## From Young Earth Creation to Evolution 2.0 – The Story

**Zach:** Welcome everybody. Zach Spear here and I'm sitting here with Mr. Perry Marshall. Perry, welcome.

**Perry:** It's good to be here. There's a great opportunity to respond to the Creation Research article and talk to people particularly who come from a creation background the way that I did.

**Zach:** Absolutely. For those of you who don't know, I can't imagine that you don't, but Perry authored the book *Evolution 2.0.* I'm not going to spoil any of the surprises, but there was an 11-page expose, if you will, by the Creation Research Society in their quarterly magazine. They wrote an 11-page review of the book, so we're going to address some of the things in that review today.

**Perry:** And tell a lot of my story, because I think there's a lot of background here that's relevant, and some of this I haven't really told before, so I'm looking forward to this.

**Zach:** It's going to be awesome. I think what we'll start with is just kind of where all this began. I know you came from a pretty interesting background in the church. I don't want to steal any of that story from you, but I also don't think a lot of people know that story. How did you grow up? What started this?

**Perry:** I grew up in a super-conservative church in Lincoln, Nebraska. My dad became a pastor there when I was about 10 or 11. Before that my dad had worked at this organization called Back to the Bible. He had actually moved from North Carolina, where he grew up, and my mom's from Virginia, and they moved to Nebraska, this voyage to this place where they didn't know anybody, and they started working in Lincoln, Nebraska.

He was not quite a missionary, but pretty close to it, working for a non-profit Christian organization. And for that matter, my Grandpa Marshall was a Baptist minister in Virginia. My Uncle Glen worked for Transworld Radio and worked as a missionary in Bonaire in the Caribbean for a number of years. I had an uncle on my mom's side who went to Bob Jones University and worked for a Christian radio station. My wife's brother has a Ph.D. in church history and runs a relief organization called Children's Relief International. So I've been surrounded by Christian missionaries and Christian scholarship all my life. That's where I come from.

My dad was a minister at this church, and I remember when I was about 14 or 15 this guy named John Whitcomb, author of a very famous book called *The Early Earth*, came to our church for week. Every night for a week he came and had this presentation and this one and this one and this one. He was advocating flood geology and it's actually a whole view of young earth creationism, which originally comes from the Seventh Day Adventists. A lot of people don't know that.

I thought it was awesome. It was way better than the normal stuff that I was used to. What was I normally used to? Let me give you an idea. To give you an idea how rigorous my Bible education was, my pastor started Romans and the first sermon on Romans I think he got to verse 2 or maybe verse 3. You're flipping in your Bibles, like you're in Isaiah and now we're in Jeremiah and now we're in Ephesians and now we're in Philippians and now we're in John, and every single thing would be cross-referenced.

This was in the 1970s and 1980s. To me the whole Bible was hyperlinked. It took him five years to get through Romans. This was serious, and there's Greek and there's Hebrew and all this kind of stuff. This is exactly what I grew up in.

It's probably not too much of a surprise to say that this was a little tedious and I didn't always enjoy it, but when Dr. Whitcomb came, man, that was great because I was a science geek. He's talking about the age of the earth and he's talking about the Bible and the Tower of Babel and Noah and the flood and all this kind of stuff, and it's a tour de force and I thought it was great.

**Zach:** You were a science geek before this happened?

**Perry:** Oh yeah, I've been a science geek all my life. I remember when I was 5 years old I got in trouble because I took a hammer to my dad's transistor radio, and he was rather fond of his transistor. He didn't really like the broken pieces of circuit board, but I've got to look at all the stuff that's in there. "Man, look at all these circuits!"

I was building electrical stuff when I was probably 8, and I was building stereo equipment starting at age 13, so I was a pretty serious science geek. So I loved the John Whitcomb thing and I ate it all up. It was like, "Man, I didn't know how all this fits together."

If you fast forward a little bit, little by little by little things start to pop up where you go, "Hey, wait a minute." For example, I remember being in second grade reading dinosaur books and it would talk about the dinosaurs being 65 million years old, and I went to a

Christian school and they'd be like, "Oh, just laugh at that. That's just the secular scientists," so I'm not going to believe in this millions of years stuff.

But I remember after I got out of college and I was working as an engineer and I got into this conversation with a bunch of co-workers about faith stuff. I was fairly competent with some of that, but this one guy made a comment. He goes, "All right, but if you're going to sit here and try to tell me that the earth is 6,000 years old, I'm not signing up for that deal." I realized as soon as he said it, I was not equipped to counter what he said.

By this time I have an electrical engineering degree and there's a lot of things that I know. For example, I know the speed of light and at some point along the way I came to understand that when an astronomer tells you that a star is 100 million light years away, there's about six different ways to arrive at that number and they all tell you the same thing, and that star really is 100 million light years away. That means the light left the star 100 million light years ago.

A lot of people kind of try to dodge this. This is actually a very, very simple fundamental thing. First of all it's like division, like how fast does light travel, how long does it take to get here, how far is that, and how long is that? It's old. That starlight is very, very old.

And furthermore, as an electrical engineer I knew something that most people don't know, which was how intrinsically bound up the speed of light is with all of physics. It's a constant. E = MC<sup>2</sup>. Energy = Matter x Speed of Light<sup>2</sup>. That's a statement of both the relationship between matter and energy – it tells you how much energy is for how much matter – and you combine that with the conservation of matter and energy. It also speaks to a fixed amount of energy in the universe.

There's all kinds of engineering problems and physics problems where you take those two things and you figure stuff out. You figure out how much energy came out of a chemical reaction, and the thing is it's all right. It's all true. Physics itself fits together beautifully like a clock or something, where you've got all these gears and they all work perfectly.

This is why we can design chips and cell phones. Most electronic things are modeled on computers before they're ever built. I worked at a company that designed a chip and they spent months and months and months and months running simulations on this thing because once it's in silicon you can't change it.

So I knew because of the precision of the laws of physics, and I measured the speed of light in the lab when I was a sophomore in physics, and even things like the length of a USB cable is based on the speed of light. USB cables aren't 100' long because they won't work. They're only like 6' long. That's because of the speed of light, so there's all these things.

I knew that the earth had to be old. There was no way around this. Then if you say, "Oh well, the universe was made to look old but it's not really old," that automatically means that most of astronomy and most of cosmology is the study of an illusion, because literally you can turn your telescope and you can look at stars that are near, stars that are far, depending on where you point your telescope in the sky, and you are time traveling to earlier, earlier, and earlier points in space.

We can almost witness the birth of the universe, depending on where we turn this. When the Hubble telescope came out in the 90's we started having just tons of new data and new information about the history of the universe, so there wasn't any question whatsoever that the earth was old.

When my friend said this, I hadn't quite figured this out. Later I encountered Hugh Ross, who's an old-earth creationist. He's an astronomer and an astrophysicist. Hugh made perfect sense out of all this stuff and he explained the Big Bang. He said, "In the beginning, God created the heavens and the earth," and he explained how when George Lemaitre formulated the Big Bang theory in the 30's, everybody laughed at him.

They were inclined to not believe him because he was a Catholic priest and they thought he was biased and everybody thought the universe was eternally old. But he said, "No, it's all moving outward, and if you wind it backwards it all goes down to a single point." That was the Big Bang theory. People hated the Big Bang theory because it sounded like creation.

I was like, "Wow, that sounds great" and I find out about this amazing fine-tuning of the universe and how if the expansion rate of the Big Bang had been less or more to the 120<sup>th</sup> decimal place, you wouldn't even have stars because they wouldn't have formed. It would have either sprayed out like a mist and never even formed matter, or it would have all collapsed in on itself. The difference between one and the other is so fine. It's finer than any human-engineered anything.

As I started to discover cosmology, I was just immensely impressed. And to be honest with you, what I discovered from cosmology and astronomy was way more impressive than anything Dr. Whitcomb talked about in his young earth creation talk.

It didn't take any kind of a big battle or anything for me to realize, "Oh, the universe is old. A day in Genesis is a period of time. It's not 24 hours, so hey, there's no problem. It's fine."

**Zach:** When Dr. Whitcomb was first bringing this up when you were younger, you weren't fighting this at the time?

**Perry:** No, I completely agreed with it, but you go through life and you start picking up things. You go to zoos and you go to museums and you learn stuff. One thing that has a lot of gravity with me is not when people are preaching at me and giving me an agenda about, "This is how old the earth is" or something like this. That has less weight.

What has more weight is when somebody has information about something that speaks to one of these questions, but they don't have a dog in the hunt and their career depends on it.

For example, guys that drill for oil. Being employed in the petroleum industry only requires that you be good at drilling for oil. They don't care if you're old earth or young earth. That's not on the job application. That doesn't matter. It's can you do the practical science of whatever geology you need to know to drill for oil.

Maybe I'm getting ahead of myself, but when my brother Bryan and I started having this tussle about faith, one of the things I quickly figured out is you'll have a really hard time finding a professional geologist who drills for oil who thinks the earth is young. You'll almost never find one anywhere. They're like, "Of course the earth is old. There's all these layers and layers and layers."

We can come back to that later, but again you don't even need that fine-grained of analysis. You only need the speed of light, which is a constant. If speed of light isn't a constant, physics falls apart. It just unravels. And physics works so well. It's probably the most exact science that exists. Electrical engineering heavily, heavily depends on all of this physics, all the way to semiconductor materials and everything.

The proposition that the earth was young had no support, as far as I was concerned. I'd already gotten over this, but it turns out that Bryan was still a young earth creationist and he had this very tightly-woven young earth creation story blended with Christian theology. He was firmly in that world and this was one of the things that unraveled for us. Again, I'm probably getting ahead of myself, and maybe we need to back up a couple steps.

**Zach:** That's okay. So in the early stages when Dr. Whitcomb is giving the talks and you're kind of learning about this young earth creation stuff for the very first time and totally accepting it – I was raised in a somewhat similar way, and to be honest I haven't made hyper-conclusions either way. I'm still kind of learning.

I guess the big thing that comes to my mind, just because I've had a lot of experiences in this type of environment, is just the exact nature of answers that are given. I guess the biggest thing that comes to my mind is when Dr. Whitcomb is giving these speeches and talking about the history of a 6,000-year-old earth, is there room for questions? Like if you bring him some of these old earth facts, is there room to even talk about it or is it a very exact thing like, "No, you can't ask any questions"?

**Perry:** This gets you into some really basic questions about the nature of knowledge and epistemology, which is how do you know what you know? I was raised in this very tight doctrinal evangelical construction of how the world works, and it had certain assumptions.

I would describe the whole belief system as pretty brittle. It encompasses a whole lot of things, and if you start messing with one thing the whole thing falls apart and it fails to work, and this was what Bryan was experiencing.

Let me kind of describe our path a little bit. I have to tell you a story about several things. When I was a junior in college I took an English class from this wonderful amazing professor named Dr. Knoll. He might have been the most-loved professor on the entire campus. The guy was ruthlessly engaging, brilliantly smart, took his job very seriously. So we're studying everything from Beowulf to Shakespeare and everything inbetween, and every class is just mind-blowing.

This literature, coming into it, would seem dull and he would just make it come alive and he would show you how English literature is really the heartbeat of western civilization and all the questions like what is life about and what is a good human being. It was just incredibly stimulating and he was a hugely influential person for me.

One day – let's call my pastor Mr. G – so one day we're sitting in class and he's talking about how in life you progress, and a natural progression of life is to go from exact answers to being willing and able to deal with ambiguity. He says a lot of kids will start out in science and math because science and math are very exact and it's very comforting, but he said the older you get, the more comfortable you get with ambiguity and gray areas and human beings and inexact answers and all the complexity of

relationships and politics. As you grow up, you move from the exact answers world to the much more difficult world of human beings.

He said, "If you want to spend the rest of your life searching for exact answers, you can go to Mr. G's church," and I'm like, "Hey, wait a minute. I grew up there. That's fighting words!" and I felt as though he'd just hauled off and just slapped me because I loved Dr. Knoll.

We'll get into this later, but Mr. G was a pretty complex character. He had some really great strengths, he had some really big weaknesses, but with Dr. Knoll I'm sitting there and I'm 20 years old and he makes this statement. I'm like, "Owwww!" and I walk out of the class, and for the whole rest of the afternoon I was just walking around in a daze.

Then probably about two or three hours later I was like, "Hey, wait a minute. I don't go to that church anymore." I'd actually left within the previous year. I'm like, "Why did I leave?" It was because the exact answers had become so excruciatingly exact that they were almost like driving people out.

**Zach:** What do you mean by exact answers?

**Perry:** Where I grew up it was kind of like the Bible tells you everything you need to know. Let me give you a real-life example of this. When I was 12 my mom went bipolar, except nobody knew what was going on. If you've ever lived with a person with bipolar personality disorder, one minute they're your best friend and the next minute they flip around and they're your worst enemy and they're hurling accusations at you. You walk in the door and you never know what you're in for.

There was arguing all the time and fighting all the time, and our family was just a wreck for a year and a half. It was like mom was just on this bender and she's doing all these weird things and saying weird things to people. You'd come home from school and the fighting would start and it would go until bedtime. It was just bedlam.

My dad's trying to figure out what to do about this and the church is putting pressure on him. My dad's a pastor, and you've got the verses about a pastor should have control of his home and children who believe and all this kind of stuff. He's a pastor, he's an elder, he's got all this responsibility, he's teaching classes, and they're putting pressure on him "Man, you get control of your wife. What is going on with her? What's all this rebellion and what's all this anger? Why isn't she being a submissive wife like she's supposed to?"

I remember a couple times the senior pastor coming over and trying to talk things through, and things are just spinning out of control. Finally, my dad got her to a psychiatrist and the psychiatrist went through his stuff and he diagnosed her as having bipolar disorder with mild schizophrenia and he prescribed an anti-psychotic drug called Haldol.

The board of elders found out that dad had taken her to a psychiatrist...

Zach: This was Mr. G's church?

**Perry:** This was Mr. G's church. It couldn't have been more than two days later that Mr. G and this other guy came to our house and sat in our living room and we had this family meeting and they explained to us that because my mom was out of control and because my dad had taken my mom to a psychiatrist, my dad was being asked to resign from the board of elders, resign from his position, and step down to an administrative job.

The following Sunday, Mr. G announced to the entire congregation of 2,000 people that because of problems with Betty and the family, Bob has resigned from his position. I mean it was just absolutely humiliating.

The straw that broke the camel's back was that Dad had taken my mom to a psychiatrist. In their opinion, psychology and psychiatry were just really a secular religion that was an alternative to Christianity, and Freud and all of that was just an alternate worldview and we're not going to have any of that around here, and it will not be tolerated.

While we're having this family meeting, I'm sitting there, I'm 13 years old and I'm just kind of listening. My sister was 18 and she was livid. My sister was furious! She knew this was unjust, and my parents are in tears and it's just awful. She says to the other pastor that came with Mr. G, "If people knew what your daughter does at night, you'd be resigning," and he said, "Robin, we're not here to talk about my family today. We're here to talk about your family."

So dad gets demoted.

