawkins is *dead wrong*. I think that we are not going to answer questions of spiritual and religious commitment by treating them as if they can be answered by scientific questions—by doing experiments and so forth. I think that is just plain silly, and misunderstands what Christians have thought their faith is about for two thousand years.

But there are people in the Christian community who in effect say, "Yes! And here is our science

Photo: Shaylah Deviney

Ian Hutchinson being interviewed by Evan Peck.

and it proves we Christians are right!" That is an extremely mistaken and unhelpful response. I don't think that science answers the question one way or the other. But there are a lot of people in the Christian church who have missed the point on this, and think that there *are* scientific answers and scientific proofs of their faith.

Q Why are these Christians so insistent on finding proofs in the first place?

A They would love for there to be scientific answers and scientific proofs because they grow up in this society which is dominated by what I call scientism—the belief that science is all the knowledge there is, and if knowledge is not scientific, then it isn't really knowledge. And although those Christian respondents probably wouldn't admit it, they've been influenced by that model of thinking, which is rife within society as a whole—and certainly in the academy.

They therefore think, "Well, I know my Christianity is true, and I know that all truth is scientific. Therefore, there must be a scientific demonstration of my Christianity. It's simple logic."

But it's *so simply wrong*. One of the premises is incorrect. The premise that is incorrect is not that my Christianity is true. The premise that is incorrect is that all knowledge is scientific knowledge. But because they've accidentally, or unthinkingly, taken on that worldview that predominates in the academy, they want to fight back on those terms and think that by doing so, they will win the battle.

I see that as a big part of the motivation behind the intelligent design controversy. There are people who think there are scientific demonstrations that prove there is an intelligent designer.

Q Speaking of intelligent design, it is clearly a hot-button issue right now in the science and faith discussions. Have you been won over by either side of the argument?

A I'm slightly agnostic on that question. I am not persuaded by the arguments that I've seen and studied that surround the intelligent-design people who say they have found scientific demonstrations of design. I am not persuaded by those arguments. I am *completely* persuaded by the arguments that some of the key players in the design argument present, when they have difficulties with evolutionistic advocates such as Dawkins, who say that biological diversity came about in the blind action of chance—unguided.

I completely agree with the Christian critics who then say, "They are dead wrong about this! The evolutionistic arguments to dismiss spirituality and Christianity are empty, polemic rhetoric."

I agree with that! But that doesn't mean that the science of evolutionary description of the diversity of life on earth is wrong. It just means that the development of life doesn't follow from an evolutionary description of biodiversity that says Christianity is bunk in the way that Dawkins says it does.

Q Where do you have difficulties with the arguments of the ID advocates?

A I'm completely sympathetic to the ID advocates who say, "A lot of what Dawkins writes is non sequitur, rhetorical arguments." I agree with that. But then they go on and say, "And we'll show his science is wrong—and that, in fact, science proves that God exists."

That is the step which I do not go along with. In the first place, I'm not persuaded by the arguments. But secondly, it's a concession of the most important premise, which is *wrong*. It's the premise that all knowledge is scientific. Saying, "I'm going to try and take these scientists on their own ground and prove them wrong," is a concession that science owns the field. But science doesn't own the entire field of knowledge. So, to adopt that view is a bad strategy apologetically, as well as *completely* missing the boat from the point of view of epistemology.

So I have big struggles with the way a lot of Christians are taught to think about the science/faith debate—particularly in the US. Christians do themselves a great disservice when they think that the solution to the science/faith controversy is that intelligent design would somehow prove that God created the world by finding gaps in the ability of the natural processes to describe how things could be the way they are.

Q It seems that a lot of what Dawkins or Harris has to say comes as a reaction to some of that …

A You're right. There is a whole different thread of the debate where you could argue that the atheistic militancy of the day is a reaction to the militancy of the ID advocates. I think there is an element of truth in that.

Basically, the level of rhetoric has been ratcheted up. The ID advocates have attacked not just the unjustified extrapolation of the scientific worldview to cover everything, but they have also attacked the basic science—the notion that we actually do understand how biology and chemistry work.

A lot of scientists say, "You're just ignorant. You just don't understand biology. What's more, by saying that we've got to have ID in high school or in middle schools, you're going to undermine the already admittedly weak science teaching in the US public schools." So there is a sense of outrage on the part of those who think that science is important, and needs to be taught rigorously and in accordance with our best understanding of science in high schools.

I am personally slightly sympathetic to that. That is one of the reasons why I am willing to say to the ID advocates, "Hang on a minute! What you're doing is pouring fuel onto the fire of this debate, and you're doing so in such a way that you actually concede the most important point that we need to get to … which is that all knowledge is *not* science."

