

Episode 95: Rich Rife

Exploring Mars and Experiencing God

Intro [00:00:04] Welcome to engage 360 Denver Seminary's podcast. Join us as we explore the redemptive power of the Gospel and the life changing truth of Scripture at work in our culture today.

Don Payne [00:00:16] Hey friends, welcome again. This is Engage 360. We're really glad, we're grateful that you've chosen to spend a little bit of time with us. We're coming to you from Denver Seminary, where our mission is to train people to engage the needs of the world with the redemptive power of the gospel and the life changing truth of scripture. That's what we're all about, what this podcast is about. My name is Don Payne. I'm your host and looking forward to another really interesting conversation today. Those who conduct a lot of sociological research on faith, at least in the U.S., find pretty consistently that one of the leading reasons people walk away from their faith is that they can't reconcile their faith with some of the findings of science. And now there are some pretty common kneejerk responses to that. And some of those responses may be better than others. But before any response, it's probably wise for us to pause a minute and take that concern seriously. Now, while not everything that comes our way in the name of science is equally valid, and we know that lots of supposedly assured conclusions of science get overturned with further research, science does present some findings that sometimes come in conflict with intensely held faith conclusions. And over the long haul, it forces people of faith to reexamine some of those conclusions. This certainly happened centuries ago, when Copernicus argued for a heliocentric universe and argued that the planets were not in fixed uniform positions around the earth, but they were revolving around the sun at different distances from the sun. And the church of the time took this to be the equivalent of atheism, because where then was God if space was infinite? So sometimes we can easily mistake the overall truth of the Christian faith for our presumed interpretations of some matters that we take to be the equivalent of the faith itself. And science can have a way of challenging and sharpening our understanding of our faith, our understanding of scripture. So, in this episode, our guest is actually one of our current students, Rich Rife. Rich, welcome to the podcast.

Rich Rife [00:02:41] Thank you for having me. This is going to be a fun conversation.

Don Payne [00:02:43] Yeah. We're so glad to have you here. Rich came to seminary, actually, as a scientist and has a really interesting story of living in that space that links faith and science. Rich, tell us first just a little bit about your background. I know you've done some work with NASA. I think you've got just a pretty interesting background in the scientific community. I'd love to get a little bit of an overview of that background.

Rich Rife [00:03:10] A brief overview, okay. So originally, I was studying how humans adapted to mountain environments as far as the nervous system responded to that, how the muscular system responded to that, and how the body dealt with that digestibility and the internal biochemistry. And during that time, I ended up having an injury. So, I had to make a shift and I paused and decided which path should I go? And during that time, I started seminary to learn more about theology and apologetics. And then during that experience, I started having old thoughts from my love of space and the mass environment that exists there and decided to start studying space and understanding how we get there and all that goes in with that, with the astronomical changes that have existed over time and how we perceive that, like Copernicus' shift. And during that journey I had the opportunity to do some work with NASA L'Space out at Arizona State and learn how to

write proposals through that and how to review proposals. And I'm currently working with them on mission concepts, the team where we get to explore Mars caves, which is pretty, pretty exciting. And, yeah, work on planning a mission there. We could possibly do that because what everybody's doing in space now is looking for life outside of Earth.

Don Payne [00:04:31] Right.

Rich Rife [00:04:31] And this is the journey we're on as well. The money's being pushed into. Everybody wants to go to Mars. And Mars caves have an increased likelihood of having water, which is where that can exist. And the right temperature. Mars surface changes anywhere from what, -70 degrees up to about 200 degrees, depending on how the rotation's spinning, and where it is, and its orbit. And the caves are where they think that this might exist.

Don Payne [00:04:58] Okay. And I guess any time you're finding hydrogen or carbon, you've got at least some indicators of the possibility of life or former life, correct?

Rich Rife [00:05:07] Correct. But the main indicator is water. You have to have water and have the right temperature they found on Earth. They basically compare Mars to Earth. What exists here they think will exist elsewhere. Mars hasn't shown any true signs of that existing. However, in the caves I think that's the greatest likelihood. But the challenge of being on another planet is how do you control that? What kind of robot are you going to use to go into a cave and still have power because there's no sun in the cave? So, these challenges have to be overcome to create that opportunity.

Don Payne [00:05:34] Okay. Okay. What's most interesting about that to you? What keeps you fascinated with that?

