SCIENCE TALK

FROM THE DIRECTOR

'It's really all about relationships.'

Relmagine Science continues its participation with the international Advancing and Evaluating Societal Impact of Science (AESIS), as I co-chaired a session at the 2023 conference in Halifax, Canada. Partnering with Ursula Gobel, VP of Stakeholder Engagement & Advancement of Society with Canada's Social Sciences and Humanities Research Council (SSHRC), we hosted an interactive discussion on

long-term partnerships between science and society.

AESIS focuses on policies and strategies to support societal impact of science, including how to generate more robust knowledge exchange and collaborations within science and between science and society. The end goal is science's positive impact on the wellbeing of society, including economic and cultural health.

Participants in our session had extensive experience with interdisciplinary large-scale projects in healthcare and university settings.

In the pre-planning for the roundtable discussion, Dr. Gobel shared her belief that "it is really all about relationships."



TABLE OF CONTENTS

AESIS Round Table Session 2023	1-2
New Read: Fire Up Innovation	3
Exploring Interdisciplinary Interfaces	4
Science and Youth	5-8
Board Spotlight	8
Relmagine in the News	9



BETTER WAYS TO WORK

When you feel included and engaged, do you do a better job? Do you think teams in which people work well together produce much better results? Have you noticed the best ideas often come from unexpected sources? Do you want to work at the top of your intelligence and give the same opportunity to others?

Liberating Structures are easy-to-learn microstructures that enhance relational coordination and trust. They quickly foster lively participation in groups of any size, making it possible to truly include and unleash everyone. Have you tried Liberating Structures?

Share your experiences with us!



Continued from page 1

Tapping into the extensive hands-on knowledge from the experts in the room, we created a map of what we know works and what we know can 'tank' long term partnerships. One of the tools we used to reveal knowledge that can be difficult to unearth was the TRIZ exercise from Liberating Structures.

TRIZ reveals hidden wisdom, allowing the group to share traps and pitfalls that can lead to failures within a team. To do this we lead the group through personal reflection, one-to-one discourse, followed by small group discussion to generate lists of things that can be relied upon to create the worst possible outcomes in a partnership. These structural and behavioral ingredients became a working list that allowed the group to generate 'first steps' that would help stop these negative patterns.

The room of interdisciplinary specialists distinguished these guiding principles: curiosity, humility, deep listening, reciprocity, alignment of values, ethics, integrity, and being intentional about a clear vision and shared intentions. Anything that supports and maintains trust is key. Each of these tenets or practices is a useful step in creating lasting partnerships in the application of scientific knowledge in service to, and in partnership with, society.

BOOK CORNER

"Fire Up Innovation – Sparking and Sustaining Innovation Teams" coming this Fall

Board member Helene Cahen is launching her new book "Fire Up Innovation - Sparking and Sustaining Innovation Teams" this Fall. Helene leans into her 20+ years of guiding innovation leaders and groups to build and maintain creative teams optimized for longterm success. The book leads the reader through 'learning by doing' to develop individuals' and teams' innovation techniques, language, and tools through self-discovery for themselves and the teams they are part of.

Author Cahen doesn't throw a salad bowl of tools and techniques at the reader. Rather, she guides the process of discovery to help find the right tool for a specific team or a particular situation. Context is key. The book is filled with examples and exercises for the reader to follow to generate new approaches in both personal and professional challenges.

Key to the work is learning that there are different styles of thinking, and these diverse styles create a much greater depth of insight and approaches when dealing with complex issues. Creative innovation is central; Helene defines creativity as novelty that is 'useful.' So what does 'useful' mean? In Helene's lexicon, something is 'useful' when it provides meaningful solutions. But, useful can also be simply the creation of inspiration and awe, the communication of feelings, or different ways to connect with emotions. Innovation, then, is the ability to scale this creativity in work, in projects, in community.

Helene's work dovetails beautifully with the mission and work of ReImagine Science. We consider her participation on the board to be a true blessing, and consonant with the larger vision we carry through-out our work and projects.

