

How to Paint a Flaming Red Bullseye on the Head of the Beast

Giant Cells, Adolf and Time Machines

In the last few weeks I've attended two cancer conferences. At breakfast I sat down with Ken Pienta. He's a urologist and oncologist at Johns Hopkins in Baltimore. Ken is one of the top cancer docs in the country, as he not only sees patients but performs incisive research.

He asked me, "So Perry, did anything jump out at you as revolutionary or super exciting?"

I stared into space, thinking. After about 30 seconds of watching me stare, he said, "I'll take that as a no."

With the exception of some Cancer & Evolution talks, every presentation seemed to be "We're sequencing these genes... and these genes..." and, "Let's try hitting this one with chemo this way." As far as I was concerned, it was: same stuff, different day.

A disquieting aspect of these presentations is that the patient's personal story is *rarely* referred to. Occasionally someone will make oblique references to the disfigurement and excruciating pain and suffering; but mostly it's facts, stats and data. Dying people reduced to data points.

Ken said, "Yeah, you're right. They really haven't turned the corner, but yesterday there were presentations you missed that I think are really going somewhere... like mine."

Ken's working on *Giant Cells*. As far as we can tell, these are the "Mothers of cancer." For many years your pancreas cells were happily doing their job, but one day they got stressed out and decided to defect. "I'm sick and tired of this joint... I want to do my OWN thing."

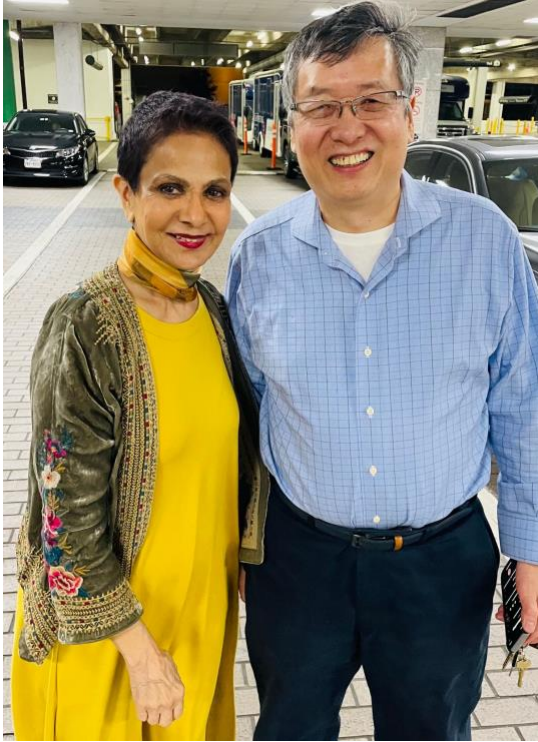
They shift into a brand new state that closely resembles the first five days of a human embryo. Their evolutionary toolkits shift into overdrive. In the budding human embryo, this adaptive state helps the new baby intake environmental data for real-time adjustment to the outside world. Accordingly, the cancer cell hyper-adapts and makes multiple copies of its DNA, which is a stress response. It is "girding its loins" for a life as a hyper-evolving independent freelancer.

It then strikes up a deal with a passing white blood cell. They merge together. The newly transformed pancreas cell brings *immortality* to the table (its "self-destruct at the end of your life and peacefully die" switch is disabled) and the white blood cells brings *mobility* and an all-access pass to the rest of your body, because it's an immune cell.



The pair begins traveling around the body as a tiny “Grendel’s mother.” They eventually start spilling out cancer cells – “little Grendels.” And *spreading* cancer wherever they choose.

Now, even if you kill the cancer cells (Grendel), you didn’t kill Grendel’s mother! Those Giant Cells give birth to more cancer cells. This is a key reason why cancer comes back after you beat it the first time.



When we find a way to “take them out,” we halt cancer at Stage Negative One.

Giant Cells are extremely hard to study because they occur in very small numbers. The lab work around these cells is meticulous and time consuming. So even though scientists have known about them since 1910... even though they have resurfaced in the literature every 10 years since then... they’ve never received the attention that they deserve.

In fact, only a few researchers are paying attention. Ken Pienta, Jinsong Liu and Azra Raza – all members of the Cancer & Evolution Working Group.

Left: Azra Raza (Columbia University) visiting Giant Cell pioneer Jinsong Liu at M.D. Anderson in Houston.