**Zach:** Real quick, when dad took mom to the psychiatrist, what happened? What was the result?

**Perry:** He prescribed this drug called Haldol and she went on this drug, and literally within days she was acting differently. She was subdued, she was level-headed, she was sane. She was also very remorseful. She realized what havoc she had created, and of course it's very obvious immediately that this was a medical problem. This was not some spiritual rebellion or whatever.

She had been kind of delusional. She would say things like, "Bob, you're not really my husband. My real husband went somewhere else and you're just a substitute that got sent in and I have to put up with you." It was just weird.

Zach: How long was this period?

**Perry:** A year and a half.

**Zach:** So it wasn't like a 2-day thing.

**Perry:** No, a year and a half of bedlam. Then she gets on this drug and it was really immediate. So now we're in the aftermath. Mom has created bedlam in the family for a year and a half and now she's remorseful. Dad's been demoted from his job. Everybody's wondering what's going on. All the guys at work, like when the elders would go out to lunch, he couldn't go, so he was definitely in the 'out' group.

I have to say there was a long string of people who, because they couldn't keep their families in line or something like that, they ended up having to leave. Remember the guy who said, "We're not here to talk about my family, we're here to talk about your family." Well, he had his turn like two years later. His son, who I knew, got caught smoking pot. He got fired from his job and, not only that, he kind of got ran out of town. He tried to sell insurance, he tried to sell vitamins, and Mr. G just kind of tried to make sure that nobody would do business with him.

I knew a maintenance guy who, because his daughter was partying or drinking or doing who knows what, and the maintenance guy had to resign from his job. I mean this was really, really tight.

**Zach:** I don't even know how to classify this type of a church. I guess the first question is are there more church congregations like this?

**Perry:** Sure, but I need to back up and tell you a couple other things. We would go see our relatives, and our relatives were like, "Man, dude, you got screwed. You need to get out of that place," and my dad said, "No. I am going to vindicate myself."

Mr. G was a very smart, very articulate, very powerful, very persuasive guy, and hardly anybody would challenge him, but my dad wasn't afraid to challenge him. After going through all this, and then clearly this is a psychiatric problem, it's a medical issue, my mom gets on this medication, dad gets in Mr. G's face and he goes, "You made a wrong judgment. This was a medical problem. This wasn't sin, this wasn't morality, this wasn't anything like that. You owe my wife an apology and you owe me and my family an apology because we didn't do anything wrong. This was a medical issue," and he stood his ground.

Mr. G relented, and nine months later my dad got his old job back and Mr. G wrote a letter of apology and encouragement to my mom saying, "We believe in you." Now, this didn't keep my mom from being afraid of him for the rest of her life, and she literally was. She was terrified of this guy, but at least he tried to make it right.

Maybe a month after my dad got reinstated he found out he had cancer – kidney out, cancer gone, a year and a half later the cancer comes back. In fact, I remember I was in the basement near the bottom of the stairs. I heard my dad walk in the door and my mom comes in the kitchen and I hear my dad say to my mom, "Betty, I've got cancer again," and she crumpled. She just went to pieces and she's crying and I listen to this whole conversation. "We're going to see if we can get some treatments and try to solve this," but a year and a half after that my dad died when I was 17.

**Zach:** So your mom was made better by the medicine. Did your dad go in for medical treatment as well, or was that looked down upon?

**Perry:** No, that was okay. They weren't against that. Dad had cancer treatments in Houston. He had cancer treatments in Maryland, and the church was extremely supportive, like extremely supportive. People brought casseroles and there were a couple generous people that were like, "Bob, I'll pay for your plane tickets. Just tell me how much your plane tickets are to go to the cancer treatments and we'll pay for those." They lived in Maryland for a month doing cancer treatment, and another family took me and my brother in and all kinds of stuff.

In fact, to just give you an idea of how supportive they were, about three months before my dad died it had become clear that this stuff just isn't working and he's going downhill, and people that were in the know knew this. My parents were at church one night and the sermon ends early and Mr. G says, "I'd like Bob and Betty to come up on stage," and it looks like something's up, and everybody knows except them.

They go up on the stage and Mr. G basically says, "Well, we're in the book of Job and Job's about hardships, and you've had a lot of Job in your life, so we decided to try to help you out. We sent out a fundraiser letter because we know, Bob, you've never been to California and we know you'd like to go to California, so we raised some money. We got \$10,000 and you guys can go to California." My parents were just speechless, and there's a standing ovation.

Then my dad gets out his travel atlas and his budget and everything. We lived in Nebraska and we'd never been west of Colorado. He figured out how to hit every single state west of Nebraska, including Alaska and Hawaii, and fit it all into the budget.

We were not a wealthy family, not by any means. We hardly ever went anywhere on an airplane like ever. So we're flying to Alaska, we're flying to Hawaii, and it was amazing. I wasn't used to even having money. It was kind of a shock to my system. It was like, "Well, aren't we going to need this money later? Dad's going to die," but it was like, "No, we're going to have a good vacation. We're going to celebrate. God can take care of the rest later, but this is our time," so we had this 5-week vacation and it was amazing.

Then after my dad died there were more casseroles and more people helping with stuff. There was a guy in the church who would call up my mom, and mom was not the highest of professional qualifications. This was a lady who's been a full-time mom for years and years. She's on psychiatric medication and she still struggles with the bipolar stuff to some degree, not the most competent person in the world. She's working at JC Penney selling jewelry, which is little more than a minimum wage job.

There was a guy in the charge who was a successful entrepreneur. He actually had a technology company. He would call my mom and he would say, "So Betty, how much are you short this month?" and he would write a check. He would make her tell him. I'm going to guess he gave her \$800 a month for a couple years.

So what you had there was a very controlling, very exacting abusive church, frankly, but if you were in the good graces, everybody took very good care of each other. So I have a lot of mixed feelings about all this.

My dad had a friend named Virge, and Virge ran the counseling department at this church. By the way, my dad had a degree in psychology from a Christian college in North Carolina, and Virge and Dad were always talking about counseling people and helping people. I don't know how many people my dad counseled at some level or another, but

he knew the bones in people's closets because if you get into that kind of stuff you're just going to be exposed to it.

My dad told Virge, "After I die, Mr. G is going to come after your counseling department because he doesn't like it." Mr. G was now convinced that psychiatry was valid, because psychiatry is medicine. Psychiatry is like biochemistry and the brain. A psychiatrist is a medical doctor. But he thought psychology was just like a secular religion. He hated psychology.

What Virge was all about was, "We're going to take the best of Christian ideas, biblical, the Holy Spirit and all this other stuff, but if there are insights from the psychological world that help us understand people's problems, we're going to do that too, and we're going to put it all together."

Mr. G did not like this, not one bit. So sure enough, after my dad died it was war on the counseling department. Eventually Mr. G just dropped the hammer on the counseling department. He fired my dad's friend Virge, and the whole church split.

**Zach:** Because of that?

**Perry:** It was that and it was also kind of personality issues with Mr. G. I remember I went to see Mr. G when I was 19 and the church is falling apart. I said, "So I've got a question. Our church has a radio ministry, they have a TV ministry. Saint Paul didn't have radio and TV, but we're using that. Last week in your sermon you said Saint Paul didn't have psychology, so we're not going to use it. So why are we using technology in this department but not in this department?"

Basically the answer I got was, "Because I'm the boss and I don't like it." Really! If you ever have a one-on-one conversation with a very powerful person who kind of intimidates you, but you actually just sit down, sometimes you'll get answers that kind of surprise you. He was being fairly forthright. He's like, "Well, I'm in charge of this church and I just don't want it." So okay.

I remember going home and thinking really, really hard about this, because what Mr. G was trying to do was be like a biblical purist. It was kind of like if you could look at it from his point of view it's like, "Man, I've got these 66 books of the Bible."

The Bible is the most complex piece of literature that there is. I think I can absolutely say that as a true statement. There is nothing like the Bible, and it's hyper-linked. There's

nothing that's been written about more than the Bible. There's not even a close second. It's an incredibly subtle and complex document.

I think maybe you could say of Mr. G, "Man, I've got my hands full just figuring this out, without trying to incorporate everything else on top of it." But I sat there and I really thought hard about it. What Virge wanted to do was filter psychology through the Bible and through the Christian lens and figure out, "What do I keep and what do I leave behind?" That's what Virge wanted to do.

Here's the conclusion I came to. If I only work within the framework of the Bible, I will never question my own assumptions. I won't even know what they are, because nobody reads the Bible in a vacuum. Everybody comes to any piece of literature with their presuppositions and everything.

If I take any field – psychology, science, anything else – and I filter it through the Bible, every time I do that I'll learn more about the Bible and I'll learn more about psychology. I'll learn more about the Bible and I'll learn more about science. Because anytime you take two different worlds – and of course, the Bible was all written 2,000+ years ago – anytime you take two worlds that come from completely different places and you merge them together, each will shed a huge amount of light on the other.

It's just like if you've only lived in the United States, you don't even know what it means to be an American. I've been to 37 countries. I remember the first time I went out of the country and spent a week in Brazil. Oh my word! The head shift that I experienced. Then I go to China, then I go to Taiwan, I go to Hong Kong, I go to Germany, I go to the UK. Every time I'd go to one of these other countries I would suddenly see the world from this whole new perspective.

I'm actually kind of proud of myself that at age 19 I realized you do not circle the wagons around the Bible. You do not. There have been more people that have come after this thing and tried to destroy it and tried to burn it and try to discredit it and proclaim that it's going to be out of date. This has been going on for 4,000 years. Nobody is going to destroy this thing. It is the summit of western literature, and you bring all comers. Bring it on!

So I made that decision and that's why I left Mr. G's church. It was like there's dead bodies everywhere from all of this commotion. This place is turning into a bit of a tyranny, quite frankly, and you're not allowed to question anything.

So Dr. Knoll makes this comment about, "If you want to spend the rest of your life searching for exact answers, go to Mr. G's church," and then it takes me about two hours and I suddenly realize, "Hey, wait a minute, Perry. You know what he's really telling you? He's telling you that you're growing up, even though you're 20 years old and you're just barely trying to figure this stuff out. You're headed in the right direction." It was like, "Wow, now I really love Dr. Knoll. This guy is good!" and I've seen this.

I think all these stories are kind of important. I immensely value having been in an environment where you would spend five years studying Romans. I hardly know anybody else who has that much background. They taught me how to think.

The internet comes along in the 1990s and I'm like, "I know what a hyperlink is. They invented those with Bible commentaries hundreds of years ago." You would look up a word and you'd see how many places it appears, and you would develop like the worldwide web of the Bible inside your own head.

I can't tell you how much this education served me. You could probably compare it to conservative Jews or Jesuits or something like that. It was immensely valuable and I've carried it with me ever since.

**Zach:** When you were talking about your mom getting better because of medicine, it's almost like science saved the day, if you will. I might be being a little too pointed.

**Perry:** Not very perfectly, I'll tell you. That medication was kind of horrible, but it was better than being psychotic.

**Zach:** So it did something that maybe the church wasn't providing.

**Perry:** And couldn't have. The church could have never fixed this.

**Zach:** Then a little bit later dad gets cancer and it's almost like the church comes back and almost in a way does save the day.

**Perry:** Yeah. Science couldn't save my dad. Cancer treatments couldn't save my dad, but our faith community came around us and really took care of us. I kind of wonder when people don't really have a community like that – and I know that most people don't – how do they deal? I don't know.

**Zach:** I frequently think about that a lot, too. So you're in Dr. Knoll's class, you leave, you've just been mind-blown, it's three hours later and you're like, "Holy crap, I'm growing up."

**Perry:** There's a lot of ambiguity in human relationships and I think if you really are a scholar of the Bible and you read the stories, the Bible is a huge story of ambiguity. I don't think it's a story of exact answers. You can read the stories of Joseph or Jacob or Abraham or Solomon or David, and they're all about situations where there's almost never one single perfect way to handle things.

Joseph is a real hero because of the Pharaoh's dream and saving Egypt and everything, but at the same time, by the time the famine cycle is all completely over the Egyptian government owns everything. They've bought everything from everybody and it has become a tyrannical state, and a few hundred years later the Jews are in slavery. So even the best efforts of Joseph couldn't help but create more problematic situations that then had to be solved. It really tells you the way life is.

But I have to contrast that ambiguity with knowing what you get at least in the hard, hard sciences, which are exact in the way that Mr. G wanted the Bible to be but was not. Basic physics and electronics and Ohm's law and Newton's law and speed of light and all this stuff is as exact as anybody would ever want anything to be. But of course then you push that to the edges and you find it has problems too. You get into quantum mechanics, where all the sudden everything is weird and ambiguous.

Then if you go to higher levels of science you start to get into biology and it becomes so complex that it does not fit reductionist models anymore, even though lots of people try to force it into reductionist models.

Maybe the insights that I was getting in my early 20's about all of this, you could say prepared me for seeing the same problems being recapitulated in science, where people wanted biology to be an exact science or a reductionist science, and it actually didn't fit reductionism at all.

This is probably getting way ahead of the game, but let's just make an observation that there are certain people – and I almost think it's more a personality type than anything. I think fundamentalist is a personality type. It's not everybody, but there are certain kinds of people that just crave exact answers. They want things to be right. They want it to be black and white. They want to know absolutely. I think for a lot of people it turns into this idolatry.

What it does is it shuts you down from asking certain questions. There are just certain questions that aren't allowed. "This is the rule book. We're sticking to the rules," like the Pharisee in the New Testament, and the battle between Jesus and the Pharisees. These are people who craved exact answers.

They would sit and they would come up with these hair-splitting things. "So just exactly what can you do on the Sabbath?" and they would completely miss the point of the whole entire thing, that the Sabbath was made for man, not man for the Sabbath.

I think people who have embraced the process of maturity will be fighting fundamentalists their whole entire life. There are fundamentalists in politics, and there are fundamentalists in religion, and there are fundamentalists in science. You have to make a decision between fundamentals, which exist in every field and which are very important, versus fundamentalism, which is when you make the fundamentals basically into a religion.

Humans are just so prone to do this. It's comfort food, man. It's Bob Evan's restaurant.

**Zach:** It's cornbread and mashed potatoes, absolutely. So you're basically in fundamentalism land.

**Perry:** Yes, and we were even proud of it. Back in the 80's, "I'm a fundamentalist, man." It wasn't quite as dirty of a word as it became later on with 911 and all of that. We were fundamentalists and we were proud of it.

**Zach:** Totally, so you're a fundamentalist and proud. Then all this stuff happens, Dr. Knoll happens, and life gets kind of shaken up. Now are you questioning things that happened at Mr. G's church, or has that not happened yet?

**Perry:** No, I was questioning it as soon as I left, but I really started processing it after I moved to Chicago. I moved to Chicago when I was probably 23, and I had been out of Mr. G's church for a couple years. I'd actually gone to church in Omaha because the refugees were all in Lincoln, like when the shrapnel started going everywhere. All these people are going all these directions, and you couldn't go anywhere without getting into a discussion about Mr. G, and I didn't want that.

My sister started going to church in Omaha, where nobody's in that scene, and we just went with her. I just kind of set it aside and I didn't really process it, but I came to Chicago and it's like, "Okay, I want to find a place where we can worship in a faith

community," and I end up at Willow Creek, which was for a time the largest church in the United States, and it's the largest church in Chicago now.