Rich Rife [00:05:39] It for me, this goes back to how the shift happened for me was in science there's not a whole lot of talk about God in it and it disturbs me because if we have all these unknowns and we don't know how the universe started and we still don't know, for example, the Heisenberg Uncertainty Principle that in the small particles, we don't know. We know position, but we don't know momentum. We know momentum. We don't know position. There's an unknown there that exists, right. And then you get into Godell's incompleteness theory. And you don't really know.

Don Payne [00:06:23] I'm going to say right as if I know what that is. I recognize it. I've heard of it, I couldn't explain it.

Rich Rife [00:06:28] So yeah. So, in a sense, it basically can tell you something is true, but it can't prove it, right. Which happens a lot. And so, you have these uncertainties, these ends that don't really; that are missing things. And you have to pause. And you mentioned that in the intro, and question, what am I missing here? And this is where I was, goodness, it's been sixteen years ago in my journey in relationship with God. And what's the purpose if God doesn't exist, then what are we doing each day? Right. And so, when you explore a Mars Cave, my curiosity is how amazing is it that God created this? Right. All these planets, all these systems. And then yet we have earth where you have to have all that to have Earth to go make an apple pie. Right. Because you can do that anywhere else. This is a special place. And he made it as such. And so, I invite him into that to engage in everything I do.

Don Payne [00:07:36] That's a really good hook to hang this on or something to remember this bias that all of the complexities, the sophistication, all of the mysteries, all of the unknowns really come together in some inexplicable way so that we can make an apple pie.

Rich Rife [00:07:51] Exactly.

Don Payne [00:07:52] Yeah, I can get my hands around that as well as my mouth.

Rich Rife [00:07:55] Right. That's not that's not my quote. That's from a famous astronomer. I can't remember his name. He put that out there. And he's like, all this happened so you can make an apple pie. And it's just a beautiful thing to think about that. It is that it is that amazing. He was that creative.

Don Payne [00:08:09] Yeah.

Rich Rife [00:08:10] We have always to explore and interact with and then still the beauty of a nice dessert.

Don Payne [00:08:16] I love to think of Genesis 2:15, which we often refer to as the creation mandate. It's when God says to the original pair, he places them in the garden and says, basically, take care of this. Work it, keep it. I think a loose paraphrase of that could be Here's my gift to you. This world has got everything. And again This is a really loose and expansive paraphrase Of Genesis 2:15. But God says basically, here's my world. That's my gift to you. It has everything you need to survive and to flourish and to enjoy existence with me. Take care of it. Figure it out. I'm not going to do it for you. But I'm going to be with you in the process and we're going to have a good time. Now, that may be the loosest paraphrase ever of Genesis 2:15, but I think that's what God is communicating.

Rich Rife [00:09:09] Yes.

Don Payne [00:09:10] Here's this world. It's complex. You're going to spend all of your history here figuring out how this thing works. Have fun.

Rich Rife [00:09:20] Yeah, exactly. And somehow, we've lost that. But, I mean, I look at it all and I'm like we're still doing it, but we're not doing it with him anymore. He's been left out of the equation.

Don Payne [00:09:29] Yeah, you mentioned that a moment ago. Why is that? Why does that seem to be so pervasive within various scientific communities that God is left out of the equation?

Rich Rife [00:09:38] This is the question I'm exploring and I'm very curious being in it and being in different realms of it. There seems to be a lot of me and that me comes from I have to do research and almost be biased in that research that brings me into it rather than the actual solution. And the opportunity to question research is decreasing. And people are too worried about moving into a research role and having the funding for it rather than questioning it and trying to disprove what they're already thinking. They're very biased in their perspective. That's what I'm seeing.

Don Payne [00:10:27] Do you come across a lot of what we would often call reductionism? By that I mean if something can't be explained empirically, if it can't be explained in terms of physical,

mechanical processes, it's not real. So, which is a way at least I think I've encountered this. That's a way within many communities, like some scientific communities of discounting the supernatural, discounting the divine, discounting anything that we can't, you know, access with our senses.

Rich Rife [00:11:03] Right.

Don Payne [00:11:03] It can't be reduced to a formula. You can't measure it.

Rich Rife [00:11:05] You can't measure it.

