SCIENCE TALK

Kambiz Alavian, Senior Lecturer, Department of Brain Science Imperial College London



What is your vision for the future of science? Its future depends on reimagining the processes first, how science is done, and reenvisioning the end goals or the purposes of 'doing' science.

How might you encourage people to change or stretch their thinking?

It can be helpful to have a focus on and to incorporate learning into research. At the same time, there are other areas where the process can be improved – mechanically there is not a very efficient process to begin with. The process of doing 'normal' science is well established, but not its transformational aspects. Creating environments that encourage transformational discoveries is key.

What attracted you to the board? This organization has created a space for discussing issues and new ideas in this space, and that's a rare thing. It's a space for discussing inefficiencies, a space to reimagine outcomes and processes.

New to our Board

The board welcomes two new members: Helene Cahen, who is featured in the piece below about TEDxLosAltosHillsWomen, and Kambiz Alavian (featured on left). Stay tuned for a closer look at Helene's work in a forthcoming newsletter.

World Science Forum – Cape Town, South Africa

To continue what we started in our Learning Journey, begun March 2020, a team of us were accepted to host a working session at the World Science Forum in December '22.

Kennan Kellaris Salinero, Jeanine Olund, Michael D. Nephew, and Ken Paul and Ken Hallenbeck traveled to Cape Town, South Africa to present 'Renewed Hope in a Shared Future for the Planet – Mapping Western Science With Indigenous Knowledge Systems.'

Jeanne, Michael and Kennan first shared their personal experiences leading up to, and during, our first Connected Learning Journey (featured in ReImagine Science's <u>Summer 2022 newsletter</u>). Ken Paul then introduced the Four Directions framework, which was used for a mapping exercise over

World Science Forum - Cape Town, South Africa (con'd)

the following interactive hour. More than 50 people from around the world participated: Ministers of Science, environmental stewards, freelancers, start-up



incubator leads, and educators from many countries. We all could feel the buzz in the room as Ken Paul guided the group through mapping their own journeys, vision, and hopes for science using the Four Directions Mapping model.

Our panel: from left to right Ken Paul, Michael Nephew, Jeanine Olund and Kennan Salinero.

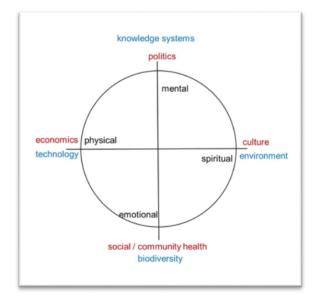
Our write-up, with lead author Ken Paul, describes the indigenous framework he brought to this exercise, and implications for current challenges we face,

both within science and for the globe:

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

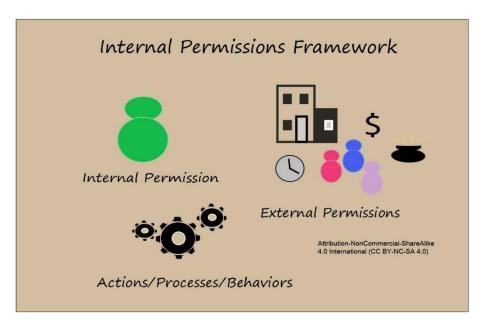
This piece was written on request of the science and communications officer for the Department of Science and Innovation, Republic of South Africa and published in local newspapers.

You can see the work done in our exercises here.



Using the Four Directions framework to map specific aspects of science and society.

Science of Team Science – looking through the lens of failure



As part of a 'Special Interest Group' (SIG) in the Science of Team Science community, ReImagine Science Executive Director Kennan Salinero collaborated with three others to explore the question "which team competencies are missing in cases"

of failure – even catastrophic failure – of a scientific team?" Our group was composed of Caroline Frietag of Northwestern University, Donald Takehara of University of Illinois at Urbana-Champaign and Julie Thomspon Klein, International Research Affiliate in the Transdisciplinarity Lab in the Department of Environmental Systems Science at ETH Zurich and Wayne State University.

Julie passed away last month (January 2023) leaving a huge hole in the scientific and interdisciplinary community. See our note of deep gratitude at the end of this newsletter.