If you compared Mr. G's church to Willow Creek, that is like a sex change operation. Willow was like mainstream, not right wing Christian protestant church. They're a lot less anal about everything. In fact, it was really just a completely different way of approaching everything.

## A Quest to the Bottom of the Proverbial Evolutionary Swamp

**Perry:** I've got all this negativity about Mr. G's church and I move to Chicago, and now Willow Creek's this completely different environment. I'm writing letters to my brother-in-law and I'm venting and processing it all. Willow Creek had a completely different set of priorities and it was very educational to be in this completely different environment.

One of the things I ended up doing was something called a seeker small group. A seeker small group is basically a Bible study for non-Christians, where nobody gets to assume that they agree with any of this. It's for people who are exploring Christianity.

For a long time I ran the longest-running seeker small group at Willow Creek. It was one of the first ones they ever started, and I kind of developed a reputation where they would send me the hard cases because I could handle them.

A seeker group was like chaos. You'd get these people together at a table and one of them is an ex-Catholic and one of them is an atheist and one of them is an agnostic and one of them is a burned-out Protestant and whatever. It was extremely intense.

There was this group that I had for quite a while and we decided, "Let's read the first few chapters of Genesis and let's just unpack it." For some reason I had the foresight to say to the group, "We're going to read this and I don't care if you think it's literal or figurative or allegorical or somewhere in-between. We're not going to be concerned about that. I just want you to read it," and we went through and we just took it really slow – Genesis 1, Genesis 2, Genesis 3, Genesis 4, Cain and Abel, Adam and Eve, and all that stuff.

Within about 3, 4, or 5 weeks the whole group was just mesmerized because the first few chapters of Genesis I would argue is the richest piece of literature ever. There is so much depth to those stories it is unbelievable. You get into it and there's more questions and more questions.

What you could see was it started out with them reading the scriptures, but in time the scripture was reading them and you could see the change. Within a year all of the people in that group decided that they wanted to have Christ in their life and they all became Christians. I think that if I had tried to ram a particular view of Genesis down their throats it would have been disastrous, but instead I just let it speak to them.

I want to say this about those chapters. Each of those chapters is only the length of a blog post, but all the questions of humanity, the deepest questions of humanity are all in there. There's a reason why the Jews and the Muslims and the Christians consider that the origin story of humanity. You never run out of ways to look at the scriptures.

Furthermore, you take other fields, other disciplines and you bring them in, and all it does is just show you more stuff. For example, very famously Jordan Peterson did this whole psychology of the Biblical stories series, which he's continuing and he's coming at it from a completely different angle than anything I ever grew up with. He's talking about Dostoyevsky and Carl Jung and Sigmund Freud and Rogers and evolutionary psychology. It doesn't matter. You put stuff in and he's got millennials hanging on the edge of their seats listening to this.

These stories are incredibly powerful, but it's like C.S. Lewis said. You don't need to defend a lion. You just need to let him out of his cage, and I had the foresight to do that with that group of people.

Then Bryan gets into his whole thing about doubt, and let me try to give you an idea of what happened to him. He goes to Master's Seminary in Southern California, which is John MacArthur's school. He gets a Th.M. which is essentially a Master's degree. He knows Greek and he knows Hebrew.

He then moves to China and he's an undercover missionary part of the time. The other time he's an English teacher, and he goes to work, and within a couple of years he's starting to have doubts. What's happened to Bryan, the way I would describe it, is at his school they gave him the exact Excel spreadsheet of all the answers. "This is what all the verses mean. This is eschatology. This is the history of the earth. This is our theology about Jesus. This is our theology about this," and it was all really neat and packaged.

He goes to China and a) the ambiguities and challenges of China itself don't really fit what he's been told, and b) he can get on the internet and nobody can stop him from asking questions. After a while he's like, "Hey, wait a minute, the earth isn't 6,000 years old. What else are they not telling me?"

I can easily figure out that the earth is not 6,000 years old. You can approach it from almost any discipline you could imagine – anthropology, astronomy, cosmology, physics, biology, geology and drilling for oil or whatever. "The earth is not 6,000 years old. What else are they not telling me?"

There was a point where he's reading the John MacArthur Study Bible and it says, "The earth was covered with this worldwide flood and it completely changed everything around, so we can't have any knowledge of what the earth originally was like because now it's after the flood." It was at that point that Bryan picked up that Bible and he threw it across the room because he knew they were just making up their own version of science. This did not fit any geological model that you can go verify by digging. They were just gerrymandering science in order to make it fit a very particular reading of Genesis. He had a bunch of questions, but this whole thing really started unraveling.

I asked my parents when I was 7 or 8, "How come you never told us about Santa Claus?" They never did the Santa Claus thing with us. My dad said, "If we told you about Santa Claus and then you found out that there was no Santa Claus, the next question would be, 'So what about Jesus? Do you make that up too?'"

Bryan kind of had a Santa Claus moment with science. The John Whitcomb young earth creation version of science is not true, demonstrably not true, so what about everything else? It just undercut the whole thing. Again maybe I'm getting ahead of myself, but I think that's what the young earth creation movement has done. It has significantly undercut the credibility of the whole entire Christian story.

It comes to the way it was all constructed. It was like the whole young earth creationist thing is everything starts with Genesis and you have to read it this particular way. If you do that, then we have everything all figured out. But then if you change any of these assumptions it all falls apart.

That's actually an indication that you don't have a very robust system of belief to begin with, because it's strung together with all of these little dependencies, where even if half of them are questionable it doesn't work. That's a warning sign.

**Zach:** So Bryan starts getting some doubt and that obviously snowballs into something.

**Perry:** I had done all these seeker groups with all these people. I eventually moved my seeker group to Border's bookstore, so now I'm getting anybody who wanders in. That was way more difficult than getting the ones that were filtered through Willow Creek. I dealt with all kinds of people like that. There was a very smart guy named Mark Vuletic

who was one of the contributors to Infidels.org and he lived here in Oak Park, and I spent hours and hours talking to him.

I had done some internet stuff and I thought I'd seen everything, but I had never experienced the level of scrutiny that you get from a guy like Bryan who has a Master's degree in theology and knows Greek and Hebrew. Bryan is incredibly smart and I was no match for his questions. Bryan really has a gift for poking at the deep questions, where most people will only deal on the surface.

**Zach:** So he's poking at the deep questions of young earth creationists and he starts thinking, "What else are they not telling me?" What else does he start questioning?

**Perry:** That's a whole other conversation, but he's got questions about the inspiration of the Bible, the authorship of the Bible, and which books we have. He's got questions about miracles. He's like, "There's no miracles," and that was a whole conversation that we don't have time to go into right now but is very interesting. It was all kinds of stuff. So the emails are going back and forth, back and forth for probably a couple years.

Then I go visit him in China, and when I get to China and we start having these conversations it was like, "Whoa, he has moved way further. He's already thrown this out the window." I didn't realize this. I didn't realize how far he had got in his doubt. He's already thrown this out the window and this really shook me up. Hey man, this is my brother.

We're riding in this little bus and I find myself retreating to what I'm comfortable with, and I'm almost learning something about myself in the process. I go, "Bryan, look at the hand at the end of your arm. This is a nice, nice piece of engineering, and I'm an engineer. You don't think this is an accumulation of random accidents, do you?"

He's like, "Hold on. Listen, if there's a billion falcons flying around for a million years, that's a lot of falcons, Perry," and I said, "Yeah, that's a lot of falcons." He goes, "If one of them gets a random copying error in its DNA and its eyesight improves and it outhunts the other falcons and the falcons get better, you don't need a designer. You only need mutation and selection, no designer necessary," and I listened to that.

I had been down the cosmology rabbit hole but I had not gone down the evolution rabbit hole and I didn't really know anything about this. All I knew was my instinctive engineer intuition, like I could study the hand for the rest of my life and I could learn engineering stuff, so I sense God in nature, however that works. Bryan is now

challenging this and he's saying no. All you need is randomness and selection and you get a hand.

So I'm not sure I agree but I'm trying to be five chess moves ahead. I already know that most biologists would more likely agree with him than me. How do I know I'm right? There's lots of stuff in science that's counter-intuitive and this might be one of those things.

I just thought, "I'm going to stop arguing with Bryan about this and I'm going to go home and figure this out. I have an engineering degree. I'm scientifically literate. Most people would get lost in this but I think I can maneuver this without getting lost. Here we go," because he had already kind of dragged me into the water. I was already drowning.

Zach: In doubt?

**Perry:** Yeah. I'm not nearly as far as he is, and there's a lot of things we haven't covered, but I had a lot of questions and I knew he was asking good questions. I knew that my belief system was more or less grounded in the Mr. G church so it was like, "Well, I don't know. Is Christianity going to hold up? I'm going to put stuff on the anvil and I'm going to start pounding on it."

**Zach:** Was your initial goal to basically win the battle with Bryan or was it just to find the answers for yourself at this point?

**Perry:** It was much more for me than him. In fact, as I started to get answers about evolution and science, Bryan became disinterested. Bryan had already made up his mind to at least be an agnostic and he didn't want to argue about this anymore. He saddled me with all these questions and then he kind of walled off. I was like, "Don't do that to me. Now what?"

If I had gotten what I really wanted at the time it would have been, "I'm going to argue with Bryan. Bryan can argue as hard as he wants. One of us will convince the other. I think I can probably convince him and then I can go back to being a regular Christian again," but that's not what happened.

Bryan doesn't want to talk about this, and I'm really not sure if any of what I believe is right. So I'm going to let science make this decision for me, because if random accidents can make a hand, then I should be able to verify this. There should be some engineering principle or something. They sure didn't teach me anything like this in electrical

engineering school, I can tell you that. At any rate, I'm going to figure this out. Then I'm going to take whatever I find and I'm going to put it on a public anvil and I'm going to let people pound on it.

I had one and eventually two websites that were basically apologetics oriented. I had one called Coffee House Theology and then eventually I had one called Cosmic Fingerprints.

What I was really trying to do for myself with these sites was I'm going to take what I believe, I'm going to put it in front of people, I'm going to invite them to pound on it, and I'm going to see if they can destroy it. Does it hold up or does it break?

So I learned a lot from this. First I learned that there was an awful lot of things that churches will try to put out there that you couldn't really defend, but I found out there's other things that you can defend. There's other things that nobody can break if they pound on them hard enough.

I don't want to get into it all here, but for example there is no coherent widely-accepted alternative explanation for the resurrection. There's not. There's a million little fragmented theories, none of which fit neatly together. There's no coherent explanation for, "This is what happened" that explains all the evidence and everything that we have. The resurrection holds together pretty well, or my "DNA is a code" thing, which gets ahead of myself.

I would put this stuff out there and people would pound on it, and what this did for me was this said 20% of Christian theology is 80% of what's important, and 1% of Christian theology is 50% of what's important. The other stuff is majoring on minors and it's really dangerous.

**Zach:** So during all of this with Bryan, did things ever get rocky in you guys' relationship?

**Perry:** They got a little strained, but actually he moved back to the United States shortly after that bus argument, and took a job working for my company and he's co-author of our Google AdWords book. We managed to buffer things and just not be constantly arguing all the time. There's a point where you realize it's just not good for a relationship to be pounding away on this, so now I'm needing to go spar with other people, which is probably a lot healthier.

I did something which was pretty unusual. I don't really know anybody else who's done anything else to this depth. The way that my websites were put together, people would sign up for these email sequences like "7 Great Lies of Organized Religion" or whatever, and the replies would come back to me and I would see, "Can I actually defend this?" If somebody's going to poke a hole in this, I'm going to find them.

So I started buying Google traffic, which at the time was really cheap. It's pretty expensive now but most people hadn't figured out Google AdWords and I did and I wrote a book on it. So I'm driving all these clicks from all over the world to these websites and people are signing up, and if people reply to an email I get the email.

I basically decided I will take on any reasonable person. I will ignore no verifiable truth and I'm just going to put this out there. If somebody can prove me wrong, I will change my mind and I don't care what it is. Sooner or later I'm going to find out does this thing hold up or does it fall apart? I thought I knew, before all this stuff with Bryan. Now I'm not so sure, so here they come.

Over a period of several years I had 250,000 people sign up for these emails. There were 75,000 on one list and 175,000 on the science list, and here they come and I'll take all comers. If you can show me that something's wrong, then I will chisel it off and I won't believe that anymore.

What this was doing was narrowing and narrowing. It's like there's a small number of things that nobody can seem to overturn. So as I went down the rabbit hole of, "Okay, can an accumulation of random accidents combined with selection make a hand? Is that true or not?" I started taking my discoveries and putting them on that website and in those emails and seeing, "Can anybody break this apart?"

**Zach:** And you were coming at this from a science-based perspective at this point?

**Perry:** Yeah. The 7 Great Lies of Religion series, which still exists and you can still go sign up for it, that was like a theology kind of approach. But where did the universe come from was a science approach. Where did the universe come from? Where did all this fine-tuning come from? Where does the information in DNA come from? How does evolution work?

Remember what I said about if you have a geologist who drills for oil, his paycheck doesn't come from theories about the age of the earth. His paycheck comes from how good are you at drilling for oil, so I was looking for stuff like that. If something is true,

people from all kinds of religious backgrounds or non-religious backgrounds should be able to verify that it's true.

There's no reason why there should be a special Christian version of science and then an "everybody else" version of science. Science being the way that it is – being experimental and all that – you ought to be able to figure stuff out. So I went down that rabbit hole and I was really scared at first. I didn't know where this was going to end up.

Bryan is maybe not quite an atheist, but he's close, and what happens if I flip? How is this going to affect me and my family? Is my wife going to take the kids to church? Are we going to have arguments about, "Well, Perry, you only say so much about all your doubts to the kids" because we couldn't be having that argument. Thanksgiving dinner could get really interesting with the relatives. Maybe Bryan and I are going to smirk at each other while everybody prays to their invisible sky daddy or the flying spaghetti monster. I mean who knows?

I don't know how this is going to turn out, but I know I'm going to follow the evidence wherever it leads and I'm going to ignore no verifiable fact, so here we go.

**Zach:** Was there ever a time where you were scared that you were going to slip off the faith edge all the way?

**Perry:** Yeah, but I just knew I couldn't be a hypocrite. I couldn't believe one thing on Sunday and then believe a different thing on Monday and just kind of smooth it over, which a lot of people do. I couldn't do that. I just want to know the truth, so yeah, I was scared. I almost felt the maw of the beast on my neck. It was like, "All right, dude, you've got to figure this out. You've got to make some sense out of all this."

**Zach:** Did this ever end up bleeding into the family?

**Perry:** Laura knew that I was going through this and she knew there wasn't anything she could do but give me space. Did this bother her? Yes, but she knew there wasn't anything she could do to talk me out of it. This was over her head.

She's a very smart person. She was a National Merit Scholar in school and she got a full tuition scholarship to college and has an economics degree, but if I was drowning in Bryan's questions she wasn't going to be able to solve them, so she just gave me space. She was nervous. She was.