Don Payne [00:11:06] If you can't measure it, it's not real.

Rich Rife [00:11:07] Yes, exactly.

Don Payne [00:11:08] Right. Do you bump up against that?

Rich Rife [00:11:10] Yeah, that's where it's at. So, in research, that's where it happens. If you break down the research, it's the measuring. If they can't define it through measurement, then it doesn't exist. But we go back to the trouble with measuring is it's incomplete as well.

Don Payne [00:11:25] Okay. Say more about that.

Rich Rife [00:11:26] So you can measure something. It's an inch. Right. But that's our measurement. But you're defining it by your view of measuring this coaster being four inches. Okay. But is it really just four inches? Are we missing something on each end?

Don Payne [00:11:41] Okay, so it's like an ad infinitum. Or the law of infinite regression, right? You can only distill it so far, but you never get to absolute zero. With your ability to measure something. Is that what you're saying?

Rich Rife [00:11:56] That's pretty much it. Yeah. That's pretty much that simple. So, you could be missing something. And that's where I like to pause and back up. What am I missing here? In exploring in the questions, I'm asking. So, I'm always shifting my perspective in what God created and how we could interact with that rather than, hmm, this is interesting. Look what I found. Look what I created. Well, he originally created that and created you to create and explore.

Don Payne [00:12:24] I think you're talking about or you're alluding to curiosity, the role of curiosity in scientific research, = in human learning in general about the world we inhabit.

Rich Rife [00:12:35] Right.

Don Payne [00:12:36] How does that how does curiosity constitute maybe this X factor that gets missed in a lot of scientific discussions?

Rich Rife [00:12:44] So I think what you're asking is, is what questions aren't we asking as a result? So. If you take God out of the equation, then you lose a whole new perspective in what's going on because you're looking at it in a view that is only curious in where we came from, right. And how it all works, rather than what is the purpose of where we are and what's going on and how it works. What are we supposed to be doing this? And nobody's asking that question.

Don Payne [00:13:18] The purpose questions.

Rich Rife [00:13:19] Right. And then you run into things getting abused and things getting used an incorrect way.

Don Payne [00:13:28] Okay.

Rich Rife [00:13:29] And that's where we get into more the ethics of this study, what's going on.

Don Payne [00:13:32] Right. Right. Yeah. Which goes to the question of should we do everything that we can do? We can do a lot of things. But should we do All the things we know how to do?

Rich Rife [00:13:44] Yeah. Yeah. That's a big piece. And that goes back to Genesis 2:15. We're supposed to rule over this, but most people shift to the rule is I need to dominate it and make money.

Don Payne [00:13:54] Mm hmm.

Rich Rife [00:13:55] Right. Instead of how should we be using this for the good of humanity, but also in the good of what God created for us to be using?

Don Payne [00:14:03] Yeah, that's a bigger, much more complex sense of purpose than a simplistically utilitarian functionality. What can I make of this? What can I get from this?

Rich Rife [00:14:15] Exactly. So, if we're going to space to study a mars cave and we find out there is life there, then what are we going to do with that?

Don Payne [00:14:24] Okay. Yeah. So, one of the I guess the ethics of science may be an arena that needs a lot more explanation. I wonder, of course, there are so many different aspects of science and so many different scientific communities and types of scientific research that it may be maybe impossible to broad brush this, but I wonder how much tolerance there is for the discussion of ethics in a lot of scientific communities when if they tend to be only backward looking and reductionistic.

Rich Rife [00:14:57] Yeah, it is missing in a lot of areas. And one of the struggles that exists is money. I mean, you have these people studying these different aspects that are always trying to get new grants.

Don Payne [00:15:07] The commercialization of research.

Rich Rife [00:15:10] And it's kind of biased a little bit. I'm finding there's less things being disproven and more things trying to be proved. And that's frustrating because if you don't disprove a theory or a hypothesis, then what are you really what are you really accomplishing?

Don Payne [00:15:26] Okay. How or where do you find Christians often getting stuck when they're thinking about the relationship of their faith and science? Because as I mentioned in the intro, this is one of the most prevalent reasons for people, particularly younger adults, teens and younger adults, Turning away from their faith is they may have been brought up in the faith, nurtured in

the faith, and they start learning about things going on in the scientific community. They can't reconcile that. And so, the faith always loses. What are some of the places where people tend to get stuck?

