

# Evolution 2.0 Newsletter

Volume 6, Issue 3

## From Evolution to Curing Cancer: Our 7-year Journey

In my book *Evolution 2.0*, published in 2015, the topic of cancer gets two pages. There, I said, “You’ll never understand cancer until you understand evolution.” I said evolution is an active, intentional process. (And I used the word *intentional* intentionally.) I said cells are intelligent, and as long as you underestimate the intelligence of cells in the evolutionary process, you’re never going to understand cancer.

### The First Cancer Convo...

It was not until 2017 that the first conversations about cancer started to occur. The first I can recall was with Paul Davies. Paul is a fairly famous physicist. He’s done groundbreaking work and studied with some of the greatest physicists of all time. And he’s also been a peaceful voice in the science/religion dialog. Always one of the reasonable scientists.



Paul contacted me after I’d mailed him my book: “I loved your book, especially because of the cancer research that I’ve done. And I would like to have you come to the Beyond Center and speak at one of our coffeehouse events about your evolution prize.”

### Which Harkened to a Connection at the National Cancer Institute...



Paul explained to me that Anna Barker, the former director of the National Cancer Institute, had reached out to him a few years before and said, “We would like you to do cancer research.” Paul replied, “I don’t know anything about cancer research.” Anna said, “That’s exactly why I want to hire you.”

That statement could be the motto of this journey.

Anna is a truly an “interdisciplinary” woman. She’s an immunologist interested in evolution and information theory who worked in government for many years. She understands how easily large government organizations get entrenched in ways of thinking, knows how that limits possibilities, and has always been one to fight for new ways of conceptualizing problems.



She chose Paul, as I understand it, because she had read some of his books. One is called *How to Build a Time Machine*. It's a short, lay-person-friendly explanation of all of the rabbit trails that you go down when you ask the question:

“Would it be possible to go backwards in time?”

You don't need a PhD in astrophysics to understand this book. So, Paul is also an **interdisciplinary explainer**. One who can cross multiple disciplines and explain them all in plain English.

That's a sign of genius.

## James Shapiro Sparks the Cancer & Evolution Symposium

Then, two years after that, I heard from James Shapiro. He said, “I'm working with Frank Laukien and Henry Heng. We want to do a cancer and evolution symposium in Cambridge, Massachusetts. Will you help us?”



Within six months, I was fully immersed in the cancer research world.



Along the way, I kept running into people who started *outside* of biology, outside of evolution. But all had come to the same conclusions as I had, independently of me. Many came from practical, *get it done* backgrounds.

Investigative reporting, radiology, practicing oncology. Practicing medicine is like engineering. **You care more about the outcome than you care about the theory.**

These people were not just critics. They weren't jealous peers. They didn't have a religious ax to grind. No, they were trying to *get stuff done*.

**How is evolutionary biologist James Shapiro an “outsider,” you might ask?** He's a bacterial geneticist at the University of Chicago, where he's been working for 45 years. Everybody in genetics knows him. He's a widely published, respected academic. Sounds like a total insider.

Yet also a rebel. He's called BS on the conventional evolutionary biology community for his entire career. I once asked him, “Do your alternate views have anything to do with the fact that you studied English at Harvard, and then went to Cambridge for genetics, instead of getting a biology degree like most people in your field?”

He said, “Yes, that had *everything* to do with it. The biology people never had a chance to tell me what I was not allowed to think.” So he's been an insider *and* an outsider his whole career.



Henry is a cancer researcher at Wayne State University. Henry figured out from his oncology research, observing the behavior of cancer cells, that there was no possible way standard evolutionary biology could be right. So



Henry wrote a book called *Genome Chaos*. And somewhere in the process of writing that book, Henry discovered James Shapiro, who had come to almost identical conclusions.

This story is very similar to that of Denis Noble at Oxford who, by knocking out genes to study the cardiac rhythm, also concluded that there was no possibility that the standard evolution story could be right. All of us figured out *independently of one another* that the whole field of evolutionary biology had been built on quicksand.

## Symposium Achieves “Critical Mass” and Leads to Connection with American Association of Cancer Research

With Laukien, Heng, and Shapiro on board, we were able to draw an impressive lineup of blue chip institutional names. Harvard, Yale, Oxford, Cambridge, MIT, Columbia, MD Anderson, the very best research centers in the world. Our symposium got enough of these people under one roof, that the critical mass happened. We garnered the level of credibility we needed.

The American Association of Cancer Research showed up and said, “We like what you're doing. Let's make you a Working Group.” (The organization has seven others.)

Other groups like this existed long before. For example, the International Society for Evolution, Ecology and Cancer, which started about ten years ago. There were others. But all this was “under the radar.” Suddenly all of these communities finally came together. Because of this, our AACR Cancer & Evolution membership now includes **1500 researchers**. We are now in a position to even change the way cancer is defined in medical schools and textbooks.

We're not there yet. But we're in striking distance!