Don't miss this read

You can find out more about when the book will become available, and <u>download a free chapter</u>,



Exploring Interdisciplinary Interfaces

Where Arts and Science Meet

Daniel Kohn, an artist and co-lead for the Ocean Memory Project, invited Executive Director Kennan Salinero to the Ocean Memory Project collective after his participation in our event 'Grieving & Thriving; Science and the Arts Together at the Edges' on March 25th, 2023.

The Ocean Memory Project community is visioning an autonomous future for itself, now that NAFKI (<u>National Academies Keck Futures Initiative</u>) has completed as a program. For this future-visioning, Keith McCandless, co-founder of Liberating Structures, has joined the team to support 'Shaping the Future of Ocean Memory Project' on the final day of a four-day virtual 'Cresting' conference. The conference will begin with reflecting through three years of thematic workshops around the question of 'does the ocean have memory?', focusing on Genomics and Cognition, Sense and Sensing, and Pollution, and Forgetting and Loss.

After honoring the past relationships, projects, and convenings, the group will look forward, creating a shared vision for moving into its future configuration. Courageous conversations, unpredictabilities, big opportunities and daunting challenges, and what is important to start doing, while also seeing what is important to stop doing are all part of the group work that will be undertaken on Nov 18th, 2023 in the online Cresting Conference. New members are welcomed to this endeavor.



Reflecting on Grief

The other exploration across disciplines that has been a continuing focus of ReImagine Science's energy and time is the Grieving & Thriving series.

Reflections of how art and science look differently upon existential questions of life and death, completion and renewal, purpose and meaning were explored by a theater arts and improvisation technosopher, an artist, and a scientist in the panel presentation leading up to an open space online event.

The thought-provoking inquiry can be viewed <u>here</u>.

For more info, email kohnworkshop@gmail.com.

SCIENCE & YOUTH

National Youth Science Academy

This summer was the 60th anniversary of the National Youth Science Camp, for high school juniors and seniors that excel in math and science. The National Youth Science Camp, now hosted by the National Youth Science Foundation, was launched in 1963 as West Virginia celebrated it's Centennial, as a state separate and distinct from Virginia.

According to Jill Cochran, daughter of one of the original founders of the National Youth Science Camp, the state organizers originally hoped to host the National boy scout jamboree. That didn't come to pass. So they pivoted to an event to celebrate science, for youth from around the country, highlighting the nearby National Astronomy Observatory in Greenbank, WV.

However, when it was suggested that the students meet for day-long lectures on the campus of WVU, the lead organizers – Chuck Cochran (Jill's father), a mathematics professor, and Joseph McKee Hutchison from the Recreation & Parks department weren't having it. Why coop the participants up inside when there was so much nature and beauty surrounding them in the Monongahela National Forest just outside their doors? Chuck and Joseph combined their own love of hiking, caving, and rock climbing and the outdoors with love of learning, adventure and the satiation of curiosity, and the National Youth Science Camp sprang into existence.



Celebrity Interview around the fire pit, Camp Pocahontas, West Virginia

After the first year, the 'delegates' who were selected (two from each state in the USA) lobbied for the camps' continuance. Many returned the following year to help produce the experience for the next cohort.

Typically two delegates are selected by each state, along with international delegates selected in partnership with the U.S. State Department from countries such as Mexico, Brazil, Argentina, Costa Rica, Trinidad and Tobago.

For the past two years, the camp met on a virtual platform due to Covid. This year was in person. Executive Director Kennan Salinero has had the distinct honor of leading a special topic the last three years, as one of the many offerings for the students to engage with.

SCIENCE & YOUTH

Continued from page 5

For the past two years Kennan's directed studies have explored complexity theory, self-organizing

systems, cellular automata, and ethics. This year we embarked on deeper dives into the question 'Is Everyone a Scientist?' to explore the connections, and dis-connections, between science and society.

Eleven delegates, ages 16 to 18, were lead through three exercise over three days, each with a different lens on this question.