Rich Rife [00:16:10] I was one of those in my early mid-twenties going through the college realm. Evolution was the big battle, right? Everybody got into how Darwin showed the opportunity for things to evolve and adapt. And that always seems to be the big, the big fight. That's probably where we started seeing science come in to dominate. And religion kind of being pushed to the side in the late 19th century. And for me was it put that seed of doubt in there. And once that doubt came, I started questioning all those pieces. But when you come down to it, science is measured. Religion's not measured. You can't measure God. There's no measure there. So, I think where they miss out is they're putting science into what they believe, when those are two separate entities. They can cross and interact. But they are two separate takes on how to how to understand the world and how it works.

Don Payne [00:17:08] What was it, Rich, that began to dispel for you the contradiction or the contradiction that maybe you had felt between your faith and science?

Rich Rife [00:17:22] Yes, that started when, It was about five years after I started having that doubt. I realized that how my life was functioning was based on science and there was no purpose. And then the morality and ethics start derailing. And when you see that happen, something in you triggers. Something's not right here. What am I missing? And you're missing, well, if I have a purpose, then it's got to be because God created me. And if you go back to that and what created where I live and all the way back to the beginning of time of how things were created. And if you can't trail back to that, then it's very difficult. It was difficult for me to accept my limitations and my meekness and weakness here on Earth.

Don Payne [00:18:08] Sounds like you were kind of bumping up against the reality of some of the dimensions of your humanness this science couldn't account for?

Rich Rife [00:18:19] Exactly.

Don Payne [00:18:19] Is that fair to say?

Rich Rife [00:18:21] Yeah.

Don Payne [00:18:21] Because when you're talking about purpose and even other, I use the word intangibles, other immeasurable like love and justice, all that's related to the realm of morality and ethics. You have to account for that somehow. Now there are non-Christian people who do try to account for that, but they'll call those social constructions, neurological mechanisms for survival, you know, but basically, they're just self-generated, direct rather than externally generated from our creator.

Rich Rife [00:18:58] Right, exactly. And that nails it. I mean, that what where I was struggling in my mid-late twenties, I was confused by all those because science couldn't explain those pieces.

Don Payne [00:19:06] Okay.

Rich Rife [00:19:07] And that's where you have to have God come in and give you that morality. Because you don't get it from science and how the social constructs happen. It doesn't work there. It's incomplete again. Right. Or God fills in those incomplete pieces, answers those questions that are always longing deep within.

Don Payne [00:19:24] I think you have done or are doing some work with artificial intelligence aren't you?

Rich Rife [00:19:29] Yes, yes. I'm currently working in software engineering because I'm very intrigued by it. That happened to this whole journey over the past three years. And it's been a fun shift and how that is going to be able to engage us with more about the world around us. I'm also curious how we can use that in studies and in researching Christian scriptures and, and figure out what's going on in there as well.

Don Payne [00:19:53] Yeah, I bring it up because AI, artificial intelligence, is sometimes very threatening to people of faith. It's as if the gap is being closed between what we can create, the intelligence we can create and the intelligence that we have as human persons. While there is still is a gap there, I mean, I think the sense, or the fear is the gap is shrinking. It's only a matter of time before we'll be able to create something that is virtually the same as ourselves. So it's sometimes a very threatening concept. How do you wrestle through some of those intriguing questions with AI, And those potential threats? What fascinates you about AI?

Rich Rife [00:20:41] So for me, I like how things can take in data and come out with a conclusion quicker. Right. That's what computers are for. AI it as a high, high piece of that. But for me I still look at the brain. And I did so much study in that. I know how it operates. It's fascinating that there still isn't a computer that can even come close to it. So, AI's never going to get near that. They just finished a computer, I think it has some high rate of processing that's just insane. And it's in a big room, much larger than we're in now. And it still can't compete with the human brain in processing power.

Don Payne [00:21:22] Well, it kind of raises the question of the difference between brain and mind. Which I know in some neurological fields that's a contested distinction. But can our mind and everything that goes into the human mind be distilled and reduced and nothing more than the traceable neurological pathways. The brain. Is there something more? Are we more than our brain?

Rich Rife [00:21:57] Right. And again, we can't measure that. Right. So again, you're going if you can't measure it, science is limited. It can't answer all these questions on all these unknowns out here. Where are you going with those?