After the symposium, scientist Vincent Ling told me, “Perry, that was the best science conference I have attended in 30 years. At 95% of science conferences, you have one specialist get up and dive deep into one area. Then the next person does the same in their area of expertise. One after the other. But the presenters at your conference, rather than just staying in their cubicle and drilling deeper, deeper, deeper, were the kinds of people who stand up and look over their cubicle wall and ask, ‘How does what I'm doing connect with what she's doing over there? Is the answer to my question in someone ELSE's cubicle?’ Ninety-five percent of scientists never do that.”

On the third day of the symposium, I had everyone on a Zoom call and I asked, “Show of hands. How many of you are a little embarrassed to admit that you only understood about 30% of everything that you heard today?” Dozens of hands went up.

I said, “That's good, because *everybody* is being stretched out of their comfort zones. We *all* had to learn to be interdisciplinary explainers. We need to keep standing up in our cubicles and talking to the other people willing to stand up in theirs.”

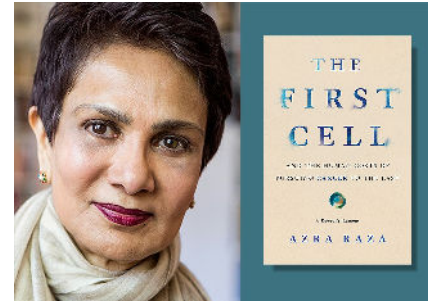


## All This Leads to Funding Three Exciting Cancer-Curing Projects

### 1. Halting Cancer at Stage Negative One

Six months before the symposium, James Shapiro told me, Frank and Henry: “You have to read *The First Cell* by Azra Raza.”

I read it and reached out to Azra to ask if she would come on my podcast. And to my utter surprise, she emailed me back “Is this THE Perry Marshall?” I thought, “How on earth does an oncologist in New York City have any idea who I am?”



She says, “You wrote *80/20 Sales & Marketing* and *Evolution 2.0*. And you have this audacious \$10 million prize. Plus you wrote about my heroes, Barbara McClintock and Lynn Margulis.”

Azra had been fascinated with evolution since she was in middle school. And we both share a deep dissatisfaction with the status quo. For her it’s cancer treatment, for me evolution. We are both “calling-out-the-elephant-in-the-room” people.

Azra’s book calls BS on the cancer treatments of the last 50 years. My #1 question to her was, “How did you get away with writing this book? How did you not get body slammed for telling everybody that cancer research isn't working?”

She said, “Because I've *lived* it. I've lost a husband to cancer. I've lost my daughter's best friend to cancer. I've treated 60,000 patients. I have their tissue samples. I've been published in every major journal. NOBODY can call BS on me with a straight face because they all know it’s true.”

Azra, like Shapiro, is an **insider-outsider**. She’s not interested in protecting some pet theory or project. She’s only interested in helping patients live!

Results.

Azra is firmly convinced that “Giant Cells” are the mothers of cancer cells. Chemotherapy doesn't kill them. You can eradicate the cancer and push it into remission, but those giant cells are still there.

But she believes if you take them out, you can prevent the recurrence of cancer. If you can identify them and take them out EARLY, you can prevent cancer from even happening in the first place.

They haven't fully *proven* this yet, but all of the dots are connecting so far. The ability to stop cancer at Stage Negative One is an exhilarating, world-changing prospect. It is moving at breathtaking speed and we are helping fund her efforts.



## 2. Reversing Cancer

My friend and long-time Evolution 2.0 volunteer, Paul Beauchemin, emailed me and said, “Perry you **HAVE** to interview Michael Levin on your podcast!” He sent me one of Michael’s videos.



I thought, “This guy is redefining biology!” I got in touch with him, we did the podcast, and he presented at the symposium. To put it bluntly, Michael is 10 years ahead of just about everybody. He holds a fundamentally different understanding of how biology works.

And guess what... another “outsider.” Michael came to biology by way of computer science. He used to think that computer science was going to give us artificial intelligence. But soon came to the conclusion that there is no real AI in computer science. The real AI is what biology is doing. Michael would still say biology is a branch of computer science, but in saying that he is underscoring what computer scientists still do *not* know.

(Watch my latest podcast interview called The Engineering of Consciousness with Michael Levin and Donald Hoffman, at [www.evo2.org/blog](http://www.evo2.org/blog).)

Levin is part experimentalist, part entrepreneur, part engineer. So he approaches questions at a fundamentally different level than almost any standard trained scientist, always with an eye to “How can I get this accepted?”

Science Research. 2.0 has been supporting his lab. **Michael is reversing cancer in amphibians** and he is researching what that might mean for cancer in humans. Early indications show promise for reversing glioblastoma, which is one of the most vicious cancers in the world. Very exciting.

Summing up: So far we’re **reversing cancer** and **detecting cancer at Stage Negative One**.

Who else is doing that????

## 3. Cortisol, Stress, and Preventing Cancer

Finally, through Paul Davies I connected with geneticist Kimberly Busey who, with Planet Perry member and psychologist Eric Kuelker, is exploring the relationship between the stress hormone cortisol and cancer.

You know what I’m about to say, right? A clinical psychologist is an **outsider** in the cancer research field! Michael studied the connection between mental and physical trauma and cancer.



