



## PROFILES IN SCIENCE ENGAGEMENT WITH FAITH COMMUNITIES

# Rick POTTS

*Rick Potts is the director of the Human Origins Program in the National Museum of Natural History, one of the many museums of the Smithsonian. We spoke with him about how he approaches religious communities with the museum's permanent and traveling exhibits on evolution. Headshot provided by R. Potts.*

**Your work focuses on human origins, which is often seen as the biggest source of conflict between science and religion. Tell us about what you do.**

As the founder and director of the Human Origins Program, I dedicate my career to research on human evolution as well as the public understandings of this topic. I emphasize the “s” on the end of “understandings” because there are multiple understandings of it—obviously within the scientific context, but also there is a broader public context in which people seek to understand how we got here and the meaning of our evolutionary origin, or of the origin narrative that people learned growing up.

I am also curator of the permanent exhibit on human evolution at the Smithsonian, the Hall of Human Origins. It opened in 2010, and there have been around 40 million visitors estimated to have come into the hall, which is a huge success; it has reached an extraordinary number of people. Of course, the people who

come to a natural history museum and decide to go visit the Hall of Human Origins are self-selected. My team and I had the idea to take the exhibit outside the Washington D.C. area; take it across the country as a traveling exhibit based on the permanent exhibit hall. Show up in every location and have discussions with the public, with clergy.

The evolutionary narrative is the cause of the perceived, and often real, conflict that people feel between science and religion. That's the reason for developing the Hall of Human Origins at the Smithsonian and for taking its traveling exhibit on the road.

**How does the permanent exhibit at the Smithsonian approach the topic of origins?**

The theme for our entire initiative on human origins is a question that goes beyond the purely scientific: What does it mean to be human? A lot of people have asked, and it's certainly one of the most compelling questions in science. With the exhibit, we never really give an answer to that question; we ask people to give us their thoughts and their ideas.

In any discussion or conversation about science, people will come in with a variety of starting points, and we always want to hear what people's beginning perspective is. People expressed a great diversity of ideas in their responses to our question. They speak about cognition, about their mental and emotional lives, sometimes about aspects of their ecological interaction with the world. And many people respond in terms of their sense of spirituality. This question of being human is very much informed by philosophy, religion, the arts, books you read, the ways that you grow up, and that is the foundation of how we present this question to the public.

**Were there differences to how you approached the traveling exhibit versus the permanent one?**

We kept that thematic question, "What does it mean to be human?" as the theme of the traveling exhibit. We realized that when people are confronted with science and technology, they are always trying to figure out how to fit it into their lives and what it means. And we realized that many people really hadn't engaged much with the subject of human evolution because they never thought it mattered in their lives. So, in my science talks, in our education workshops, in our town hall meetings, and in our conversations with clergy, we explored the evidence from the archeological remains

for behaviors like sharing resources, caring for others, the origins of our complex social lives, the origin of art, changes in our diet, and changes in how fast we grow up. These topics were tremendously successful in helping people understand how to connect the science to their own lives.

We didn't go into any of the communities with the attitude, "We are here to help you learn about human origins." Rather, our orientation was, "We are here to learn about your perspectives on human evolution. We acknowledge that this subject can be challenging and troubling, and that people don't know how to speak with one another about it." We wanted to nurture local community conversations about the science of human origin and to learn about people's diverse perspectives.

**What did you want the traveling exhibit to accomplish?**

At the very least, we wanted to present the findings on which the scientific evolutionary narrative is based—the fossils, archeological remains, genomics, our understanding of humans in comparison with other living creatures, specifically our closest living relatives among the primates. And although that certainly was an important aim, the exhibit and our aims actually go far beyond that.

We would say, "We do research at the Smithsonian and around the world in finding fossils, digging up archeological remains, finding new evidence and information about the evolutionary origin of human beings. What do you think about that and about our findings?" We knew that we would encounter many people who would reject the science on the basis of their starting point. But at least we could help people gain access to the fossil evidence and other evidence so that they would know what they are rejecting, and perhaps articulate in conversations with us why they were rejecting it.