Don Payne [00:22:10] Yeah. So, when neurological reductionists want to give me a scientific explanation, a reductionistic explanation for why a piece of great apple pie is such a worshipful experience, I just don't buy it.

Rich Rife [00:22:32] Right.

Don Payne [00:22:32] They may posit how that happens in my brain through certain neural pathways and synaptic functions. But you can't reduce the doxological, the worshipful, the glorious pleasure, of that piece of apple pie to nothing but that.

Rich Rife [00:22:52] Yes.

Don Payne [00:22:53] I am more!

Rich Rife [00:22:56] That's so true.

Don Payne [00:22:57] Yeah. Well, hey, Rich, when you're involved in discussions with people of no faith or people who are struggling with their faith because of science. How do you have those conversations? What are some of the ways you could recommend to engage those conversations about faith and science with people who are in in different places? They're struggling with that.

Rich Rife [00:23:25] Right. The key piece I shift to is I have to build trust first. And I find it very important to build a relationship because what I find in science is that there tends to be a box that's built around most folks. And I'm not a big fan of putting people in those because one, it creates a bias for me, and then I have to kind of try and navigate around that box. So, I built a relationship, start to have conversations just about the simple stuff in life. You build that trust in that conversation, and then you can shift into harder questions. So, what do you think about how we interact with someone in this ethical situation, and where do we think we got that ethics, this ethical situation? How do you think about that ethically? That is typically where I shift into and then from there it makes it much easier to shift and start talking about God. And when you bring in ethics, then you can start having a relationship with them in how they think about we were created then about their morality and then what in them is struggling, what in them are they be battling. One of the things I'm always watching during those conversations is especially if it's live, but being on Zoom so much, it makes it difficult, is their body language. Are they uncomfortable about it? If I see they're uncomfortable, I back away because I already know they're not going to have a conversation with me, an honest, deep heart piece that I want to get into.

Don Payne [00:24:43] Why is it, do you think, that some people may be intimidated by that conversation or not want to have the conversation?

Rich Rife [00:24:51] For me, from my experience, it's because they already have a doubt, and they don't like to not know. People love to have to be able to know and be done. They don't want to explore that deeper and explore what's missing and what they might not know. The unknown scares people.

Don Payne [00:25:09] People don't want to keep struggling?

Rich Rife [00:25:11] Yeah, want easier path. The struggle is tough.

Don Payne [00:25:14] Do you think that's equally true? This sounds like a leading question. Maybe it is, but is that equally true for people of faith and people without faith?

Rich Rife [00:25:22] I agree. Yeah, definitely. Yeah. Because there's many in faith, I found, that don't want to keep struggling in scripture. Like I love diving into scripture and learning it and understanding the humanity of Jesus when he was on Earth, that was a beautiful thing, his personality. I like to go into Scripture and kind of find that and interact with that and that's a missing piece.

Don Payne [00:25:43] Okay. Yeah. And so that need for quick maybe premature closure.

Rich Rife [00:25:49] Right.

Don Payne [00:25:50] Can exist on both sides of a conversation.

Rich Rife [00:25:53] Yeah. Yeah. And it's much easier for you walk through life and be okay with where you're at and not willing to shift out of that.

Don Payne [00:26:00] I hear you suggesting I think that one of the ways we can have meaningful conversations with people who are stuck or struggling is to introduce those dimensions of humanity, human personhood, that just cannot be accounted for by the empirical science.

Rich Rife [00:26:20] Right? Yeah. It's not that simple.

Don Payne [00:26:22] Yeah. Just expand our humanity. Just acknowledge And keep pushing out of the boundaries of what it means to be fully human and fully alive. And asking the questions can Nothing but empirical science account for the fullness of human personhood and ethics.

Rich Rife [00:26:43] It can't. It's missing. And then that's always a battle between faith and science. Right. Is science wants to try to measure it. And with faith, they don't measure. You're already corrected through Christ dying on the cross and his ascension. That's all cleaned away. So, the ethics piece that we struggle with to put that in is a challenge. And they don't they don't really clash. They can be used together. And that's what's missing.

Don Payne [00:27:11] What are some of the ways, Rich, that your background as a scientist has actually been an asset to your faith?