Psychology research has shown that certain traumatized people are three to four times more likely to get cancer. But people who have had adverse childhood events and have been through therapy suffer much lower rates.

Again, fascinating and promising, crucial, foundational work we are proud to help fund.

## **The Power of an Interdisciplinary Mastermind Group**

As a business consultant, one of my favorite formats for education is called the mastermind group. At its best, you gather about 12 people in a room. You may have entrepreneurs in software, mortgage, furniture, trucking, you name it.

Such groups almost always cost more than \$10,000 a year. I've been a member of such groups for 20 years and directed one for 17. It is extremely common in the entrepreneur space and it works. Getting out of your own business and fish bowl for even two days, to hear the ideas and advice of people OUTSIDE your industry is, I believe, *essential* to your success.

But, as far as I can tell, this is seldom done in most other industries. The cancer and evolution group is a science version of the mastermind concept. Though many members are oncologists or cancer researchers, members hail from many different branches of science cancer research. There is an appreciable number who do not come from any of the standard categories. Astrophysicists, chemists, information theorists.

This leads to interdisciplinary insights.

The evolution theme brings diverse fields into the conversation that wouldn't otherwise belong. So I hope what appears to be the beginning of a mastermind concept will continue to get richer and richer as we go along.

## **We Need the Help of Another Outsider...YOU to Help Us Cure Cancer in Our Lifetime**

I told you about three projects that any thinking person should recognize as highly productive, high Return On Investment areas of research. I believe that \$1 invested in these projects will go 10 to 100 times farther than \$1 given to conventional cancer research, which has made little progress on Stage 4 cancer in over 50 years.

The cancer industry is mired in a ditch. We are not! We have traction. We are moving ahead.

**“Perry, why has it been so hard for these ‘obviously’ promising ideas to get funding?”**

One reason is that we are selling *prevention*. Every good marketer knows that prevention is 16 times harder to sell than a cure. You have to sell a cure and work backwards to prevention.



Everyone understands this. If a man is having a heart attack right now, his arm is throbbing, and he's writhing on the floor in agony, and you say, "If you give me \$250,000, you'll live."

...He will say "Sold!" No marketing or persuasion skills required.

But if you rewind to five years earlier and approach the same guy, overweight, stuffing cheeseburgers down his gullet and swilling a 6-pack of Bud every day, and say, "Give me \$25 a month and I'll lower your risk of heart attack by 50%," it's a HARD SELL.

Not interested.

Thus I believe that, since it costs a lot of money for individuals, insurance companies, governments and communities to treat people in Stage Four, just so they can live six more miserable weeks, we ought to have the wherewithal to stop and say, *These guys at Science Research 2.0 are actually doing something about this and we need to help them.*

I don't really care if it's grants, or foundations, or government, or wealthy individuals, or not-so-wealthy individuals. Frankly, it's going to come from all of these places.

**But THIS is worthy of your time, attention and money.** Half the people reading this will, in the next two months, hear about another close friend or mother or brother who just got a cancer diagnosis. If it's Stage Four, they have no better shot than they did 50 years ago.

Let's change that.

We need someone to come forward and donate \$1 million. We need others to bring gifts of \$10,000, \$50,000 and \$100,000. Even if you can only give \$1,000 it makes a big difference.

We can make more progress in the next 10 years than has been made in the last 50 years by addressing the right problems instead of the wrong ones. But we need your help. Right now, all the money in conventional research is going into the late stage "cure." This is backward. *It's too late by then.*

We're hacking at the very root, the start. We've redefined the problem. We're making progress where no one has made it before. And I keep getting weekly confirmation that we're on the right track. It's exciting and it's frustrating because I know we could do so much **more** so much **faster**, with more resources.

Let's cure cancer in our lifetimes.

**Donate at [www.evo2.org/cancer](http://www.evo2.org/cancer)**  
**Or call SR2 CEO Jon Correll at (858) 336-3061**

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# What Can You Do to Be a Part of Evolution 2.0?

Evolution 2.0 is me, CEO Jon Correll, Mary McEvoy and a few other precious volunteers to contribute hours here and there. **We can really use your hands-on assistance.**

Another thing you can do to help is fund our virus research. I know of no one who is bringing a full-fledged “Evolution 2.0” viewpoint on virus evolution. It’s 501c3 not for profit, so you can go to [evo2.org](http://evo2.org) and make a tax-deductible donation.

We could also use some volunteers.

We need people who are skilled in...

- **Administration and project management**
- Finances
- Scientific papers, research, and projects
- Film (documentary screenwriters, editors)
- **All** forms of marketing ad copywriting, buying Google, YouTube and Facebook traffic, writing blog posts, shooting videos, podcasts, publicity angles, news media
- Project management

If any of the above piques your interest, please reach out and let us know. Email [evolution@evo2.org](mailto:evolution@evo2.org) and let us know what your skills are and how you might like to help.

Carpe diem – Seize the day.

Perry Marshall

**Donate Here: [www.evo2.org/cancer](http://www.evo2.org/cancer)**