So, we had goals of presenting the findings and nurturing community conversations about it, but we also had a third aim—fostering connections between the science and how people live a meaningful life in this world. We situated the exhibit in public libraries around the country, which was a really great decision, because public libraries are tremendously respected. People can go and find a good book to read, or hear an interesting lecture, or in this case see an interesting exhibit, and have the kind of conversations we wish to advance.

.....  
**“The theme for our entire initiative on human origins is a question that goes beyond the purely scientific: What does it mean to be human?... With the exhibit, we never really give an answer to that question; we ask people to give us their thoughts and their ideas.”**



*The traveling exhibit on human origins in Chesterfield, VA. Credit: Smithsonian's Human Origins Program, courtesy of the Chesterfield County Public Library, Chesterfield, VA.*

.....  
**“The idea that science and religion must be in conflict...can come with some pretty devastating assumptions, like that scientists are always opposed to religious faith, or that people of deep religious conviction reject what science has to offer.”**

### **How many communities did you visit?**

The traveling exhibit, in its first two and a half years, went to 19 different communities across the United States. They ranged in size from rural towns and small cities to large urban areas. The smallest location that we visited was Andover, Ohio, with about 1200 people. The largest was Orlando, Florida. From the east coast to the west coast, we found that people interacted with the exhibit and our programs in a great variety of ways.

We planned for the exhibit to be in each library for about 4 weeks, and our team would be there as well. Our team includes me, Dr. Briana Pobiner, who is our educator in human origins at the Smithsonian, and the co-chairs of our Broader Social Impacts team, which consists of members of clergy from many different religious perspectives and communities from around the country.

Beginning in 2019, we started visiting theological seminaries. While the exhibit is at a seminary, they will have classes in the seminary devoted to this question of “What does it mean to be human?” and about the subject of human evolution. And we’re going to continue to work with the American Library Association, which really helped us a great deal in finding venues for the exhibit.

### **Given the topic, you must have expected challenges. Were there any memorable instances when you did encounter conflict?**

We knew from the beginning that understanding human evolution can be troubling for many people. The idea that science and religion must be in conflict was common. That idea can come with some pretty devastating assumptions, like that scientists are always opposed to religious faith, or that people of deep religious conviction reject what science has to offer. We knew that when there is conflict on this topic, people hardly know how to speak with one another in a fulfilling way. Our approach was that we were there to listen. And that was very important and helped to lower the temperature when conversations got a little bit tricky.

During one town hall meeting, we were talking about the variety of viewpoints that people could have when coming into an exhibit about human evolution, and how some people could feel very uncomfortable

from a religious perspective. A group that called itself the free thinkers stood up and said, essentially, “Why are you even bringing religion into this conversation at all? No one of a religious perspective deserves to be part of this conversation because they are going to reject it outright.”

Our goal then became to defuse the antagonism and to help people be mindful that we were there for a respectful conversation regardless of viewpoint. We explained that there are many people, even members of clergy, including those in the audience, who have tremendous interest and found the exhibit and topic of great importance. And that those people wanted to learn how to talk intelligently about science to people in their congregations, for example, who ask questions about human origins and the conflicts that can exist with the narrative presented in the Bible. We explained that this is an important goal of our project. We were surprised that the source of such a challenging conversation was a combative group of free thinkers and not, say, anyone from a fundamentalist religious perspective.

Probably the most challenging community overall, though, was a rural community in Pennsylvania. Before the exhibit started, the library received several weeks of very harsh letters, and even death threats. The head librarian made it very clear to everyone, even to the local newspaper, about the exhibit’s visit. It is a very religiously conservative community; many of the students, if not most, are homeschooled in a primarily Christian context. The idea that the public library would bring an exhibit and scientists from the Smithsonian to talk about evolution was upsetting. There were words on road signs basically damning the subject of evolution. They were wondering if it was going to be the end of the library there, but they wanted the exhibit anyway because of the importance of having a conversation about it, and trying to shift away from this conflict mode.

