How Might We Infuse Connection, Ethics and Courage into Western Science?

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Science gives us a deeper understanding of our world, the human body, living systems, and the cosmos. Scientific work can also be utilized for exploitation of natural resources. Science and technology can also lead to creation of wide disparities in access to resources, access to healthcare. Simply put, science can become a tool for misuse, for monetary gain and for power.

We argue that utilization of scientific discoveries can lead to unintended consequences, causing climactic impacts and wreaking havoc on biodiversity. This has resulted in an existential threat to the security of our place on the planet.

Reimagine Science was founded in 2008 to focus on how we ‘do’ science, to create a scientific enterprise that is more inclusive of society, more generous to the younger generations of scientists, and more responsive to negative impacts on the natural world. We are proposing a shift in the framework of science, recognizing the large gap between current approaches to science and a holistic approach. Our model of science would continue to enable research, innovation and discovery, but as a holistic model. Science would also honor social responsibility and environmental and cultural sustainability, community and the living environment.

We began a learning journey in 2020 to develop the kind of training needed for the scientist of the future. This journey led us to a new partnership. We were introduced to a framework that is based on an Indigenous, holistic four-directions model for health and healing, utilized by many American Indian/First Nations in North America.

At its base, this framework identifies the four areas that are the basis of a healthy system: spiritual, emotional, physical and mental. These are represented in each person as the spirit, heart, body and mind, respectively. Indigenous teachings say that all four aspects must be
addressed in order for an individual to be healthy, otherwise there will be an imbalance in the individual's health journey.

When this model is expanded to the societal level, the elements of societal health for spiritual, emotional, physical and mental transform. The spiritual aspect becomes culture and environment and deals with the intangibles that support our lives. The emotional aspect becomes social interactions and biodiversity which concerns itself with interrelationships and co-dependence. The physical aspect represents our economics and technology, the tools needed to support our physical needs. And finally, the mental aspect becomes our politics and knowledge systems, intellectual pursuits to research, policies, and knowledge acquisition. The last two - physical and mental - define the domains where scientific work so centrally resides.
Yet our functioning society needs all of these elements to be working together. If all are given proper attention and support, we create a holistic and healthy world. In our modern world we favor the mental and physical and often minimize the spiritual and emotional.

We believe the major source of this imbalance comes from fear. We recognize that fear comes in many forms, and is often used as an unhealthy motivator.

When this happens, we have negative consequences within our society, where we practice disrespect, devalue relationships, exhibit greed, and experience dishonest politics. We propose that what can bring us back to balance is to exercise love. Love in the sense of practicing respect, acceptance and understanding. We then become more open, more generous, and more honest in how we do our work.

In our existing science paradigm where the mental and physical are overvalued, scientific discovery can become focused on a model that emphasizes profit. When that happens, our institutions become detached from our society and social structures. The very visible result is a lack of trust. The disconnection from culture, spirit and the environment can result in a lack of ethics and vision within our research, and potential large-scale environmental and ecological damage to our natural world.
We are promoting a scientific paradigm that will continue to advance pursuit of the knowledge and innovation while supporting economic and technological gains. But it will also provide balance through the inclusion of impacted communities, honoring spirit, culture and environment.

The current interest in Indigenous Knowledge within science needs to become a partnership where the whole Indigenous Knowledge System is embraced. A system that equally resides in all four directions of a healthy system. One that includes heart and spirit as equal partners of intellect and invention.