**Zach:** Was there any conversation about just what you said – like the kids around the table.

**Perry:** No, because I hadn't gotten to the point of throwing it out, like Bryan had. I just knew it could happen. I knew there was a whole list of things that I was just less and less and less sure about, so I just had to go through it and nobody could do it for me and nobody could do my thinking for me.

I would talk to all kinds of people. I would go to Willow Creek and we had this thing called Truth Quest that met every month and it was like the apologetics people. In a city the size of Chicago, when you have an apologetics thing that meets every month, and you've got 8 million people within an hour, you get a lot of smart people showing up, and a lot of these questions were over their heads, but I had to do this.

Again, I had to let science make the decision for me. Was Bryan right about the hand and the falcons and stuff? I knew that I should be able to figure this out. I knew this from an acoustics paper I wrote in college where I kind of had to get to the very bottom of the proverbial swamp before I could piece the problem together, and I did. I figured it out. Once I got to the core fundamental principles, then I could build on top of that and then I solved the problem, and I knew what it felt like.

What I knew was that I had not gotten to the bottom of the swamp in the evolution question. For a while I was just watching the ping-pong ball go back and forth between the left and the right. "Oh, that kind of makes sense. Oh, but that kind of makes sense."

It was kind of like this sadistic entertainment, watching them take pounds of flesh out of each other, but I had to get past all that. I had to get down to real scientific books and literature.

## Are Evolution and Intelligent Design Connected? This Video Reveals the Answer

**Zach:** So what is the bottom of the swamp?

**Perry:** For the evolution question it's the fact that DNA is a code, and the evolution question is a question of how does code evolve? Now, that's not all of it, but that's much of it.

Bryan's thing about falcons was actually getting really close to the bottom of the swamp just the way he phrased it. He said, "Falcon has copying error in DNA. Copying error

makes eyesight better. Falcon hunts better, outhunts the other falcons, and the falcon population improves in quality."

That was actually a very clear and simple description of traditional Darwinian theory. It was by no means complete, but it got to the essence of neo-Darwinism. He described neo-Darwinism correctly.

I had this huge epiphany. I was lost and lost and lost, but I knew that acoustics paper. I knew the feeling of when you finally figure something out and one day — bam! Here comes that feeling. I'm reading about DNA, mutations, how the genetic code is put together, and I'm like, "Wait a minute, I know this. I know exactly what this is. I've seen this before. This is layered digital code."

I wrote an Ethernet book in 2002, which is a whole other story, but for the purposes of my career at the time it was a really good idea to write that book. I wrote this book and it's how the 1's and 0's go from here to there on your wifi or that blue cable that connects your computer to the internet.

I said, "DNA – ethernet." In fact, I've got a diagram I show in my presentations. It's in my Arizona State University prize announcement. Ethernet here, DNA transcription and translation here, and they look almost identical.

I'm like, "Oh, so this has to obey all the rules of code. I know those rules. I know about information entropy. I know about signals. I know about noise. I know about digital signal processing. I know about analog signal processing. I know about error correction and detection. Oh my word, I can do this! This makes sense now!" and it was correct.

I had this flood of intuitions. "So that probably means this is true. It probably means this is true. It probably means this is true," and over the next couple years one by one by one by one I verified by reading biology papers that all my suspicions were correct. It was maybe the biggest epiphany I've ever had in my life when all that came together. "Evolution is a software engineering problem, or it can be framed that way." Now, it's more than that certainly, but part of it is fundamentally a software engineering problem. I can figure this out. All the sudden it started to line up and it started to make sense. Wow!

**Zach:** What did Bryan think about this during this time?

**Perry:** Bryan is keeping a distance. Bryan told me, "All right, Perry, I am going to be like a big soft pillow," meaning when people come after me like, "Hey, what about this and what about that? I want to argue with you."

What Bryan realized was that there wasn't any way that he could get into arguments about this with people without trying to proselytize them back the other direction, and he did not want to do that. He did not want to be that guy. He didn't want to be the guy who's taking away other people's faith, and frankly he just didn't want the stress of fighting this out with all of these people, so he just kind of deflected stuff.

I would come to him with stuff and he would think it's interesting, but he didn't want to engage that deeply with it, so he stood on the sidelines. He did think it was interesting, and as my whole evolution thing evolved he thought it was definitely intriguing, but you have to remember he's not fundamentally a scientific guy.

Different people sort out the world different ways. An engineer, a physicist, a scientist, or a chemist is going to approach these questions much differently than a historian or housewife or business manager or whatever. It was like, "Well, Perry's got his own way of figuring this out."

**Zach:** So at this point you had kind of figured out that DNA is code. Bryan's on the sidelines. The thing that has come to my mind a couple times is that you say, "I'm going to let science make this decision for me," which I think is very cool and agnostic in a way. "I'm going to let these facts tell me what to do." Do you feel, speaking from a hardcore Christian perspective, that that's maybe not a stance that God would want us to take?

**Perry:** That's a great question. First of all, it's a very myopic way of approaching the question. Technically I don't think that's really the right way to approach the question, because I understand the limitations of science. However, because I was an engineer I already understood the limitations of science anyway. I knew what science could and couldn't tell you.

Science can't tell you why it's okay to eat a cow but it's not okay to eat your office manager. Science cannot tell you whether it's okay to kill people and eat them for dinner. Morality tells you that, and I knew that. So I don't think you can reduce all this to just being a scientific question, I really don't. However, I knew that science could tell me, "Does it take a purposeful action to get a hand? Or do hands happen by accident?"

The definitive answer from communication theory was that hands don't happen by accident. Codes don't happen by accident. Evolution doesn't happen by accident. This whole thing is way deeper than anybody's talking about.

Again, I'm getting ahead of myself now, but back to your question. Whether you think people should let science make this decision for them, they will and they do. That's the fact. There are millions of people who have let science make the decision for them that faith is or is not valid, and that's a fact. Deal with it. You can scream, you can object, you can stage a protest, but people are going to do that, and that's what I did. I had to confine this to something I could manage. I couldn't manage 9,000 questions.

Let me also mention that when you're in a state of doubt, there's a particular vulnerability that you have and it's the mountain of 9,846 questions all at once. Nobody should expect themselves to answer 9,846 questions. Nobody can answer that many questions and nobody should expect anybody else to. Nobody should expect themselves to. And you have to remember, it takes a lot longer to answer a question than it takes to ask it.

I've met a lot of atheists and they can pound you with 8,000 questions. What they don't realize is I know how to ask them 8,000 more questions that they don't know how to answer either. You have to take things in finite doses. For most of these questions, good answers do exist, but it takes time to wade through them and you have to narrow what you're thinking about to something you can manage.

There's going to be thousands of people that watch this video that get into various stages of doubt. You have to narrow the field to something you can manage. You can't just stand under a bucket of bricks while a bunch of skeptics throw stuff at you, because it's not fair and you have to turn the table around. It's like, "Okay, skeptic, you tell me how this works."

When I started digging, I started finding out the skeptics didn't have nearly as many answers as they pretended to have. I quickly figured out nobody knows where life came from. I also figured out we know at a surface level how evolution works. At a deep level we do not. If we knew at a deep level how evolution works, our software would evolve. It doesn't. We don't know how to make machines or computer programs that do what bacteria do or do what animals do, not even close.

We don't even know how to make one self-replicating machine, even though we've been able to perfectly define what a self-replicating machine is for decades. Nobody's even made one self-replicating machine.

The hubris around how much science we actually know is just obscene. The litmus test for how much we know in science is engineering. If you can build it, you understand it. If you can't build it, you don't understand it, and you can take that to the bank. "Oh, we completely understand protozoans." Okay, build one. Nobody's built a protozoan.

Craig Venter has made synthetic cells from lots and lots of borrowed parts. He's reengineered the DNA of existing cells. That's as far as we've gotten with bioengineering, so you've got to be really careful when you start saying, "We know how stuff works and we know how things are." If you can't build it, you don't understand it.

**Zach:** I want to jump in right here on this exact topic of not knowing. Almost coming back to the original stuff at the beginning with the young earth creationism stuff – is it an okay place to take a stance that the earth is 6,000 years old, because obviously no one can build an earth. How does one go about proving the earth is old or young?

**Perry:** You end up having to do math. You end up having to make inferences using normal scientific thinking. Again, if I know that that star is 100 million light years away, and if I know that light travels at  $3 \times 10^8$  m/sec, then I can calculate how far away that star is.

There's a very fundamental question. Are the laws of the universe constant? Is the speed of light constant? Are the laws of the universe the same 100 million light years away as they are here? You can never know that for sure, but what you can say is if the laws of physics are not constant, then the whole enterprise of science itself just falls apart.

The fact that all of your stuff works, the fact that the video camera is working, the fact that the USB cable works, the fact that the Voyager satellite did what the Voyager satellite did, the fact that all this stuff works – again we're back to engineering. Engineering verifies that this kind of thinking is valid. It's inferred to be valid. We don't know that it's valid.

If you want to reject the idea that constants are constants, that the laws of physics are consistent – if you want to reject that idea you can do that if you so choose, but it takes you back 1,000 years in science. It takes you back to before we knew anything about science, and I just don't know how can you rely on the conveniences of the modern world and the technologies and the cell phones and the medicine and everything else, and then say that you don't believe that science can tell us anything about history.

We can use science to determine 10 seconds ago, 10 minutes ago, 10 hours ago, 10 weeks, years, centuries ago. Why can't we use science to determine 100 centuries ago or 1,000 centuries ago or 1 million centuries ago? What's the problem?

One of the most fundamental ideas in science is that the universe is constructed from a consistent set of unchanging laws that are discoverable and measurable. In fact, there's a verse in the Wisdom of Solomon Chapter 11, which is from the Catholic Apocrypha. It's at least 2,200 years old, maybe older. It says, "Thou hast made everything in weight, in number, in measure."

That is the first statement to my knowledge of a scientific worldview that ever existed on earth. It's more precise of a statement, to my knowledge, than anything the Greeks ever came up with. That idea got developed in the Middle Ages, by 1300 to 1600 becoming what we now understand to be modern science. It was birthed out of theology.

Again, it was based on the idea that God made an orderly world with unchanging laws that we could discover. That idea became the unifying force. Newton sees an apple fall out of a tree and he goes, "Hey, if the same thing that makes apples fall out of trees causes moons to orbit planets, then I have this unifying thing called gravity, and everything is explained by this one equation," which is a huge breakthrough.

When you go from being in a world where everything maybe seems to happen for no reason at all – I don't know why there's a thunderstorm, I don't know why there was a meteor, I don't know why there was a comet, all these things just happen and maybe Zeus and Apollo got mad at each other – this was the ancient world.

Then all the sudden it was, "No, the reason the asteroid fell, the reason the comet went through the sky, the reason the moon orbits the earth, the reason those two stars are circling each other, and the reason that the apple fell out of the tree is all the same reason, and you can explain it all with this one equation," that is such a massive simplification. It is so elegant. I love the word 'elegant.' It's elegant. It's one coherent explanation instead of a bunch of little ad hoc explanations. This is the nature of science.

What increasingly began to bother me was Christians rejecting this very thing that Christianity itself had given birth to. Science wasn't born in Greece or Rome or China or India or the Mayans or Egypt. It falteringly tried to get started in those civilizations but it never went anywhere. Why didn't it go anywhere? Because there wasn't a verse that said, "Thou hast made everything in weight and number and measure." But Christian theology had a conception of God.

In the 1700s this became Deism. It was the idea of the watchmaker that just winds it up and lets it go. A lot of Christians don't like this watchmaker idea. I think this watchmaker idea is almost necessary in science.

Maybe later in our conversation we can talk about miracles or maybe we can talk about people's spiritual experiences, but let's just set that aside right now and understand that wherever possible you look for regularities in nature. You look to do what Isaac Newton did, which is unify a million disparate things with one equation, and then all the sudden you've explained all of them. That is so beautiful. It was so immensely powerful. It's beautiful!

There are different things, like you could look at a sunset, you could look at a cliff, you could look at the ocean, you could look at a woman's body, you could look at an athlete – well, you know what? An equation is as beautiful as all those other things, if you have sufficient and experience to appreciate what it really is. It's beautiful.

So I started getting the sense that in order to preserve a particular way of seeing God, Christians were undercutting the whole entire enterprise of science itself in order to make history fit their interpretation of scripture, and it really started to grate on me.

I don't want to get too far ahead of my story here. So I have this epiphany about DNA. #1, all that code in the falcon – if the falcon evolves it's not through random copying errors. #2, it's code and all the other codes are designed. I can't find any codes that aren't designed, so that would make it look like DNA is designed.

Really at this point I now had two questions. One of them is where did life come from in the first place? There has to be a genetic code before you can have replicating cells, so that sure looks like a design argument. But then there's the evolution question.

We can go at these in whatever order you want to, but I'll just say that most people who went the path I went down would have become old earth creationists, and have and do. But I wasn't so sure that evolution was wrong. I just suspected that the explanation I was being given was wrong, and those are two different things. The reason that I suspected that evolution might still be true was because all of those emails and all of those conversations with all those people.

You'll notice I've got a lot of books here. The way I ended up getting a lot of these books is I would get in a conversation with somebody and they would say, "You should read this book," so I would buy the book.

One of the advantages of having a fairly successful business at the time was I could afford these crazy experiments with this Google traffic. For years I spent \$3,000 to \$5,000 a month on Google traffic. I was feeding my little apologetics machine and it was feeding me questions and I wanted to know, "Can I answer all these questions? I'm going to put money in the slot and I'm going to cause people to show up. They're going to pound on my questions and I'm going to find out the truth, and that's how I'm going to do it. In fact, I could get all these people to do a lot of work for me." Let your enemies figure out what the questions are, and then you see if you can answer them.

So I was doing that, and I could afford to buy any book I wanted. If I need to buy this \$110 textbook I buy it because it's my education. This is my post-college education. Now, compared to what most people spend on college this is still incredibly cheap. So I'm spending \$60,000 a year buying books and Google traffic. There's lots of grad students that spend \$50,000 a year getting a PhD. I'm getting my informal PhD on the streets of the internet.

So I've got all these books and I'm reading all these books and I'm like, "Well, the way they're explaining how evolution works isn't right." I know it's not right because communication theory tells me absolutely that it's not right. I know that I know this.

**Zach:** Are you talking about neo-Darwinism?

**Perry:** I'm talking neo-Darwinism. Neo-Darwinism is what Bryan told me on the bus, copying errors in the falcon's DNA and occasionally one copying error makes the eyesight better instead of worse, so then those falcons hunt better and the other falcons die and then the population gets better and better.

If you combine that with population genetics and Mendel and a few other things, you have neo-Darwinism, which is basically the theory du jour of the 30's and 40's which became cemented into modern biology. This was the explanation. Accidental mutations, random selection, everything gets better and better. But this is digital code.

This sounds all believable to most people or to a lot of people anyway, but let me give you an analogy of what they're actually saying. Let's say that we buy a CD. We buy Boy by U2 in 1980 or whatever year that was, and we have this CD. Now here's what we're going to do. We're going to replicate CDs. We're going to get at CD stamping machine and we're going to make CDs, except every CD is going to have a scratch somewhere which corrupts a little bit of the data. The scratch is going to be in some random place,

and every single one is different. So we make a million CDs with scratches, and then we replicate those million CDs. The ones with detrimental scratches get thrown away and the ones with beneficial scratches we keep.