Why is it so important to identify and take out these Giant Cells?

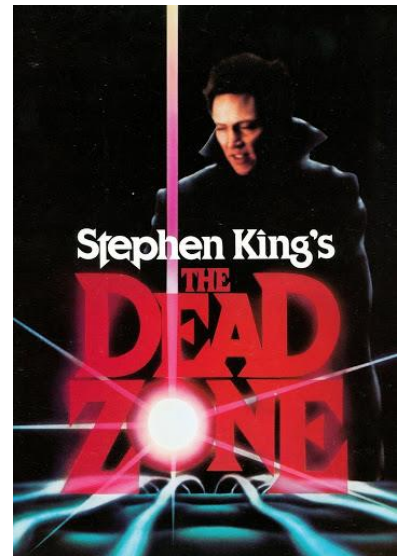
The Adolf Time Machine

In the movie *The Dead Zone*, written by Stephen King, the main character, played by Christopher Walken, can see the future... and change it.

He asks his doctor friend, who had survived the Holocaust...

“If you could go back in time, to Germany, say, before Hitler came to power, knowing what you know now, what would you do? Would you kill him?”

After a brief conversation about Walken’s powers, the doctor says, “I’m a man of medicine. I’m expected to save lives and ease



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suffering and I love people. Therefore, I would have no choice... but to kill the sonofabitch.”

In cancer, we can take out Hilter, Himler, Eichmann, and Goering when they were children...without any of the ethical dilemmas the doctor would have to work through. These Giant Cells are the leaders at the top of the Third Reich of cancer. They foment, direct and lead the Blitzkreigs and Holocausts of cancer. They are the evil geniuses.

But instead of laser focusing on them, we've been spraying and praying and napalming “civilians” and “followers.” And taking out patients in the process.

A dear friend and client was recently diagnosed with cancer. She's been taking chemotherapy for the last two months. She told me, “If any of those doctors actually had to take these medicines they'd be working a lot harder to find something better than they are now.”

My friend and world-renowned biologist, James Shapiro, just published a new evolution book. 702 pages, with probably 4,000 references. He's a “bottom of the swamp” guy if ever there was one. The Giant Cell model added a major new perspective and flavoring to his entire work. The instant he found the model, he understood THEY are what we need to focus on.

In early March, I reached out to Azra Raza for a catch-up call. I said, “We would like you to give Science Research 2.0 an IP agreement which will help us support your work. Can we discuss?”

She said, “Perry, your timing is uncanny. What I've not been able to tell you until today is that I discovered a way to uniquely identify that Giant Cell and paint a red bullseye on its forehead... and ONLY on its forehead, and not any other ‘innocent civilian’ cell.”

In her patients, even in *Stage Four* patients, early indications are, if they take out the Giant Cells, the cancer does not return.

Why? Because they killed Hitler.

What strikes people most forcefully is how absolutely dead serious Azra is about this project. It radiates from her being. She is going to do this if it's the last thing she does.

Compare that to the dull, death-by-PowerPoint presentations seen at conferences. Night and day.

We are on the right track. We can't go back to the old track.

Unfortunately, a lot of cancer doctors, even some who label behaviors as “evolutionary,” still don't *get* the willful, volitional nature of evolution. They don't get what a Giant Cell does or where the real battle is.

Work in this area is 100X better Return On Investment than any other cancer research I can find.



We are looking for six- and seven-figure funding sources to stop cancer at Stage Negative One – *intercept the young man before he turns into Adolph.* We can arrange for you to hear the full story, which I cannot disclose in full detail in public. Email evolution@evo2.org to organize a conversation. This is worthy of your highest attention.

Azra says: “Look Perry, it could be possible that everything we are planning materializes. We take out the Giant Cells as proposed and then... nothing happens. The cancer continues unfazed. It is highly unlikely... but possible.

“Well, in that case, it will not be very different from all the mutations everyone has been targeting and yet spectacularly failing to cure cancer. At least we tried something new.”