It turned out that, during the four weeks that the exhibit was there, 30,000 people came to the exhibit—an all-time high for a month in that library—all without incident. During our town hall meeting, there were people who stood up and said, “We know how people originated,” and in very eloquent ways summarized Genesis 1. In that particular instance, there was someone from the same church as the person who read Genesis, and they said, “I’ve been to the exhibit at the Smithsonian

and I've seen the traveling exhibit here, and I think it's the most wonderful topic that one could ever encounter and embrace, the idea that science has made these discoveries. And although they conflict with a literal reading of the Bible, they enhance my view of creation."

At that point, our group from the Smithsonian stepped out of the conversation and just allowed it to proceed. By virtue of opening up a conversation, it allowed people to speak to the variety of ways people can reconcile, or at least accommodate, science into their worldview, and that it need not destroy the personal identity of someone coming from a religious perspective. Providing that kind of opportunity to communities where the conflict mode was very strong meant a great deal to us.

**Some of us might be uncertain how to guide a difficult conversation; how do you prevent a dialogue from going off the rails?**

That's a really good question. We decided from the outset to start every community conversation with a set of ground rules. Like, "We're here for a respectful conversation where we acknowledge that people have different views from one another, and we want people to keep their comments and their questions as brief as we can. Is everyone okay with those ground rules?" And we wait, sometimes a bit uncomfortably, until people generally are nodding and saying yes, and then there is buy-in to those ground rules, and that gives us a way to guide the conversation if it gets heated or disrespectful.

There were only one or two cases where someone was really disdainful to another attendee. One of those times, I stopped immediately and I called the person out and

said, "You are not following the ground rules, sir. We have come here to try and nurture a welcoming conversation for everyone, and you have done exactly the opposite of that." The audience applauded when I said that, and that person didn't say anything again during the group conversation. But I went up to him at the end and said, "I'm sorry, I didn't mean to shut you down, but you did understand the rules of the conversation." And we actually had a pretty decent conversation after that.

**How did you assess if you were making a difference?**

We had an independent company both do a survey in each community we visited, and also send their interviewers to have conversations of their own with people in five of the communities. In one community, only a quarter of the people who came to the event or exhibit said that they had any prior interest in the topic. And yet, in the follow-up survey of people who attended from various communities, between 75% and 84% came away thinking that scientific discoveries on human evolution enriched their understanding of what it means to be human. And that was really our goal—encouraging people to make a meaningful connection with the subject.

**Any tips for someone interested in hosting similar community dialogues on challenging topics?**

The deficit model does not work. It is not true that all you have to do is inform people about a particular subject from a scientific standpoint. Avoid that, study the variety of viewpoints that people have, and acknowledge the challenges and the troubling aspects of the topic. That's the first step.

Also, when bringing science to the public, there will be people who think they know a great deal about the science but actually have highly inaccurate understandings. Be prepared to gently improve people's understandings by saying, "Well, actually, here are some interesting things to think about," and then present the evidence in a way that can reshape their understanding.

There are great resources about how to have difficult conversations, which are useful because we've inherited this conflict mode. We have a choice to make in each conversation about whether we want to go beyond that antagonism and combativeness and see if there is a better approach. Not necessarily a full reconciliation between science and religion, but a way of opening our minds. Being present to foster a dialogue, having the tools to be able to defuse challenging combative situations, learning how to have a difficult conversation—all of those are really very important. ~

.....

**“By virtue of opening up a conversation, it allowed people to speak to the variety of ways people can reconcile, or at least accommodate, science into their worldview, and that it need not destroy the personal identity of someone coming from a religious perspective.”**

For more DoSER resources, including more about Dr. Potts, please visit:

[scienceligiondialogue.org](http://scienceligiondialogue.org)

Learn more about DoSER:

- [aaas.org/doser](http://aaas.org/doser)
- [AAAS\\_DoSER](#)
- [AAAS.DoSER](#)



*The traveling exhibit on human origins in Chesterfield, VA. Credit: Smithsonian's Human Origins Program, courtesy of the Chesterfield County Public Library, Chesterfield, VA.*

Suggested citation format:  
 AAAS Dialogue on Science, Ethics, and Religion, in *Profiles in Science Engagement with Faith Communities*, R. Kline, R. O'Malley, Eds. (AAAS, 2020)

Interviewers: Liz Crocker, Rob O'Malley  
 Editors: Rachel Kline, Rob O'Malley