That is an exact analogy to what neo-Darwinism is saying. Well, guess what? If you scratch a CD, it always, always makes it worse. It never makes it better. If you corrupt an internet packet it always makes it worse. If you corrupt a USB stick it makes it worse. If you corrupt an SD card it makes it worse. It never makes it better. Copying errors do not improve anything, ever. As the author of an Ethernet book I can absolutely assure you this is true.

Ethernet and computers and cell phones and all these devices have myriads of error detection and error correction systems. When you're driving down the expressway and your daughter's in the back seat with her iPad and she's watching Dora the Explorer on YouTube, you don't even know it but there's all these messages — "Hey, that packet didn't come right. Fix that packet and send me another one." There's all this going on between the iPad and cell phone tower to make all that come out right. Every single 1 and 0 has to come in correctly or else the whole thing just blows up.

It turns out that cells are the same way. Just like Ethernet hubs and switches and iPads and cell phones, cells have error detection systems and cells have error correction systems.

As soon as I had this epiphany I suspected it would be true, and then I later found out it was true. I eventually found out actually that evolution does not work the way the neo-Darwinists say it does. It works a different way, but it happens.

Zach: How does it work?

**Perry:** In order to explain this, let me tell you another story. For about two years I've got all these emails coming in and I'm going, "This explanation of evolution doesn't make sense, but I've got all these books and all this anecdotal evidence that sure looks like evolutions still happen anyway, so how?" and I didn't know. But for some reason I was wise enough, I guess, to just let the question float.

Also I decided pretty early on that how evolution works or the degree of evolution or the role of evolution in the history of earth is not a central issue in Christianity. If there's a hill you're going to die on, that is not one of the ones that you should die on. It is not even central. Whether animals are kinds, and whether dogs and cats could come from a

common ancestor – I don't think the Bible addresses that in the slightest. I don't think the biblical authors were even remotely concerned with questions like that.

I think it's a huge mistake to insert some kind of biblical doctrine into that entire question, do dogs and cats have a common ancestor. The Bible doesn't care. The Bible doesn't give you any kind of precise definition about any of this. What does the Bible say about animals? It says they came from the ground. It says, "Let the ground produce animals and crawling things." By the way, it doesn't say that God just made the crawling things. It says the ground produced them.

In fact, the Genesis story, at least in some roundabout oblique way, might even seem to suggest evolution, quite frankly. It says, "Let the waters teem with fish." It doesn't say anything about how they came to be. Again, I don't think they're even concerned with the question.

I think Christians that turn this into a doctrine are just making a huge legalistic blunder. It's a huge mistake. They're just importing all this baggage. It's like saying it's wrong for a pastor to take his wife to a psychiatrist. It's so inappropriate.

For a couple years I just said I'm going to stay neutral about this. This is not a hill I'm going to die on. I'm not going to deal with that, but I'm going to accumulate evidence and I'm going to keep reading books. It looks like it happened but I'm not sure how.

One day somebody sends me a paper by James Shapiro. James Shapiro is a highly-regarded geneticist at the University of Chicago and he tells the story about a woman named Barbara McClintock. He was friends and colleagues with Barbara for a long time and she was a mentor to him.

I think Barbara is the most important biologist of the 20<sup>th</sup> century. That's a big statement but seriously, I think so. In the 1940s she was doing experiments with corn. She would blast corn with doses of radiation and it would break the chromosomes of the DNA. Then she would see what happened.

They didn't understand DNA at the time. It hadn't specifically been discovered, but geneticists could look in the microscope and they could look at chromosomes and they could see things that were going on. She was very good with a microscope and she was extremely acutely aware of what was going on with her plants.

She would look at ears of corn and she would figure out from the patterns of the corn kernels – the dark ones and the light ones – and she would actually figure out how the chromosomes had changed. It was absolutely brilliant what she did.

So Barbara McClintock is hacking corn plants and she throws the plant a curve ball, and the plant just throws a curve ball right back at her, and she's like, "Whoa. What is going on here?" and she pieced it together very carefully and she figured out what happened.

What happened was that she broke a chromosome and the plant wasn't able to reproduce properly, but the plant wanted to reproduce. So what the plant did was to use transposable elements, which are segments of DNA that can move around. Moving a transposon is sort of like moving an adverb or an adjective to a different part of the sentence and making your sentence say something different.

This plant was taking pieces of DNA from other sections and other chromosomes and copying them over here. It constructed a unique new sequence that had never existed before, repaired the chromosome, and went on and reproduced, and she figured out exactly what had happened with all these different genes and bits of chromosome. She figured this out.

She presented this at a conference at Cold Spring Harbor, NY in 1951 and the reaction from the audience was a mix of anger and "You've got to be crazy." Some of them thought it was funny like, "Woman, you don't seem to know. Genetics builds the plant. The plant doesn't build the genetics. Don't you know this?" Half of them were just angry like, "Who does she think she is? Plants don't do this."

She just spent the last seven years meticulously figuring out this is what had happened, and she called these things jumping genes or transposons, transposable elements, and everybody ignored her. They wouldn't listen. It turns out she was the first person to observe an evolutionary event, and also figure out the genetics of how it had done it.

You could make an analogy. If I ripped a page out of a mystery novel and I gave it to a good writer and I said, "Read everything before that page, everything after that page, and reconstruct what you think that page is missing," a good writer could do it. They might take stuff from this chapter and sentences from over here and beg, borrow, steal from the rest of the book and piece it together – well, that's what the plant did. A corn plant knows how to rearrange its own DNA.

This is like that M.C. Escher drawing where the hand is drawing a hand is drawing a hand. This is really trippy, it is, if you just stop and think about it. "So the genes and

chromosomes build the plant, but then if they get damaged the plant rebuilds the genes and chromosomes in a unique way."

So here's what happens. Everybody ignores her. Nobody believes her, so she goes underground with her research. Basically, she didn't publish her work for 20 years but she kept doing it. In the 70's people started seeing this other places, and then she started publishing. She won the Nobel Prize in 1983 for discovering transposable elements. Transposable elements are part of the bread and butter of genetics.

So Shapiro's talking about this and then he goes on and he's explaining the error detection systems, the error correction systems, and how cells go through these stages of repair. Every time a cell in your body copies, there's this error checking system that happens. "Okay, that didn't copy right. Fix it. That didn't copy right. Fix it," which is exactly what happens when your kid is in the back seat and there's engine noise and there's radio towers and there's all this stuff going on, but you're still getting the signal. It's the same thing! In fact, a lot of the mathematics is the same.

This is way too deep for this video, but we could go to different forms of error detection and error correction that exist in Ethernet and stuff, and it's almost the same. It's scary how similar it all is.

Dr. Shapiro was talking about how a cell is kind of like an operating system. It cleans up files and it does all these things to maintain itself. I'm like, "How come nobody is talking about this?"

First of all, Shapiro and his friends and the citations and the other papers he cites and McClintock – it turns out there's this whole entire community of people doing live evolution experiments just like Barbara did. The science had advanced hugely since Barbara's time because now we're in the early 2000s when I'm reading this paper.

Jerry Coyne isn't talking about it and Richard Dawkins isn't talking about it and Ken Hamm isn't talking about it, and the Discovery Institute and the intelligent design guys aren't talking about it.

They're proving evolution happens in real-time, which I haven't even gotten into yet. They make new species. They do symbiotic mergers. They do hybrids with massive rearrangement of DNA. From an engineer's point of view this stuff is just astonishing.

The intelligent design guys aren't talking about it. The creationists aren't talking about it. The Darwinists aren't talking about it. It's like I've been buying books for two years and nobody's told me this. How is this possible?

And I dig deeper and there's more, and I dig deeper and there's more. I find out about Lynn Margulis and I find out about David Prescott and I found out about Evelyn Witkin and all of these people, and they've been proving this stuff for decades, but they're like the red-headed stepchildren of biology.

You'd think the Christians would be talking about this stuff and they're not. They're like, "Evolution – bad, bad," No, evolution is amazing, amazing, amazing. It's happening in petri dishes right now. It's why you have to finish your antibiotics. Why aren't you guys talking about this?

So Creation Research Science Quarterly chastises me for not knowing that all of their guys have been talking about this at their conferences for years. Well, I'm not the only one that doesn't know. How come you guys are keeping this stuff a secret, and how come you're not explaining how evolution works?

Let's run with the creationist young earth view of the world for a little while. I remember this whole explanation that the earth was enveloped in water, and the water kept the sunlight from coming through, so that meant people lived for 1,000 years. Then the water came down and that was the flood and it wiped out the whole earth. All the species of the earth were on one ark, and because it was a global flood...so you have this whole story.

We don't have geological evidence for a global flood. We have a lot of geological evidence for a massive regional flood in the Middle East about 5,000 years ago, and we have 200 civilizations that have an ark story, and clearly something like that happened, and I do think Noah's a historical person, but geology and history do not confirm a global worldwide flood. But let's grant for a second and let's go with a global worldwide flood. That means all the animals on earth have to have fit on an ark 5,000 years ago.

My numbers might be a little off, but let's just say we have 10 million species now and we had 10,000 on the ark. That's 1,000 to 1 species. For every species you had on the ark then, you have 1,000 species now. That's a lot of evolution, a lot.

If we take the young earth creationist story at face value – and I don't believe that all of the animals on the earth were on Noah's ark; I think their cattle and their stuff was, but

anyway – if I go with their story, their story requires massive speciation, massive evolution – not micro-evolution but macro-evolution.

Zach: Not just transposing genes.

**Perry:** No, massive evolution. Even if you're talking 100x in the species it's massive evolution, so why aren't they waving the evolution flag and telling everybody how evolution works and why it's necessary? No, they're just machine-gunning the Darwinists with, "No! Evolution is a hoax."

Type in "evolution is a hoax" in Google and see how many websites come up. Right to this very day you go to Answers in Genesis and they're all telling you about how Darwin and everybody is this big fraudulent secular crusade against Christianity.

Did you ever use DOS?

Zach: I remember DOS. I never used it.

**Perry:** Anybody my age used DOS back in the day. There were all these little things you'd type into DOS. So imagine that DOS was introduced in 1981 by Bill Gates and his friends, and imagine that no human being in Redmond, Washington ever touched it. And imagine that DOS added a Windows Desktop by its own internal adaptations. And imagine that it added Microsoft Word and it added Excel and it added a web browser and it added a connection for a mouse and it added antivirus. Imagine that the antivirus software all talked to each other and they all updated all the time.

Imagine that happening and we got to now and we've got Windows 10, and no employees in Redmond, Washington ever had to touch Windows. If DOS evolved into the modern version of Windows all by itself, would you be impressed?

**Zach:** I would definitely be impressed.

**Perry:** You would be crapping your pants. You'd be like, "How on earth? I want to talk to that Bill Gates guy. I want to understand." This is how Christians should view evolution, and it just baffles me how Christians have allowed evolution to turn into a war between science and religion.

**Zach:** That's a big thing I keep noticing, is there's two factions almost. It's almost like both of them are waging war, when in fact there should be more of a union.

**Perry:** It's the Palestinians and the Israelis. It's the Hatfields and the McCoys. It's the Republic against Northern Ireland. It's this blood sport thing. It's a grudge match, and it's not helping. It's not helping at all, especially considering the science itself.

Organisms do the most amazing things, and evolution is not a hoax. Evolutionary events are produced every single day. New species, symbiotic mergers, hybrids, massive rearrangements.

## Defending the Marriage between Design Evolution Against the World's Largest Group of Atheists

**Zach:** Do you have any thoughts on more of like a macro-evolution? Like if you think about neo-Darwinism for a second and what they say – tadpole to human – what's your thoughts on that?

**Perry:** You look at the mechanisms of evolution, and there are mechanisms that produce small incremental changes. Transposons, like Barbara McClintock discovered, is a small incremental change. It's not a massive thing. Horizontal gene transfer is when organisms trade genes with each other. That's a gradual mechanism of change. Epigenetics is when basically genes stay the same but they switch on and off, and your body is doing this all the time. That's a gradual mechanism.

But then there are two quantum leap mechanisms. One of them is hybridization. I could cross a lion with a tiger and I can get a liger, and a liger has twice as many chromosomes. Occasionally with animals you'll get a fertile. Usually you'll get sterile, but occasionally you'll get a fertile, and once in a while it will take and you will get a new species of animal from hybridizations.

Then after the hybridization happens there's this whole process called hybrid dysgenesis, which is basically transposons and epigenetics switching things on and off and dealing with instabilities in the genome. This happens occasionally with animals. It happens with plants all the time. Then there's another one called symbiogenesis, which is cellular mergers.

It's widely believed that a chloroplast, which has its own DNA and reproduces independently, is really a blue-green algae living in a plant cell. It's like a Starbucks in a Marriott. It's like, "Hey, you come in here and you provide some juice for the customers, and we'll give you a safe place to do business." This is what a chloroplast is in a plant cell. We have lots and lots of good reasons to believe that this happened probably two

billion years ago. Lynn Margulis championed this theory. So you have mechanisms of gradual change and you have mechanisms of sudden change, and the mechanisms of sudden change don't kick in very often.

It's just like human technology. Human technology has lots and lots and lots of incremental improvements, but then once in a while somebody will come out with an iPhone. Or when I was a kid they came out with the Sony Walkman, and all the sudden a cassette player can be this big and then everything is different. They come out with a CD and that changes everything. In biology it's kind of the same way. In biology they call it punctuated equilibrium.

What Christians need to stop and think about is what is going on inside these cells that makes this actually happen? If this is all new to you, you should ask why. Why am I the first person to tell you this? This should be in every high school biology book, let alone freshman, junior or senior.

Unfortunately, the advanced mechanisms of evolution mostly only get introduced when you're a sophomore or junior in biology, but for the beginning of your biology education they just tell you that the changes are random. Then later in your career you kind of find out they're not random, but it's almost like they've already served up the pink Kool-aid. They've already given you the notion that hands evolved just randomly by accident. The truth is we don't know how these cells know how to do what they do. We just know that they do it. It's just so amazing what they do.

**Zach:** We're going to jump into that in a second definitely. All those things you just brought up – the five pieces that make this...

**Perry:** I call them the Swiss Army Knife, the five mechanisms of evolution.

**Zach:** So these five blades of the Swiss Army Knife, if you will, these are things that the CRSQ published that they had already known for a long time. To me, and again I'm kind of an outsider a little bit here, but it almost sounds like slightly fighting words. I'd be a little bit like, "Why have you not told me?" just like you said earlier. "Why have you not told me? Why have you not published this?"

**Perry:** And they'll say, "Well, we did and we talked about it," but the angle that's in all their articles and all their journals is "Macro-evolution is not true. Darwinism is not true." I agree. Darwinism, not correct. Evolution, however, is true. Natural genetic engineering is true.

They don't believe in common descent. They're offended by the idea that life could start as a single cell and then end up including humans. Well, I think it's a remarkable engineering achievement.