Perry’s Poster Session at AACR

The conference invites all registrants to apply to give a talk. My presentation was accepted for a “poster session.” A poster session is like a booth at a trade show with big banner. You can see my banner much more clearly at

www.evo2.org/cancerdynamics

Agency of the Cell:
Convergence between Origin of Life, Evolution, Cognition and Cancer
Perry Marshall, Founder, Evolution 2.0 Prize

Prevailing View:
Chemicals → Code → Cognition

Evidence Says:
Cognition → Code → Chemicals

Prevailing View gets Cause and Effect Backwards
All Living Cells are Cognitive (Shapiro 2020)
Evolution is goal-seeking (Shapiro 2020; Hanks & Hanks 2017)
Random mutations are noise and noise destroys (Beaumont 1998; Marshall 2021)
Natural selection is an outcome, not an explanation (Wagner 2014)

Cognition
Definition: “Total set of mechanisms and processes that underlie information acquisition, storage, processing, and use, at any level of organization” (Beaumont and Levin 2014)
Cognition manifests agency, which is exclusive to biology (Cimini and Walker 2018)
Self/Non-Self Identification in bacteria and cancer cells (Gibson et al. 2015; New and Hagan 2018)
High Speed Evolution: New species in week or months (Shapiro 2020)

\$10 Million Tech Prize
Forbes, Inc., CNN, Financial Times, Vox, Spectrum, Genomics
All Living Cells are Cognitive (Shapiro 2020)
Evolution is goal-seeking (Shapiro 2020; Hanks & Hanks 2017)
All Genetic Algorithms require goals (Hanks and Hanks 2018; Hanks 2019)
All codes whose origin we know come from biology (Cimini 2018; Marshall 2015, 2021)

www.NaturalCode.org

Implications
Choice and Agency: Not derivable from laws of physics (Beaumont 2021; Kaufman and Xu 2021)
Neither physical laws nor random interactions make choices (Kaufman et al. 2017)

Issues in Cancer:
Slash, Poison & Burn is not working (Shapiro 2019)
Cancer & evolution running out of control (Shapiro 2019; Lu 2021)
Genome Chaos: Cancer cells massively re-arrange genomes (Shapiro 2018)
Tremendous power of cancer cells to out-evolve radiation and chemotherapy (Shapiro 2019)
All types of cells are capable of autonomous behavior in certain situations (Levin 2004)

Dilemma:
Chemicals (drugs) cannot in principle solve cancer
Rules / algorithms cannot in principle solve cancer
Cancer is a struggle of information and intent (Levin 2004)
Therefore we must treat cancer as an autonomous purposeful agent with unique identity and capacity to choose.

Productive Questions
What does a cell know about itself? (McQuinn 1994)
Michael Levin: “triggers cancer cells to revert back to normal cells as well (Levin 2021)
Origin & Nature of Information: Biggest question in science that can be precisely defined - intimately related to curing cancer?
What if we can persuade cancer cells to want something different?

EVOLUTION 2.0 PRIZE

Most of my conversations were about cognition... volition at the cellular level. I’d say, “There is a crucial moment when that pancreas cell makes a cognitive decision to start doing its own thing. The question is *why*. *Why* did it make that decision? What would make it *want* to reverse this decision and go back to being a normal cell?”



You throw a raw steak on your kitchen table and tell your dog, “No! Do not eat that steak!” When you leave the room, Rover is gonna decide whether to obey you or not. It is a willful decision by a conscious being.

This is the level at which we must solve the cancer problem.

The consistent reaction was hearty nods and *that makes complete sense. Wow. I never thought about it that way.*

One visitor asked, “What about AI and the singularity?” He was referring to Ray Kurzweil’s theory that computers are going to get faster and smarter and eventually “wake up.” I said, “That’s not going to happen. There will never be a ‘singularity.’ There’s not been any indication that computers ever were, would, or will wake up. A computer is a completely different thing than a cell.”

He replied, “Yeah, but cells are just life.”

“*Just* life??? What do you mean?” I volleyed back. “You can’t make life. Nobody knows how to do that. The closest anyone’s got was Craig Venter who made “synthetic” cells using 99.9% borrowed parts. A cell is not a drone or a machine. It’s a living, decision-making being... as are you. You are not a wind-up toy.”

He thought about it and admitted, “It is comforting to think about it that way. It’s a more hopeful way of looking at the world. I don’t want to believe that I’m a wind up toy.”

“You’re not. You will never be. The singularity is based on false assumptions.”

There are wrong assumptions everywhere. For example: “If you rub enough chemicals together, you’re gonna get life.”

That’s false. It’s never gonna happen. It takes something far greater than that.