Rich Rife [00:27:19] For me because the way I function in science, I constantly struggle with it and sit there and reflect on it constantly. And I function with that kind of battle in Scripture as well and what I believe and battle and all the apologetic pieces and ethical pieces and the theology. If I didn't have the ability to struggle in it, I don't think I would grow as well as without it.

Don Payne [00:27:44] So struggles may be a good thing, not a bad thing.

Rich Rife [00:27:48] Yeah, right. And you don't want to avoid it. You don't grow without it.

Don Payne [00:27:52] Have there been any good resources that you would recommend to people who want to maybe chase this conversation down a little bit further.

Rich Rife [00:28:02] I'm a big fan of John Polkinghorne's work.

Don Payne [00:28:05] Oh so am I, yeah, the English physicist.

Rich Rife [00:28:08] Oh, man, it's awesome.

Don Payne [00:28:09] I can barely understand him.

Rich Rife [00:28:13] I really enjoy going through his work. I'm going through his one world right now, and I find that to be a great resource. And I think he's hard to understand, but he also forces you to change perspective and ask questions. And if you find him on YouTube, watch some of his videos, he'll ask a question. And after he's asked a question, I think it's really important.

Don Payne [00:28:33] Okay. Yeah, I shouldn't have said what I said about I cannot understand it because I mean, that says more about me than about him, because I don't have a real thick scientific background, though I'm fascinated by what he does. He was a quantum physicist. Is he still living?

Rich Rife [00:28:47] No, he passed away a few years back.

Don Payne [00:28:49] Okay. John Polkinghorne is his last name. And he does have some more accessible works. Right. The one I remember reading just few years ago, The Trinity in an Entangled Universe.

Rich Rife [00:29:02] That's one of my next ones to read.

Don Payne [00:29:05] Yeah. So yeah, Polkinghorne I'm a big fan. So I'd underscore your recommendation of his works as one who was, I think he was an Ordained Anglican priest.

Rich Rife [00:29:18] He was. That's how he finished his life.

Don Payne [00:29:19] Yeah. As well as a pretty accomplished physicist.

Rich Rife [00:29:23] Oh yeah. Outstanding. Yeah. Outstanding physicist. Yeah. And you'll find the Heisenberg Uncertainty Principle in there I mentioned earlier, as well as Godell's Incompleteness Theorem there. They're both in that book. Yeah. And it's good stuff.

Don Payne [00:29:35] He does have beautiful ways of tying those together.

Rich Rife [00:29:36] He does. It's fascinating.

Don Payne [00:29:37] Yeah, that's great. Rich Rife, so good to have you on the podcast.

Rich Rife [00:29:40] Yeah, thank you for having me. This was great.

Don Payne [00:29:41] Yeah, I'm glad you're here. Tell us a little bit about your program at Denver Seminary. What are you studying?

Rich Rife [00:29:47] Yeah, well, apologetics and ethics.

Don Payne [00:29:48] Okay, you in the MA or MDdiv?

Rich Rife [00:29:50] MDiv

Don Payne [00:29:50] Okay, good.

Rich Rife [00:29:51] I'm doing this nice and slow. I don't like to hurry.

Don Payne [00:29:54] So you can fully digest it.

Rich Rife [00:29:56] I want to struggle with it.

Don Payne [00:29:58] Good man. It's been such a pleasure to have you here. Friends. Thanks for spending some time with us. I want to give another shout out to Andrea Weyand, our director of communications, who kind of behind the scenes makes a lot of this happen. Friends, by the time you hear this, we'll be coming up on, I think the end of about year two of the Engage 360 podcast and entering into year three. So, hope you've been able to enjoy and benefit from a lot of our episodes. You can find them all on the seminary website. If you ever want to look back at any episodes, just go to DenverSeminary.edu and look up the Engage 360 podcast and all of our episodes are there and I think most of them also have available full transcripts. If you want to download the transcript of any of our conversations, please access those. We'd love to hear from you. You can email us at podcast@DenverSeminary.edu. And if you are so inclined and I hope you are, give us a rating or a review on whatever podcast platform you utilize to access us. Anyway, I will be looking forward to another conversation with you really soon and may the Lord continue to walk alongside you as you struggle well with this wonderful, mysterious, fabulous life-giving world that the Lord has given us and the redemption He's given us to enjoy in that world. Take care, friends.