Now, there's a part of the CRSQ review where Royal Truman talks about symbiogenesis. Basically he says common parts do not imply common ancestry. What he's saying more or less is, "I realize that a chloroplast looks an awful awful lot like an algae, but that just means God used the same parts but he made them both from scratch."

Let's understand, there's a very good reason why you would want a common ancestry view, and it's the same reason that you want one equation for comets and asteroids and apples. It's because it unifies everything.

Furthermore, try this on for size. Let me take a little detour. There's a really interesting book by Guillermo Gonzalez called *The Privileged Planet*. It's also a film. This is an astronomer who goes to one of these eclipses to observe the corona of the sun while the moon is covering up the sun. They go to India or somewhere where there's an eclipse and they set up all their equipment.

He's like, "Huh. It's really interesting that from the vantage point of the earth, the moon and the sun are exactly the same size in the sky. And because they're exactly the same size in the sky, it enables us to observe the corona, and there's no other way to observe the corona that way. It gives us data that we wouldn't have any other way, and that data helps us piece together the mystery of the universe." He's like, "It's almost like the universe is designed to maximize observation and understanding," which I thought was a very interesting argument.

I said, "You know what, what if the universe is designed to maximize human understanding? What if the universe is designed to reveal itself to us as we uncover its mysteries?"

If you take an evolutionary view, that means that God is revealing more to us through a process that we can study than if he just makes things ad hoc. If life is a process that started presumably with a single cell and eventually ends up with 10 million species and ecosystems and everything – if all of that is a continuous process that can be studied, then science gives us even more windows into the mind of God. But if God just needs a zebra, makes a zebra, needs a lion, makes a lion, needs primates, makes primates, needs human, makes human – there's nothing we can study.

So let's talk about symbiogenesis. The Creation Research Quarterly says, "Oh, I know it looks like they're the same, but really it's just that God did the same thing twice."

I've got a friend named Kwang Jeon and he's a professor emeritus at the University of Tennessee at Memphis. He did symbiogenesis experiments. He took amoeba and x-bacteria and he put them together, and they fought like cats and dogs for 18 months, but at the end of 18 months they had made a symbiotic merger where one was living inside the other. They had both discarded parts of their DNA that they didn't need. They had consolidated functions. It was like a Starbucks in a Marriott.

It was like, "Hey, we don't need a whole other set of pipes from the water company. How about we tap into these pipes," and you get rid of all this redundant stuff that's duplicated between the two, and they merge together.

The formal definition of a symbiotic event is that once the symbiosis is complete, if you separate the two they'll die. It would be like if I took a big saw and I sawed out the Starbucks and put it out on the street, the water wouldn't work, the electricity wouldn't work, and there'd be a big hole in the middle of the Marriott. No one would want to be in the lobby and nobody would want to go to the Starbucks, so they would both die.

Same thing. He tried to separate them after the symbiosis event and they died. So symbiosis events have been produced and they are quantum leaps. They are massive changes from what was originally there. They don't happen very often, but they create something brand new that never existed before.

Every green plant, every green thing you've ever seen in your life – grass, trees – it's green because of that symbiotic merger. It's the world's most successful merger acquisition, and we can study how these things happen because God reveals himself to us through nature. The whole earth is full of his glory.

So I say Darwinists under-estimate nature because they tell you it's random and accidental. It's not. And creationists under-estimate God. I think the creationist's God is small and limited and much less than the real God. That's a strong statement but I think it's true. I think they're denying an entire dimension of the grandeur of the universe, and I think they're doing a huge disservice to Christianity, to non-Christians, to everybody, and they're creating a war between science and religion that shouldn't be there.

**Zach:** So have you abandoned your young earth creationism?

**Perry:** I am definitely not a young earth creationist, and I believe in a common ancestry of evolution. Why? Because it provokes a higher view of God than any other view. As an engineer I say, "Which is more impressive? Making zebras when you need a zebra, making lizards when you need a lizard, making humans when you need a human? Is that impressive, or is it more impressive if you can start with a single cell and it could all develop from there?" In my mind that's way more impressive.

If I went to an engineering team and I said, "I want you to design something that does that," the common descent version is way harder to design, and it doesn't require God to have to show up and do stuff.

Now, this does not mean that I don't believe in miracles. I do. I've been in the room twice when people got healed from being deaf for 30 years. I've seen it with my own two eyes. I've seen miracles. And you know what's an interesting irony? Most young earth creationists don't believe in modern miracles. They don't.

Where I grew up, which is very typical of the young earth creationist evangelical thing, I remember this musician came to our church and he was kind of famous. His name was Dino Kartsonakis and he was this piano guy and he was amazing. So he comes and he plays the piano and he has this concert and everybody's dancing and it was really great.

In the middle of this presentation he tells some story, and I don't remember the details really, but it was something about his mother and his grandmother, and one of them was sick and I think they cast out a demon or something like that. It was one of these kinds of stories, and she got all better. Then he goes on with his concert.

We were driving home and my dad says, "We uninvited Dino from ever coming back again." I was 9 years old and I remember this clear as day. I'm sitting in the back seat and I go, "Why?" and dad goes, "Because he told that story about healing that grandmother, and that doesn't happen anymore." I'm 9 years old and I go, "Well, it happens in my Bible all over the place. How do you know that didn't happen? He told the story." But at Mr. G's church it was "None of that miracle stuff. We're not going to let any of that around here."

So you go, "The creation of the world is this series of miracle, miracle, miracle. Zebras are a miracle and cats are a miracle and humans are a miracle, but there's no miracles now." And what I realized is, "Well, if you don't have any miracles now, then you have to have miracles 6,000 years ago or there's no miracles." So I guess they're hanging onto them for dear life. "Don't take away my miracle! If cats and dogs can come from a

common ancestor, then you just took away my miracle." I don't know if that's right, but it kind of seems like that's what the logic is.

First of all, I've seen people healed of stuff. If you go to coffeehousetheology.com/miracles you can read a whole huge blog post I wrote about a whole bunch of experiences I've had. You could spend six hours just watching all the videos and following all the links, and I would encourage you to do that.

Absolutely miracles happen. But if humans weren't around to observe it, then I'm voting for natural process because then we can observe it and discover it. I think the universe is designed to maximize discovery, and if evolution is true then the universe is more designed to maximize discovery than if it's not.

Furthermore, let's talk about the prize and how that all happened, because that's a perfect segue right into this. Here's how this developed. I go, "DNA is a code. All the other codes are designed; therefore, DNA is a design, by inference. You can't prove DNA is design, but is there any other explanation?" So I piece this together and I think I've got a pretty good argument.

I gave this talk at Willow Creek. My friend Andy and I had the apologetics thing called Truth Quest, and Andy runs the thing. He goes, "Perry, why don't you come and give a DNA talk, because I know you've been doing all this stuff and I know about your brother and everything." So I go to Willow Creek and I give a talk called, "If you can read this, I can prove God exists." It's a little tongue in cheek because you can't prove God exists, and I admitted that.

But I said, "Look, DNA is a code and here's all the definitions. All the other codes are designed. There aren't any codes that aren't designed that we know; therefore, DNA is design, therefore God exists," and I gave this whole presentation. I recorded it and I put it on my website and I put it in my email series and I pushed it out there and it went viral, and man, the atheists were mad. They were mad!

I saw something really interesting going on with my websites, and that was whether we were talking about science or religion, I got every kind of person you could possibly imagine. I got Scientologists and I got Jewish people and I got Urantia and I got Hindus and Buddhists and every denomination of Catholic, Protestant, Orthodox, you name it. I talked to all these kinds of people, but nobody was more furious than the atheists any day of the week on any topic. It was like they were just miserable or something.

They would be so offended and you'd just see them coming a mile away. You could tell just from the very first email, whether they told you anything about themselves or not. It's like, "Oh, it's one of these really angry guys, like the disciples of Richard Dawkins."

This started to become a game. How fast can I back the atheists into the corner? Can I do it in a week? Can I do it in a day? Can I do it in an hour? Can I do it in 10 minutes? Can I do it in three paragraphs? I mean really. It became a very serious experiment of how do I explain this in such a simple and clear way that it cannot be refuted, so that we get down to the core issues instead of just dancing around all these side issues.

So I'm kind of practicing, and this guy comes along. "Oh, I see through all your sophistry and all of that," and he starts arguing with me about DNA and I back him into a corner and he's feeling flustered. Sometimes with these people it would almost be like this sensation of I'm strangling the guy. I don't know how to describe it, because man, they are so invested in this view of the world and I'm challenging it and it is not making them comfortable at all.

So he goes to the largest atheist website in the world, which was called Infidels at the time. This was 2005 and they had a discussion board. It's the largest atheist discussion board in the world and he posted a link. He goes, "Hey, you guys, I've been conversing with Perry Marshall, author of "If You Can Read This, I Can Prove God Exists." Be nice to this guy while you rip him to shreds."

Then he emails me and he goes, "Hey, just want to let you know..." and I'm like, "Oh no, oh no." I had gotten reasonably comfortable doing this one-on-one in private, not in front of a million people, but all right man, top of the flagpole. They want to nail you to that thing and make an example out of you. Oh no. Oh, please. I didn't want this.

I went out to breakfast with my friend John and he's like, "What do you mean you didn't want this? You've been inviting it the whole time. Don't deceive yourself, Perry. You've been fixing for a fight and you got one, so I think you're going to have to man-up and be in the fight." Oh man, not these people.

**Zach:** Because you knew about this...

**Perry:** Oh, I knew about Infidels. I was talking to Mark Vuletic about Infidels seven or eight years before that, when we were sitting in a coffee shop in Oak Park. He was part of their – I don't know if it was Board of Directors, but he wrote articles for them, so yeah, I knew who these people were. I'm like, "Oh man. Okay dude! Put on your big boy pants and go in there and defend yourself, so here we go."

I was scared to death. "If you make one slip, if you even say one wrong word, they will just paste you to the floor. They will run you over. You will be roadkill, man. You'd better be really careful of what you say."

And also on top of this, at this time I have this blossoming reputation as a guy who's teaching online marketing and Google AdWords. A year later I published the world's best-selling book on internet advertising, which is called *Ultimate Guide to Google AdWords*, which is now in its 5<sup>th</sup> edition, so I had this really sterling reputation online and people like Perry. "Perry helps us figure out our internet traffic and stuff," and then over here these people just hate me, and that's going viral. You type in "Perry Marshall idiot" on Google and hundreds of websites would come up and all these angry people.

So I've got to explain this and I've got to defend myself. DNA is a code, and I've got to defend that. All the other codes are designed, and I've got to defend that. Therefore, DNA is designed, and I've got to defend that. Here we go. It's one of me and I don't know how many of them – 50? 100? I don't know.

It went on for well over 1,000 posts over seven years. It became the longest-running most-viewed thread in the history of the largest atheist website. As I said, it's one of me and a whole bunch of them, and they couldn't get around it. They couldn't solve it.

I'm like, "Snowflakes are not a code, and sand dunes aren't codes, and hydrochloric acid isn't a code. This is what a code is. Engineering textbooks, biology textbooks..." and I just keep defending this successfully, and they keep unsuccessfully trying to poke holes in it, and this goes on and on, and after a while it just starts getting comical. They'll make up anything to avoid this.

Eventually that forum got shut down and sold to somebody else. It's a big long story, but it ran for seven years and I was very successful with this. I was still trying to figure out how do you nail this thing down? How do you keep people from just going round and round and round in circles, which is mostly what would happen. They would just go around in circles.

One day I was going back and forth with this guy on my blog because of this whole experiment of how do you explain this to the world? It's still going on, and I have this realization. "Perry, you have to explain to him exactly how to prove you wrong. Show him how to prove you wrong," because it's possible. If you can show a code that's not designed and show that nobody designed it, you win and Perry's wrong, so write a spec. So I get this engineering textbook and I write a spec and I put it up there.

I said, "If you can solve this, I will write you a check for \$10,000." I press Publish on the blog and thought, "What's going to happen?" Nothing happened. He disappeared. Game over. I put money on the table and I told him exactly how to prove me wrong. "You figure this out and I'll write you a check," and he didn't even say, "Aww, I don't believe you'll write me a check." He didn't even say that.

Apparently I had enough credibility that they knew – famous author, public figure, best-selling author – if a best-selling author puts money on the table and says, "You do this and I'll write you a check," then that's some serious skin in the game. He couldn't solve it.

I started writing *Evolution 2.0* and a friend said to me, "Perry, when your book comes out, instead of having a \$10,000 prize you need a \$10 million dollar prize." I was talking to this guy about it and I go, "How on earth am I going to get investors to be willing to write a check that big? I can't write a \$10 million dollar check. There's no way." And this guy says to me, "Well, make it an award for the patent," and I go, "What patent?"

He goes, "Look, if somebody solves chemicals-to-code, if someone can pour chemicals in a bathtub and get digital communication without designing it, that's AI, baby. That's like a serious, serious advance in technology. Microsoft would buy that in a hot second." I'm like, "Oh, I never thought of that before."

This had never entered my mind. I had never really thought through, "If somebody actually did figure this out, what would the implications be?" Yes, it would have implications for the origin of life, but it would also have implications for technology. I'm like, "Oh, okay. That's interesting." So I went around and I started raising money.

I had to do what anybody starting a company who needs investors has to do, which is you make a list of rich people and you go start pitching them. So I call my friend Greg. "Greg, can we go out to lunch? I want to show you something really interesting," and I stumble through this whole story. "You can buy a slot if you'll commit to writing a \$1 million dollar check if we have a discovery. Then if I get 10 guys like you…" and he's like, "That's nice, Perry, but you know…"

So I spent several years pitching people on this. I mean it took a long time, and I didn't really have anything to show them other than this story about the Infidels thread and my blog and everything. I don't have a book done yet. I mean this is pretty abstruse – hand at the end your arm, evolution, cells, genetic code, AI – it's a lot of stuff to piece together. But eventually I got a group of investors together, and they're in all kinds of

industries – medical doctors, cryptocurrency, entrepreneurs, real estate, all these different people, and we got backing for the prize.

Along the way it also became evident that you need judges. Perry's an electrical engineer. He's not a research scientist. He's not at a major university. It could kind of seem like this Don Quixote kind of a thing, so I need real legitimate judges who a) if there's a dispute about the prize, they will adjudicate, and b) to lend credibility that the whole idea is fundamentally sound in the first place.

So I went on the hunt for judges. I went to an evolution conference at the Royal Society of Great Britain and I introduced myself to the organizer, Denis Noble. He's a very respected scientist. He's probably one of the top 100 scientists in the UK. He has a Commander of the British Empire medal from Queen Elizabeth. He's the guy who figured out the cardiac rhythm, which made pacemakers possible. He was the first person to model a human organ on a computer, which he did in 1960 in the basement lab with punch cards on borrowed time that he convinced somebody to let him use on the computer mainframe. He's a Fellow of the Royal Society. He's been the editor of several journals. He's been the president of the International Union of Physiologists. He's a serious, serious scientist, and he came on board as a judge.

I got George Church. Now, George Church is not a household name unless you're in genetics. Everybody in genetics knows who George Church is. He has been involved in almost every genetic engineering breakthrough in the last 30 years. He has 95 patents, 420 papers published, and he's a rock star. He's at Harvard Medical School.