At the conference, Frank Laukien (co-founder and co-chair of our Cancer & Evolution Group) introduced me to Adam Goldstein. Adam is a volunteer visiting scientist at Michael Levin’s lab. He’s preparing to move to Oxford and do some work under Denis Noble. He is an entrepreneur who started a company 10 years ago and sold it. He became very interested in psychology, which brought him into biology, which carried him to Michael Levin’s doorstep.

Entrepreneur... psychology... Denis... Michael? Too many similarities and coincidences. If it were a movie you might not believe it!

Adam and I had a long convo over lunch, and then he came and he listened to my poster session. He says, “You know, you’re asking the question, ‘How do you get a cancer cell to *want* to do something different?’ I wrote a proposal to do a project with Michael asking the very same question.”

There is convergence here. We are in the vanguard.



These are the big questions of the future fight against cancer...

How do you get a cancer cell out of fight or flight?

How do you get a cancer cell to *want* to do something different?

How do you redirect or take out Hitler at age 3 so that World War II never happens?

Or, put more gently, ***“How do you raise Hitler in a different way so that he never reaches the conclusions he came to?”***

How do you get Adolf from ever forming in the first place?

What are the stressors that make a Giant Cell appear? People with excess childhood trauma are three to four times more likely to get cancer and heart disease than the average person.

Suppose we would detect cancer at Stage Negative One... could we develop a test you can buy for \$25 at Walgreens? Let's just say for the sake of discussion that we could.

Could your insurance companies demand you take your test? (If you take it and still get cancer, they pay for your treatment. If you don't, they don't.)

Or... “You have missed your annual cancer test, so we are doubling your insurance premium until you get yourself to Walgreens and take that test.”

Can we nudge people into compliance?

Medically I know we are on the right track. I don't believe these problems will take 15 or 20 years to solve. I think they take one to five years to solve. We are in spitting distance of putting a major dent in cancer.

Then, once the *technical* problem is solved, what's next institutionally speaking? With Big Pharma? Big Government? That's a whole 'nother conversation.

I heard a presentation the other day where a very high-ranking government official said, “Big Pharma executives tell me nobody makes any money in early detection.”

One step at a time.

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 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 and let us know what your skills are and how you might like to help.

Donate Here: www.evo2.org/cancer

These are the 5 “80/20s” of Science Research 2.0. Our criteria for what we fund. Each eliminates 90% of suitors and multiplies our odds of success by 10X. This is why we believe we can achieve more in ten years than the government has achieved in 50, with far less money. **If you want to help win the war on cancer, this is where your money should go. Not to the IRS.**

How we invest your money	How the government wastes your money
No Drugs. We don't fund Big Pharma drugs; a drug will never cure cancer because drugs are <i>dead</i> and cancer is <i>alive</i> . Drugs play a role, but will never be THE key that unlocks cancer.	Addicted to Drugs. The government and Big Pharma are in bed and locked into a drug development → regulation → drug funding cycle that is self-reinforcing and locks out unfamiliar ideas.
The Enemy is SMART. Evolution 2.0 is the smart cell. Life is purposeful, cancer is intentional, and maybe even self-aware. The whole is greater than the sum of its parts, so the key is discovering what defines the whole.	The Enemy is Dumb. Evolution 1.0: Nature is blind and purposeless, “monkeys with typewriters” with natural selection and blind pitiless indifference. It's “only” chemicals. Everything reduces to its component parts.
Does it WORK? Gold standard is <u>engineering</u> : Can you build it and does it work? The legendary scientist Richard Feynman said, “That which I cannot build, I do not understand.” Action, not analysis.	Do other scientists approve? Gold standard is <u>peer review</u> : Do other scientists (who are competing for the same dollars) like it and approve of it? Studies show that 70% of science research is not even reproducible.

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<p>Challenges the SYSTEM. ALL professions are run by “good ol’ boys clubs” and become blind to their own assumptions. We believe in threatening the status quo, questioning assumptions and killing sacred cows.</p>	<p>Preserves the status quo. I have consulted in 300 industries. No profession is more hobbled by peer pressure, cliques and political correctness than science. Scientists spend 40% of their time lobbying for government grants. It’s impossible to get anything done.</p>
<p>Skin In The Game. We fund researchers, scientists and doctors who have risked careers, reputations and personal resources to sustain projects they believe in.</p>	<p>The Buck Stops Nowhere. Bureaucrats are shielded from all personal risk. The purpose of bureaucracy is not to accomplish anything, but to obstruct accomplishment by anyone else.</p>

Carpe diem – Seize the day.

Perry Marshall