The first day we asked 'what defines you as a scientist? Using the Liberating Structure 'Celebrity Interview' the group walked through the different phases of Dr. Salinero's career positions. At which point was she considered a scientist? At which point was she considered 'outside' of science? They then generated a list of structural practices in current society that create disconnections from science.

Imagine the surprise when the delegates - elite STEM students from across the nation - suggested that putting students into elite STEM tracks leads to the isolation of science, and scientists, from society.

They wished for more fluid movement between the arts, humanities, and science for all students.

They were deeply troubled by the funneling of high performing STEM students into STEM course work that allows little diversity and exploration of other domains.

On the second day, the group explored the transmission of scientific knowledge through the networks of relationships in society. Each delegate was first asked to imagine a real person in their life that they both admired and knew well. Most chose a parent or close relative.

They arranged themselves around the fire pit, with those most closely identified as 'scientists' closest, and those who had no scientific exposure furthest away.

The group then looked at how scientific information might transfer from those closest in to those furthest away from 'science.' Each played the part of the person they admired. They then imagined how that information might flow from one individual to the next. Would they be believed? Would the knowledge receiver verify through other sources, and if so, which ones?

SCIENCE & YOUTH



National Youth Science Academy Delegates who participated in the Discovery Session lead by Kennan Salinero - Left to Right: Teresa, Priyanka, Sovkya, Lily, Mannix, Sophie, Diego, Matthew, Aum, Julius and Vega

Continued from page 6

Several interesting breakpoints in trust, knowledge transfer, and resources were revealed during the exercise – the mothers who would do extensive online research, rather than trust carte blanche, the cab driver who would turn to his daughter, whom he'd put through medical school, the lawyer who would make sure the information was shared with the indigenous communities she served.

The third day was 'drawing together'. We used the Liberating Structures symbols for 'change', 'goal', 'relationship', 'support' and 'wholeness'. adding 'nature' and 'science.'

Each student silently stood by as their peers interpreted their future-visioning of their best life going forward, through the symbols, imagining their trajectory. Uncanny insights of nuance and aspirations were discovered through this visual medium, even as the student who drew their path stood by without a single word of explanation.

All in all, the week in the woods with the whole community of student delegates and the other presenters was a true blessing.













REIMAGINE SCIENCE NEWSLETTER

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BOARD SPOTLIGHT

Welcome to our newest member!

Jeanne Olund, Ph.D BOARD MEMBER

ReImagine Science is thrilled to welcome a new member to our board – Jeanne Olund, Ph.D. Jeanne has been a champion of our work for many years, participating in nearly all of our programs. Her voice has helped shape our work ever since our formative years, as a featured speaker at our Science UnSummit in Washington, D.C. in 2010.

Jeanne has participated in all of our Science UnSummits, our u.lab retreat, our learning journey (launched in 2020), and was a copanelist at the World Science Forum in Capetown South Africa. Jeanne brings her expertise in creating and leading high-performing teams in the avionics industry.

Jeanne also holds expertise in career pathways for women in STEM, having written her PhD thesis on Women of Science, Technology, Engineering, and Mathematics: A Qualitative Exploration into Factors of Success.



JOIN US!

Interested in volunteering to help our organization? We look for partners in academia, the arts, education, and science who wish to explore new approaches to 'doing' together. Email kennan@reimaginescience.org.

REIMAGINE SCIENCE IN THE NEWS

Kennan Kellaris Salinero inducted into Marquis 'Who's Who in America'



Executive Director Kennan Kellaris Salinero has been included in Marquis Who's Who biographical volumes. Individuals profiled are selected on the basis of current reference value.

Factors such as position, noteworthy accomplishments, visibility, and prominence in a field are all taken into account during the selection process. <u>Read more</u>.

Taking a break from the hashtags

We are considering new venues for exchanging timely information about where we are and what we're up to – as well as what others are doing. If you've found new platforms that are working for you, let us know.