In fact, if anybody knows what CRISPR genome editing is, his team and Jennifer Doudna's team at Berkeley are battling for the patent rights over CRISPR. So this guy's a total rock star. He's on my judging panel.

The president of HeroX, who hosts our prize – we're the largest prize on HeroX, which was founded by Peter Diamandis, who founded the X Prize for space flight – Christian Catalini says to me, "Perry, everybody knows you're a Christian. You need some atheists on your team. Can you go get like \$5 million dollars of atheist money?" and I'm like, "I don't know, but I've got an idea," and I go to Michael Ruse.

Michael is an atheist professor of the philosophy of history of science at Florida State University. Michael has testified in creationist trials. He's written at least 5 or 10 books about Darwinism and creationism and all this kind of stuff. He's a wonderful delightful guy. I like him. I find most of the atheist crowd to be disingenuous, but he's a really

friendly guy, so I got a hold of him and he came on board. So I got these three really sterling A-quality judges on my team.

Paul Davies is a very famous physicist and he invited me to come to Arizona State University at the Beyond program, and I launched the prize at ASU in August of 2017. Paul has been a long-standing figure in the dialogue between faith and science. I do not know what Paul's religious beliefs are. He's not a Christian and I'm really not sure, but he's met the Pope and he's met the Dalai Lama and he's been a peacekeeper. He's like, "Hey, there doesn't need to be this war going on," so he was comfortable having me.

There are several magazines that have written about the prize, for example the Institute of Electrical and Electronics Engineers and Frontline Genomics, so the prize is out there. Right now at this moment it's \$5 million. Eventually I'll raise more money and we will get it up to \$10 million, but we have a very serious thing on the table right now.

People say, "What are the chances that anybody's going to solve this?" and I say, "Well, it's a really hard problem. I think it's the biggest question in all of science that can be precisely defined, and it's a big question."

Where did life come from? Where did the genetic code come from? It's a huge question. In fact, I think it overlaps with consciousness, evolution, artificial intelligence, and it overlaps all kinds of stuff. It would be absolutely huge. It's hard. Maybe a 10% chance. Maybe I'm right, maybe I'm wrong. George Church is more optimistic than that. He thinks we'll solve it in five years, for example. There's an interview with him on Frontline Genomics about it.

But here's the thing. The way that I originally framed it, it's a "God in the gaps" argument. It's "God did it and you don't know any other way, so see, I win." Well, okay, that's nice but I don't like that kind of argument. I don't think it's a very good reason to believe in God because it's like, "So if somebody figures this out, Perry, are you going to stop believing in God? Does God go away?"

Listen, every time you make a scientific discovery and a puzzle piece comes in, it leads you to three more puzzle pieces that nobody's found yet. I've never seen an exception to the pattern. Science just keeps getting deeper and deeper and deeper and deeper.

It could be that this is solvable. It could be that the universe is designed so that this question is answerable. It could be that the genius of God is revealed in the answer, and I'm certain that if you find an answer it's only going to raise more questions.

I think a really good reason to believe in God is to ask the question, "Where did the universe come from? Where did the Big Bang come from? Where did the laws of physics come from? Where did all that fine-tuning come from? Why is there something rather than nothing? Where does morality come from?"

These are the classic reasons that have always been given, and I think they're very valid reasons. I like those reasons better than a "God in the gaps" argument that might get solved, but at any rate, no matter how that settles out there's one thing I can tell you for sure. Codes are always intentional. Evolution is always intentional.

You can't get a hand at the end of your arm through a series of random accidents. You get a hand at the end of your arm through a series of precise adaptations to threats and to opportunities, which biological organisms are doing all the time. Barbara McClintock's plants muted as a direct response to what had happened to the damage, and they repaired the damage specifically. Damage is random. Repair is not. All of biology is intentional and directional and goal-directed and teleological.

This is where I think a lot of Christians have kind of missed the punchline. The question is not whether evolution happens or not. The question is whether evolution is intentional or whether it's random and accidental. It's clearly intentional. We don't even know the degree.

So now we have this whole bigger question. How did these cells know how to do what they do? Barbara McClintock put it better than anybody I've ever heard. She said in her Nobel Prize paper, "What does a cell know about itself?" Now that's a good question. I don't know what a cell knows about itself. What does a cell know? I don't know, but they know something. Bacteria communicate with each other with language. They have words for me and you, and us and them, and how many of us are there? It's unbelievable.

I think cells are smarter than humans in some sense. Maybe they're savants, if you will, but they're better programmers than anybody at Google or Silicon Valley. If Microsoft knew what one bacterium knows, their stock price would go up 10X or maybe 100X. We would be in a whole new world if they figure that out.

**Zach:** Speaking about that, how does somebody solve the prize? What's the spec?

**Perry:** You have to get an encoder, a message, and a decoder to self-organize. That's it. A digital communication channel.

**Zach:** So for a mortal like myself and maybe some of the people watching, can you explain that?

**Perry:** Get out your cell phone. I text you and I press Send. Then what I texted appears on your screen. My phone is the encoder, your phone is the decoder. It's that simple. If you can get anything like that to self-organize, and it's got to be this side, the message, and your side, they have to self-organize – if you can get that to happen, you win the prize.

You could have the letter A and then Morse Code for letter A, then back to letter A – if you can get a system with a whole alphabet that will do that, you've solved the prize. That's it. It's actually pretty simple.

**Zach:** Sure. Just about any predisposition inside this is...

**Perry:** Right, you can't pre-program it in any way. You can't cheat. If you get that to happen without cheating you win. Our investors not only will buy the patent from you, they'll pay for the patent to get filed. We've budgeted a generous amount of money for lawyers and patents. I mean it's going to be a fight. This is a patent fight if there ever was one. If somebody figures this out, oh my goodness. It might be worth way more than \$10 million dollars.

There might be a whole bunch of negotiation. We're at least guaranteeing that whatever the prize amount is, that the discoverer will at least get that much money, and they'll be partnered into the company so they can get future profits.

We've thought this through and I've got some very smart people in my investment group. One of them is worth over half a billion dollars. There's some very talented people on my team. George Church is no slouch and Denis Noble is no slouch. We've got some very smart people. Maybe this can be solved, and if it can, great. If it can't, then we're not going to make up stories.

One time, and I think this was 2004 or 2005, something like that, I was listening to this radio show and it was Richard Dawkins going head to head with George Gilder on an NPR station in Boston. Richard Dawkins is the world's most famous atheist and he wrote the world's best-selling book on evolution, which is called either *The Selfish Gene* or *Blind Watchmaker*. They're both hugely popular books.

Somebody calls on the phone and they go, "So Mr. Dawkins, where did life come from?" and Dawkins goes, "It was a happy chemical accident," and then he just kind of goes on.

I'm like, "Happy chemical accident? What kind of answer is that? Did he just say that? And then he just went on as though he had answered the question? That's no answer. That's not even science. That's anti-science."

When we're talking about where did life come from, there's not going to be anymore lucky lightning strike, warm pond, happy chemical accident. That is not an acceptable answer to the most interesting and fascinating question in all of science. That is not okay.

He was a professor at Oxford and he has no business shrugging off those kinds of questions so glibly. This is a serious question and it deserves a serious answer. This is not a joke. Life is not a joke. If you don't know, you say you don't know, but you don't make stuff up. That's not science and that does not serve the public. Any professor at any university has a fiduciary responsibility to serve the public and to tell the truth.

What has happened is that Christians have invented their own version of science, and the atheists have invented their own version of science, and neither of them matches up to the facts. Neo-Darwinism – that falcons have copying errors – nobody should believe that. Nobody should ever believe that, but especially since Barbara McClintock. In fact, science was really on a wrong path for 60 or 70 years.

Really, neo-Darwinism is dying and it cannot be saved and they all know it can't be saved. I would say if you want an official date, neo-Darwinism died an official death at the Royal Society meeting in November 2016, which Denis Noble organized. Basically he said, "All right, we need people who believe in evolution but do not buy into neo-Darwinism. We need a major conference where all the leading thinkers that are studying natural genetic engineering and all these kinds of systems in nature get together and present what they've discovered."

There was a huge political fight within the Royal Society and there were a lot of people that didn't want that conference to happen, but they pulled it off and they got it to happen, and I was there and it was incredible.

Nobody is willing to defend neo-Darwinism in public anymore, not really. Jerry Coyne won't even debate people in public. He avoids it. He'll shoot people from the safety of his blog, but he won't actually go out and debate people head-to-head. I'd love to see him debate Jim Shapiro or Eva Jablonka or Denis Noble or any of these people, but he would end up looking very bad. And Dawkins won't do it either.

We're in a new era of biology.

## Evolution 2.0 Author's Main Goal is Not to Prove God Exists – It's to Stop the War

**Perry:** We're in a new era of biology. You could think of that meaning like the Protestant Reformation of evolutionary biology. I felt like Forrest Gump, that I was actually there. There's been this hegemony that has held the old theory in place for such a long time, and they've held sway over the profession, but they've lost a lot of their power and the profession is really moving on.

**Zach:** Is your primary goal to eventually get to the end of this problem and say, "Ha, I told you God existed," or is to more so, as you said earlier, heal the rift?

**Perry:** It's more about healing the rift. I'm sure some Christians will be disturbed that Perry's not out trying to prove that God exists. Here's what I've found. I can do a "God in the gaps" argument as good as anybody, and I've got as good of a "God in the gaps" argument as anybody has got. DNA is a code. All codes are designed. Therefore, DNA is a design. And hey, I've got \$5 million to prove that I'm right.

Well, the \$5 million is no longer to prove that I'm right. The \$5 million is to pursue the truth. The fact is, we don't know where the genetic code came from. Maybe it's a divine miracle. Maybe it's an act of God. I'm fine with that. But maybe it's an undiscovered law of physics and maybe it's something absolutely incredible, and maybe if we solve this we'll solve consciousness and we'll solve AI and we'll understand biology so much better. Maybe it'll be this huge breakthrough. I don't know.

Here's what I did find. I found that if I used a "God in the gaps" argument to back people into a corner, once people got backed into a corner they would just leave and they would not stay engaged. In other words, I could never twist anybody's arm and get them to believe in God. It just doesn't work, so I don't use that approach anymore.

But what we can do is we can start telling the truth about science. We can follow the evidence wherever it leads. We can speak the truth at any cost, if we so choose. There's no reason for there to be this war between these two sides. I think it's completely ridiculous. It's counterproductive.

I know all kinds of scientists, especially in evolutionary biology, who can't really admit in public that they have faith. It would be like coming out. I know all kinds of scientists who believe that there's some level of design in the universe, but if they use the word

'intelligent design' they would just get their head smashed in. There are scientists that can't let it be publicly known that they're friends with me. There's not many of those, but they do exist.

If you look at George Church and Dennis Nobel and Michael Ruse, my judges, they're all bullet-proof. Nobody can take them out. They all have tenure. They all have huge accomplishments, and being on Perry's controversial prize panel isn't going to hurt their career, but a normal regular professor would probably not be able to get away with it, at least at this point in time.

I want that to change. It shouldn't matter what your religious beliefs are if you're a scientist, and if you're a scientist you should be allowed to believe that the universe is designed or that the universe is purposeful. I mean it's very obvious that eyes are for the purpose of seeing, and hearts are for the purpose of beating, and you can't get around this. Yet in biology it's been forbidden to exist that purpose exists in nature.

Purpose does exist in nature. It's very obvious that it does. All codes are purposeful. All organs in bodies of all kinds of animals are purposeful, so we live in a very purposeful world, and purpose is a legitimate inquiry. We need to break down the Berlin wall so that people are free to ask questions, so I'm trying to break that down.

I think if we can break down that wall, the issues around faith itself can take care of themselves. I think if you can have an honest conversation, faith is going to do just fine. It's when you have forbidden areas of conversation, forbidden areas of discourse, that actually causes doubt to flourish.

**Zach:** So this utopia of demilitarized conversation, what are you doing to facilitate that?

**Perry:** When I announced the prize at Arizona State, I talked about a demilitarized zone. The DMZ between North and South Korea is where the two sides can talk and they don't shoot each other, so I came up with four rules for DMZ.

#1 is put down your weapons. You can't come into the DMZ and be trying to shoot people. Everybody needs to be welcome to the conversation, whether you disagree with them or agree with them or anything.

To that point, there is no segment of this fractured debate that I have not learned important things from. I've been critical of young earth creationism, and I've learned a lot from young earth creationists. In fact, one of the best books I've ever read is *In the Beginning Was Information* by Werner Gitt. He's a 6-day young earth creationist, but

he's also an engineering professor in Germany, and it's a superb discourse on the information problem in biology.

The Creation Research Quarterly guys kind of chastised me. They said, "Mr. Gitt's been out there for 20 years and he hasn't gotten anywhere, and I think Perry's prize is a fool's errand."

Well, I've gotten somewhere with this prize. I've got people taking me seriously. I'm speaking at universities. I gave a talk at Notre Dame a few months ago. I launched the prize at ASU. I've got the leading geneticist at Harvard. I've got the leading physiologist at Oxford. I've got people taking this seriously. I've got millions of dollars of investment. I think we have Shark Tank for biological ideas, is actually what I think we have here, so I'm actually making some progress.

I've learned things from Richard Dawkins, even though I don't like him, and I've learned things from Jerry Coyne, even though I don't like him. There's all these people, and everybody has pieces of truth. I don't think anybody has it all right. I don't think you can say, "Oh, these guys are the ones that are right, and everybody else is wrong." I don't think that's true, so put down your weapons.

#2 is assume positive intention. What that means is that people need to realize that even their worst opponent on the worst day has some good motives in what they're trying to do. There's some goodness in the pursuit, even if you don't like the way they're pursuing it. You assume that in their own way, people are looking for the truth.

#3 is to ignore no verifiable fact. If you can figure out that it's true, then figure out that it's true. You don't get to sweep things off the table that don't seem to fit your model. If you can verify that it's true, then you have to leave it on the table even if you don't know what to do with it. It's kind of like I didn't know what to do with evolution for quite a while, so I just let it ride.

#4 is get to the truth, not the sale. In other words, make this about finding the truth. Don't make it about beating your ideological drum. I got this from my friend Ari Galper, who's a sales trainer. He does these workshops where he'll train sales people, and he has to de-program them from being a little propagandist for whatever brand of car they're selling or whatever their product is.

No, your first job is to figure out does the person you're selling to even need this in the first place? And will this actually solve their problem? This is about them before it's ever about you. If people do that, they can actually trust sales people.

Have you ever gone to a sales person and he's like, "Oh, I wouldn't put siding on that house. In fact, that whole wall needs to be ripped out because it's got mold in it." A lousy salesman would just sell you the siding, and then you put new siding over a house that's rotting. You respect people that actually consider what your needs really are.

So those are the rules of the DMZ. If people can stick to those rules I think we can have a peaceful conversation. The creationists know a lot of valuable stuff, and the creationists have brought up many critiques of evolution that are valid.