Our small team interrogated the question of competencies for team science through the lens of failure over several months, bringing in Julie's expertise across the domain of interdisciplinary team literature, books, and case studies of failures.

This led to the creation of a new framework, which we named the 'Internal Permissions Framework.' The name comes from Brené Brown's concept of 'internal permission' – the permission one gives to themselves to take action, especially if the action is confronting.

The model adds two further aspects to internal permission: External permissions (which includes resources, funding, and time allocation), and process (everything about how we 'do' things, such as meetings, lab procedures, and how we communicate). We believe these three distinct aspects of team environments create the milieu for how a team performs, or doesn't.

Our presentation of this framework, given at the 2022 Science of Team Science Conference, can be viewed here. A map of personal competencies for teamwork generated during our inquiries is captured here.

If you are interested in using this framework to better understand a team you manage or are part of – either a successful team or one that is experiencing challenges – please reach out to us (contact@reimaginescience.org).

Women on Change, Rights & the Future

ReImagine Science's secretary of the board Helene Cahen was a lead organizer for **TEDxLosAltosHillsWomen** in November '22. This full day of exploration, workshops and sharing of new TEDWomen talks on the big screen took place on the campus of Foothills College, Los Altos Hills, CA. The topic "Leading Women on Change, Work, Rights, the Future and JOY!" was further explored with discussions, musical performances, and interactive discovery sessions. Discovery sessions utilized various combinations of music, artmaking, movement, dance and guided discovery.



The organizing team's belief that 'learning in a community is one of life's great pleasures'

fits well with ReImagine Science's models for change, exploration and growth.

ReImagine Science is planning to be a host for <u>TEDCountdown</u> in December 2023.

Upcoming Event



Grieving and Thriving: Science and the Arts – Together at the Edges

Saturday, March 25^{th} 2023 10 a.m. to 3 p.m. (EST) / 2 to 7 p.m. (London)

As the moment of loss might be an edge between past and present, what is the edge in the context of grief? For some of us, as we look at the future and what we truly want, or what might come to pass, it can really scare us.

How do we deal with unrealized visions of the future? With the grief of a future that will never happen? How might we lean into what feels like mistakes or failures? In this uncharted territory, are we beginning to see things we didn't see before?

If these questions resonate with you and you are burning to talk about it with others, come and explore these questions with us, in the context of both science and the arts.

In our 'Grieving and Thriving' events hosted in 2022, we have explored spaces of grieving as well as the thriving that we believe becomes available when we

allow ourselves to fully grieve. We seek ways our full humanness can show up - in systems, in institutions, in communities and for ourselves, individually.

Now, in 2023, we are still asking the same questions, but shifting to new ways to look at them. We invite you to join us. In French and English.

Registration: <u>English version</u> <u>French version</u>

Let's Talk!

Thank you for reading our Winter 2023 Newsletter! Please reach out to us if you'd like more information on any of our programs and initiatives. Email: kennan@reimaginescience.org



TEDxLosAltosHillsWomen organizing committee, happy after a job well done Left to right: Maryam Mohit, Veronique Lafargue, Helene Cahen, Kerah Cottrell, and Christine Campbell



Julie Thompson Klein, as her Avatar

With great sadness we note the passing of Julie Thompson Klein, Professor of Humanities Emerita in the English Department at Wayne State University and International Research Affiliate in the Transdisciplinarity Lab in the Department of Environmental Systems Science at ETH Zurich.

Gaetano R. Lotrecchiano and Andi Hess, of the Science of Team Science community, wrote a fascinating historical piece about how Julie came to be a leader in interdisciplinary studies.

Working with Julie Thompson Klein – her avatar shared here is familiar to so many in the team science community – was a privilege that she shared widely.

During the many outpourings of grief and remembrance of Julie the remarkable number of people – both young and old – who claimed Julie as a true champion of their work, their abilities, and their potential became clear.

She made people believe in themselves. Her cheerleading gave so many around the globe a great belief in what they could accomplish. If Julie believed in you, with all the expertise and deep critique that came so naturally to her, it carried a lot of weight, giving impact to her vision for flourishing teams that did interesting work in ways that made a difference.