



ASSUREDSCIENCE

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2: The Move, toward developing a new system

Knowledge from success and failure within the traditional system provides the framework for developing the new system for scientific research.

I have conducted research in the traditional system for more than 30 years, most of the time at the lab bench. I enjoy translating my ideas into experiments with my own mind and body. If there is a technique I need to learn or develop for my experiments, I become obsessed with trying to make it work flawlessly. And very few things in life can keep me from the first opportunity to examine raw results of an experiment. In the beginning, my mind used to focus on data that were expected or made sense. They made me feel good and boosted my ego. Over time, and with more intimate knowledge of my research subject, my mind started to fix on data that did not make sense or were unexpected because I knew that they would lead to exciting results later and a better understanding of the subject.

The sense of contentedness or joy that pervades my whole body when I realize that I am onto something new has kept me going despite rejections after rejections. Whether the results would garner funds or not, or get published in a high-profile journal or not, became secondary to the adventure of sorting them through my looking glass filled with data (published, unpublished, explained, and unexplained). Just imagine that a series of data sets (many unpublished) stretching back 16 years gave me a clue that after eight more years of experiments and thinking (i.e., more than 24 years later) suggest that I might be onto the ultimate function of my subject (which is a gene). Ironically, if I had a grant to pursue that clue, this organization would never have happened. Thus, working toward developing a new system for research is a very bittersweet move for me.

'Bittersweet' not only reflects my mindset but also how I feel about the traditional system for research. In it, I have enjoyed unexpected successes and suffered painful failures. In retrospect, these mixed experiences have been extremely valuable for developing a new system for research and the founding of this organization. They helped me come up with ways and

means to preserve, even accentuate, the positives of the traditional system while mitigating or eliminating its problems.

My computer, connected to the Internet, became my primary 'bench.' I felt like I was back in the days when I started my research career, when every day I learned something new and exciting. All the subjects that I used to skip in the past became my focus. Patent and IP laws, business structure and principles, IRS and non-profits, computer search engines, federal funding of research and the universities, website design, even Facebook and Twitter (which I have never used), became my research subjects. Although all were new to me and required a lot of work, none was as imposing as the subject I knew most intimately, the traditional research system in which I had spent most of my life. It was as if the subject was my mother. It did not matter whether it was a compliment or a complaint; I had to examine my motives very closely on every issue. Definitely others would, and did, often mercilessly or worse, dismissively.

I set for myself three goals to achieve: have scientists control their own projects and careers, produce good data, and do both of these things efficiently. I first started thinking about how best to achieve these goals within the traditional system but soon realized that 'outside of the box' solutions were required. Therefore I moved to thinking about designing a new system altogether, one that can function as a satellite system to the traditional system. I kept in mind that the best solutions use natural instincts to advantage and naturally adapt to changing conditions. The result is a patentable concept and a organization with the motto "*More scientists and better science with less money.*" More and better for less? Yes, it is possible.

What I did was put the traditional system 'on my bench,' not entirely figuratively. You see when I put something on my bench I own every part of it, 'the good, the bad, and the ugly.' Owning the good (the expected or interesting result) is merely a lure, but owning the bad (the unexpected or unexplainable result) and the ugly (the contrary or spurious results) help me actually accomplish something at the bench. Therefore, I primarily focused on the problems with the traditional system for research so that I could explore finding suitable solutions. Keeping in mind the adage, "If it ain't broke, don't fix it," I have left the good alone. In fact, I believe that these aspects have become even better in the new system of research wherein the conventional problems are mitigated or eliminated.

I am now seeking people who believe in, and are willing to work towards, the same goals: democratizing the scientific research enterprise as much as

possible, empowering small labs and bench scientists, and facilitating efficient generation of highly validated and integrated data, with the additional goal of restoring romance and adventure to scientific research. I particularly welcome people with different expertise, perspective, and experience, as I believe that when diverse solutions to the same problems are considered, the system becomes not only robust but also capable of adapting to changing conditions in the future.

In essays 3 to 7 I will present my analyses of the problems afflicting the traditional system of research that provided the basic framework for developing the new system. I request you to read them in sequence and as you would the background of a research project because that's exactly what it was for me. After reading the essays, I think you will be in a good position to consider joining the effort and seeking access to more details about the organization.

As you could imagine, forming a good team of co-founders, advisors and supporters is the most critical task at this juncture. In this regard, I believe that the motivations, aspirations, and experiences of all the Founders will have to be incorporated and integrated for the concept to develop into a fully operational research system. Therefore, if you are a potential participant reading the essays please also think about how you might be able to expand or add to the Founding page or any other page of the website.

Cedric