I have to make it very clear — I think we've only figured out about 5% of how evolution works, so when a creationist says, "You haven't solved that, you haven't solved that, you haven't solved that," usually they're right. Now, they're not always right, but at least sometimes they're right. My approach is to say, "I have a hypothesis that if we continue to pursue the truth at any cost, a mechanism for what you see there will be figured out."

I believe that the most God-honoring way to practice science is to assume that there's an answer somewhere, that it can be discovered, and we don't just give up and say, "God did it." There isn't any scientist who could say, "God did it, that settles it, so let's have a three-martini lunch." Scientists can't do that. Maybe pastors can, but not scientists. I really, really respect what scientists do in their jobs, and I don't think Christians should be saying, "You can't figure that out."

I was talking to some scientists last year and they were like, "Is the purpose of your prize just to kind of rub people's noses in the fact that they haven't solved it yet?" I said, "No. It's just truth serum." I totally applaud if somebody can solve this. This is not a Trojan horse. I'd love it if somebody solved it.

Now, it would raise all kinds of new questions, ethical questions, AI questions and whatever. I realize that, but a lot of Christians kind of avoid this sort of stuff. Then what happens is Monsanto discovers it. Who wants Monsanto to own this? That would not be good, so we need ethical conscientious people to own a technology like this.

I think Christians have been so afraid of being on the forefront of science and technology, and for that matter for the arts and culture, and this is not okay. Christians used to be in the lead, so why did they abdicate? Why did they? It's not good.

**Zach:** Kind of bringing this whole baby back full circle then, where is Bryan at today?

**Perry:** If you go evo2.org/bryan, there's a video where he actually talks for an hour about where he's at, and that was recorded in 2017. He's still figuring things out. He's still exploring. He's not hostile to faith. He's not a Christian, either, and we get along great. He's the president of my company.

Everybody asks about Bryan, and one of the things that happened as a result of the whole Bryan thing was I became comfortable having people right in my face and right in my personal space who don't believe the same way I do. I'm okay with it.

When Bryan left faith, he lost a lot of friends. There were a whole bunch of people who talked behind his back. They kind of shunned him. They wouldn't meet with him. There was all this whispering in the background, and he found out who his real friends really were. I'm really disappointed that a lot of his old friends really were only comfortable with Bryan if he believed the same way they did.

How flimsy and weak is your faith if you're afraid that Bryan is going to corrupt you? And how come you're not willing to go to the bottom of the swamp with your beliefs and figure out why you believe what you believe? Or are you just going to recite a doctrine that somebody else gave you?

I've got people of all kinds of persuasions. None of my judges are Christians. I've got investors who are Christians, I've got investors who aren't Christians. I mix it up with everybody and I love it. It's like those seeker groups that we did at Willow Creek. That was a DMZ. "You do not have to believe the way I do to sit here at the table and talk about this, as long as we can just have a conversation. Can't we just have a conversation?"

Isn't social media polarized enough? If you're a Christian, can you have a beer with atheists and figure out how you're going to get along and talk about this stuff and just be calm? Man, we need that. If people can't learn to do that, we're in trouble. This is about the DMZ. This is about opening up the space. This is about having the conversation. It's about healing the rift between science and religion.

I've got two lifetime ambitions. I want to heal the rift between science and religion, and start a second Renaissance. If you're going to have a second Renaissance, people have to be curious and they have to want to know. They have to just not be content with the answer that somebody served them on a silver platter.

That's what happened to me when I got plunged into this. I said, "I'm not taking anybody's answer for this. I'm going to go to the most fundamental definitions, the

most fundamental reality that I can find, and then I'm just going to keep chiseling harder. I'm going to put things on the anvil and I'm going to pound them as hard as I can. If it breaks, it breaks and I'll give it up. If it holds together, it holds together."

**Zach:** How do you read Genesis? Because a lot of this talk can totally change the way that we view Genesis if we put it in a 6-day creationist type of view.

**Perry:** First I want to say that the way that Genesis has become interpreted by American evangelicals – because actually this way of reading Genesis is very peculiar to Americans or American exports. The Catholics don't read it this way. The Orthodox don't read it this way. The Pentecostals may or may not read it this way. But that way of reading Genesis is very brittle. It's like, "If I change anything at the beginning, then the perception is that the whole gospel falls apart, the whole Bible falls apart."

I do not agree. I think there are assumptions that are baked in that have to be changed, so let's talk through some of those assumptions.

One of the assumptions that you have to challenge is the nature of the fall of man. The traditional version is that planet earth was a perfect paradise, and the Garden of Eden was a perfect paradise, and then man sinned and death came into the world.

I think that's the wrong definition of the fall, and I don't think that definition is even biblical. The fall is not the introduction of animal death in the world or physical death in the world. The fall is the loss of connection with God – two totally different things.

You'll notice in the Garden of Eden story there's a tree of knowledge of good and evil and there's a tree of life, and they chose the knowledge of good and evil over the tree of life. Why is there a tree of life if they're immortal? They're not immortal and death does exist in the world.

Science tells us this very clearly, but even the Bible says it was very good. It doesn't say it was perfect. There's a huge difference between very good and perfect. If you go into an unspoiled mountain range where humans haven't been around, or a forest or a cliff or an ocean, it is beautiful. It is amazing. It is very good. And yes, I am suggesting that a world with predation and carnivores and lions and tigers and bears and sharks is still good.

Some people are kind of horrified at this. I'm like, "Hang on a second. If you're horrified at that, why are you not horrified by the idea that there was a serpent in the garden?

Which is worse? Sharks and bacteria or Satan?" Any way I read the Genesis story, conflict is baked in from the word go. Conflict is waiting to happen.

I think the young earth position just turns a blind eye to that and goes, "Oh, God would never make a world where there's conflict." God obviously created a cosmos that's in conflict. Accept it. I think this is the first stage of just fully being an adult. There is conflict in the world.

This idea that death came from Adam's sin, this comes from Romans 5, but if you read Romans 5 very carefully it's very clear he's not talking about animals and he's not even talking about physical death. He's talking about spiritual death. He's talking about separation from God.

So if you redefine the fall a little bit, which you have to in order to line up with everything that we know about the world, there was death going on in the world for millions of years, as all of our geology and anthropology and everything clearly shows us.

There's some more assumptions that have gotten baked in or snuck in to Christian theology that I think are wrong. Another one of these assumptions is the idea that sin is transmitted genetically. This idea came from Augustine. It's not in the Bible. As far as I can tell, sin is transmitted by knowledge. Sin is transmitted the same way salvation is, by knowledge.

Adam wasn't the first human. Adam was the first prophet. There were other people around. The scripture even implies that there were. Cain kills Abel and he's like, "Oh no, somebody's going to kill me!" Who? According to the story, there's only mom, dad, and him. Who's he talking about? Then he goes somewhere, he gets married, and he builds a city. He gets married to who? And he builds a city for who?

The traditional creationist position has to make up all kinds of stuff that's not in the Bible to make all that fit. How about there were other humans around and Adam was the first one that God revealed himself to?

I've got a book called *Historical Genesis: From Adam to Abraham* by Richard Fischer, and I know Richard. He's a friend of mine. It's a brilliant book. He explains how there are references to a holy man named Adam in ancient Mesopotamian literature, and that this was a real guy and he was the first Semitic person. He wasn't the first human. Anthropology clearly shows us that there were other humans.

Let's take another assumption, day as a period of time. That's what I assumed. Why would you assume that a day is 24 hours if regular days, seasons, and years don't appear until day 4? Then at the beginning of Genesis 2 it talks about the whole creation from the previous chapter is happening in a day, using the word yom. The word 'day' isn't even consistent in its use. So I don't see any reason to be dogmatic about the word 'day.'

I think the reason that they insist on short days and a perfect creation is that that lays sin and death at the feet of mankind instead of God, and a lot of people are more comfortable laying all that at man's feet instead of God's because of the suffering that goes on in the world. "Okay, so if lions have been eating rabbits for millions of years then, wow, that's a cruel world." Yes, it is, and you need to accept it. If you can accept the fact that there was a serpent in the Garden of Eden, I don't see why you can't accept that there's animals eating animals in the world.

Then one other assumption. If you read Genesis assuming that the story is told from an earthly point of view and not from outer space, then all the sudden it makes sense that there was light, but there weren't seasons and years before day 4, which is when the atmosphere would have been transparent enough to see the sun and the moon. That's why you see the sun and the moon on day 4. I think that's a reasonable theory. I'm not dogmatic about that theory.

I think another way of reading Genesis is that it's not literal chronological narrative, the way people assume it is, that it's highly poetic and symbolic. People like John Walton and a lot of other people have a very different interpretation, and I think there are good arguments for saying that you shouldn't try to overlay the Genesis 1 story with modern cosmology and make them line up, and they may be right.

I'll only point out that if you assume a day is a period of time, if you assume the story is told from an earthly perspective, and if you assume Adam is the first prophet and not the first human, the whole thing fits modern cosmology just fine, and there isn't any other ancient religious book or ancient creation story where you can make a handful of assumptions and get any of it to fit. So there's a reason why people are still arguing about Genesis and they're not really arguing about the Hindu version or the Buddhist version.

That's how I read Genesis, and therefore Jesus doesn't fall apart if there's an evolutionary story, and the New Testament and the rest of it. In fact, I'll even go further. I don't think you can actually really understand the Old Testament in particular without some sense of an evolutionary view.

I think that the Sermon on the Mount is the ultimate counter-Darwinian manifesto. "Blessed are the peacemakers. Blessed are the poor in spirit. Give to people who ask of you," and all of that. And you have Paul saying, "In Christ there's neither male nor female, Jew nor Greek, slave nor free. All are equal in Christ Jesus."

Nobody had ever said that or really anything quite like it before then. The notion of all human beings being equal did not exist before Jesus and Paul – it didn't exist. It wasn't to be found. I'm going to go a little further and say equality didn't exist. There wasn't equality in the world.

Alexis de Tocqueville wrote this book called *Democracy in America*. The French sent him to the United States in the 1820s and 30s. The French aristocracy was freaking out. They were like, "What is this democracy thing? What's going on in America? This is turning everything upside down." They were scared, and everybody in Europe was talking about America, so they sent the smartest guy they could find to America, Alexis de Tocqueville. He wrote *Democracy in America*.

It is one of the best books I've ever read, and in that book he says, "So what is the core DNA of the United States? What is it based on? It's based on two things. It's based on equality and individualism," and he coined the term 'individualism.' He needed that word to describe Americans because it didn't exist that way in Europe. He said these two things in tension with each other are what drives America.

He described individualism, which I think we can all understand. He said, "Where did the idea of equality come from?" and he goes all the way back to Paul, who says "In Christ there is neither male or female, Jew or Greek, slave or free." He says that's where the idea of equality got planted in civilization, and it slowly, slowly grew and grew and grew, and eventually you get to the Magna Carta and the invention of the gun and the invention of democracy and the post office and the library and all these things. Everything made more equality, more equality, more equality, and it started with Paul. You have to fix this idea in your mind, because before Jesus and Paul it didn't exist.

We read the Old Testament and we think that equality exists. It doesn't. The Jews do not consider all of the tribes around them to be equal, and nobody in the ancient world thinks there's anything unusual about how it's springtime and the roads aren't muddy anymore, so we're going to get in our chariots and we're going to go down to the next village and we're going to kill everybody and take everything they have. This was how the world worked.

You didn't go, "Oh, they're equal to us. They have equal rights." No, it didn't exist. It doesn't really even exist in the Jewish law, either. So Darwinism and evolution and all of that is based on inequality and the survival of the fittest and all of that.

Jesus comes and he's like, "Okay everybody, hold on. That will only get you so far. It'll get you tribalism. It will get you tribe warfare and it will get you people struggling for dominance and superiority. It won't get you the kind of peaceful society that humans want in their hearts, what humans want in the sense of being reconnected to God and going back to the Garden of Eden," which I think was an opportunity to heal the earth. It was an opportunity to own our authority and be connected to God.

But Jesus was like, "Okay, let's take a second run at this. Everybody is equal. You're equal to me, equal to her, equal to him, black, white, Jew, slave, free – everybody's equal." Then this equality juggernaut, de Tocqueville explains how it comes in and starts to eat away at racism, starts eating away at slavery, starts eating away at tribalism.

You have to understand what's the idea of the Garden of Eden? It's the first shot at creating this equality, which failed. So now we have a second shot, which is Christ. But the Old Testament suddenly makes sense why this inequality, why we're going at killing the Hittites and all this kind of stuff. It's because they were not considered to be equal. They were not considered to be children of God.

I don't have time to go any further in trying to explain this, but you read the Old Testament and you get to the children of Israel at the beginning of Exodus and then you pay attention. It's like this really primitive society. They're like children. What you see in the course of the Bible is you see humanity growing up.

Then you get to the New Testament and it's like, "Okay, now you're ready for the real stuff." The real stuff is you're all made in the image of God, and you can all have the spirit of God, and you can start to create a civilization that you could have never imagined in that old world.

You can't judge that ancient world by the new world, because the human race had to evolve through it. If you believe in evolution, then you understand that the Old Testament is just reporting the evolution of the human race, and that's where we were. We were in this very immature state of being able to relate to God, too. So you have a necessarily limited understanding of God, which is not what we have now. We have a much better understanding of God.

So I believe in an evolutionary arc and I believe the most evolutionary figure of human history is Jesus. Nobody equals Jesus. Even 5-year-olds know that Jesus doesn't kill people. We all know how abusive religion has been, and there's Mr. G demoting my dad for talking mom to a psychiatrist, and there's the scientist basically taking Barbara McClintock out of their little club for thinking that plants edit their own DNA, and there's all these injustices that happen, but we know they're wrong and we know Jesus doesn't treat people that way.

Jesus has the most consistent branding of anybody in history, speaking as a marketing guy. All the 5-year-olds, all the Muslims, all the Jews, they all know that Jesus is a peaceful guy. They all have some idea of "what would Jesus do." That's the evolution that we have to aspire to.

It becomes pretty clear that you have this arc of physical evolution, which is natural genetic engineering and it will only take you so far, and when you want to evolve spiritually you have to completely redefine even what evolution is.

That's what the New Testament is and it's what the prophets in the Old Testament were always hinting at. There's all these prophetic passages by Isaiah or whatever, where they're envisioning a peaceful society. A lot of evangelical Christians think we had that in the past – no, we didn't. It never existed.

There was a hint of it in the Garden of Eden, but however long it took, they punted on that plan and then we're back to the evolutionary world we came from, except now we have this knowledge that we can't get rid of. It's this knowledge of God, so it chafes at us. It's that chafing between this idea of what a godly kingdom might be like, versus this tribal world we live in that kind of explains the whole path of people throughout religious inquiry and seeking after God.

**Zach:** Perry, this has been absolutely awesome, man. Thanks so much for taking the time to go through all this and answer all these questions for myself and the listeners.

**Perry:** Thank you for doing this, because it's needed to be done for a long time. Thank you for watching and paying attention. Post comments on the blog and let's keep the conversation going.

Zach: I appreciate it. Thanks so much, Perry.

**Perry:** Thank you.

Zach: Guys, have a great day. This has been Perry Marshall and Evolution 2.0.