On ID in Public Schools

I believe that science is a sufficiently robust enterprise that it is not going to be blown off course by a minority of people. Scientists ought to have a more robust view of their whole discipline.

We should simply say, "Look, science is what it is." We should have confidence. We should argue strongly for what we believe to be a correct view of nature, and of the mechanisms that we see about us in the physical world. And we should argue strongly for the teaching of those. But we shouldn't get quite so bent out of shape over the adoption of ID in our schools by some school board.

I think that ID probably shouldn't be taught in schools. In so far that it is science, it is the ideas of a small group of people whose science is not particularly persuasive. It certainly isn't mainstream science.

I think the ID people are reacting to some of the arguments, the rhetoric, and the political activism of secularists in our society. One of the things which I believe drives the ID movement, and drives the controversy in the US, is a literalistic interpretation of the separation clause of the constitution in the US that has, in the past twenty or thirty years, been interpreted to say we can't teach religion, mention religion, or mention things that might have religious content in our public schools.

What happens is natural. People with Christian faith, whose kids might be going to public schools, want to see respect paid to their religious beliefs in the schools. They don't see why that should be, uniquely amongst all intellectual endeavors, banished from the schools. So they are looking for a way to bring back into the schools some respect and acknowledgment of their religious faith. They see ID as a way of doing it.

What they're obviously trying to do is to finesse the arguments of the secularists. The secularists say science isn't religion, so science can come in. So people say, "Fine! ID isn't religion either. It is science. So it can come in." It is a wedge issue.

But in all of this, what it really amounts to is tribalism. On the one hand, there are Christian people who are gathering together in their tribe, and then there are secularists, driven by this scientistic viewpoint, who are gathering together in their tribe. They are hammering at one another. It's not really an intellectual debate; it's a political power play.

Q On a bad day, scientists may see Christianity as undermining their work. But on a good day, the Christian faith can provide a "fertile soil" for first-class scientists. I can see atheistic scientists constructing a perspective in which they might say, "Well, we already have plenty of good scientists. Why even try to make peace in this conversation?"

A You know, we don't need to make peace. What we need to do is find truth. And certainly, that is what I would try to advocate. I don't feel obliged to sign up with either tribe in this particular debate. I make no bones about the fact that I have Christian commitments. I have joined that family by the grace of God, by adoption. But that doesn't mean that we should all have to band together on every single intellectual topic.

I think that the Christian church does itself a great disservice if it extends its standards of orthodoxy—in terms of theology and belief—to extremely transient popular ideas of movements like ID. I mean, the Christian history is littered with people who've adopted transients of the moment, instead of focusing on fundamentals. It's ironic to me that evangelicals (and I would certainly count myself an evangelical) who want to emphasize Christian orthodoxy and continuity with the historic apostolic faith, would adopt what I consider to be a blip on the historic horizon of Christian theology and doctrine as a kind of shibboleth of evangelicalism. In a certain sense, they are putting themselves in the same boat as the liberal revisionists. The liberal revisionists are throwing out orthodoxy because they are persuaded to adopt the thinking of the moment—often scientistic thinking of the moment.

Q How can Christians avoid this "thinking of the moment"?

A I think the answer is to return to the foundations of our faith. Ultimately, our faith is founded on the person of Jesus Christ; the foundations of our faith can actually begin to unpack some of this controversy.

It's certainly the case that if you look over history, at some of the great scientists, you realize that many of them were completely committed Christians—people of deep faith. They *weren't* all of the same brand, denomination, and persuasion. There were people whose orthodoxy was unquestionable. There were people whose faith was deep and much in the mainstream of a particular denominational tradition. And there were people whose faith we would recognize as comparable to the way we would express it today. But in all cases, they found a tremendous reality in that. And in many cases, their faith was really a terrific motivation for their scientific work. That sort of melding is what I want to try to advocate.

We can view a constructive relationship between science and faith as being the historic norm if we can back away from this scientistic emphasis that was brought into the fore by some of the rhetoric of the enlightenment. That is really what I would like most to get across to thinking Christian and non-Christian people. There is a different option.

Q Are you optimistic about the future?

A In the flesh, no. I'm not optimistic of being able to persuade either side of the argument in the near future—that this other path is the more profitable one to explore. I do see that there are people who "get it" in a certain sense. Or, perhaps more modestly, they are helped by thinking about the perspective the way I put it. But I don't see easy ways to finesse the fact that, as I alluded to earlier, the media loves an argument—a battle. So the people who promote the warfare metaphor have an immediate media advantage because it's just more fun. Maybe I need to work harder on making that other way seem more fun (laughs).

On the other hand, I am optimistic. I think that ultimately it's not in my hands. There is one in whose hands it is. And he has a plan. ⊙