

SCIENCE TALK

Spring News

Grief and Hope

– by Kennan Salinero

[Nicholas Maxwell's](#) poignant letter, explaining the essential need for science, and the ivory tower, to address the urgent needs of the world was shared in our [Fall 2024 Newsletter](#).

We share with great sadness Nicholas's passing earlier this year.

I was able to meet with Nicholas and his wife Chris Van Meerten in London in September. It was a very special visit. We spent several days together, with Nick's vivid and delightful discourses on the many memories, happenings, events and philosophies that informed his decades-long, prodigious output in books, articles, and theories regarding the desperate need for a wiser, collaborative, and interested scientific enterprise. One that works with society as a whole, determining what is of importance in its focus and efforts jointly, not through the misled idea that science is strictly about 'discovering truth.' Because, as he cogently pointed out, there is a pre-cognitive bias about where we focus our questions and interests within the scientific domain.

It was his great hope that humankind will wake up to these urgent needs, and the transformation of our scientific enterprises will be of utmost focus and concern. See [collections of remembrances and stories](#) of this extraordinary person and philosopher of science.

Grief

'What happens when we have leadership that is breaking an already broken system?'



Nicholas Maxwell and wife Chris

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Grief and Hope

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Many of our cornerstone institutions are in crisis mode – universities, the National Institutes of Health, Department of Justice, Internal Revenue Service, USAID, the National Park Service, to name a few. This moment in time must be acknowledged.

ReImagine Science notes the many career professionals in the institutions listed who have been released from their jobs, their work, and the careers that they sacrificed for, with their passions and commitments at the forefront.

For many, questions of ‘am I currently safe?’, ‘what’s happening?’ and ‘what do I need to do in this moment?’ can be at the forefront of the trauma response.

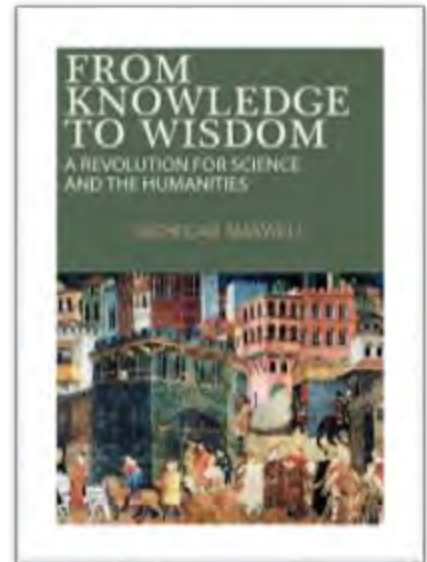
We knew that change was coming. ReImagine Science’s formative years were ones in which Delta Smelt populations had crashed. *None* have been found in the last six years – they are now on the brink of being declared extinct. Prior to that, Wild Atlantic Salmon and Cod populations dropped by over half in a similarly short time. We’ve always believed that these species collapses will rattle through the web of life, placing pressures on our human systems.

In 2012 Daniel Mezick and his partners hosted a culture conference in Philadelphia and Boston, where one of the speakers specifically called out the large amount of energy that is potentially released when a system is broken open. And the potential to harness that energy. It felt timely even then, but is exploding into relevance, now, here.

Hope

It is also a time for hope. Linda Staheli, whose past litany of high-level positions in scientific organizations includes being director for the Division of International Relations at the Fogarty International Center, National Institutes of Health, a senior policy advisor at the White House Office of Science and Technology Policy and a Foreign Affairs Officer with the Department of State. Linda has collaborated with ReImagine Science over many years, benefiting our work greatly. She has co-hosted several salons on topics of deep concern and interest to scientists with us, including [Ethics and Trust in Science](#), [Science Structural elements and Future possibilities](#), and Science and the Commons.

ReImagine Science is built to turn full attention to these changes, to have the agility to be responsive, in service to rebalancing wholeness and wellness as, and with, scientists.



“Humanity is in deep trouble. We urgently need to learn how to make progress towards a wiser, more civilized world.”

– Nicholas Maxwell,
[Essays from ‘From Knowledge to Wisdom’](#)

Teens' Dreams

Hope for the future can be supported by engaging with those who have the greatest vested interest in that future that has yet to be: the younger generations. Linda Staheli, founder of Teens Dream, sees this clearly.

Her energies are now primarily focused on the youth-mentoring [Teens Dream program](#), run by teens from around the world that are working toward positive change for the future of the planet. These projects are grouped through the lens of the UN Sustainable Development Goals.

Teens Dream has produced a docudrama about their work, as teens, on the UN Sustainable Development Goals, and how to get involved. The docudrama premiered at the Ocean Institute in Dana Point – resulting in a new OCEAN HUB – based on SDG#14 Life Below Water! It is available for screenings by any organization wishing to reach out to the teen population in their area. For more information, email Staheli at lstaheli@globalcolab.net.

The hope is to let local teens learn about, and join, this mentored program to nurture their aspirations for their future, helping shape a world abundant with opportunity, wildlife, nature and beauty.



RelImagine Science using SPT at the [Estes Park retreat in 2016](#).

Social Presencing Theater (SPT)

RelImagine Science continues to explore the frontiers of 'doing things differently' by learning from other sectors. One such domain is to learn through what is called 'embodied cognition' - using a felt sense to obtain input about one's surroundings and the atmosphere 'in the room' as held by the people in it. This approach, in our estimation, runs counter to the traditional ways in which scientists seek to understand the universe.*

Our work in this domain has been hugely informed by our involvement in u.lab, with The Presencing Institute, and in particular Arawana Hayashi's Social Presencing Theater. Social Presencing Theater, or SPT, has been used across the globe in government, NGO and business settings to help a system 'see itself' and identify non-obvious routes to desired outcomes that are particularly difficult to achieve in complex and entrenched systems.

The article on page 4 is by Loise Petre, a fellow student in last year's year-long SPT Practitioner Development Program along with our Executive Director, Kennan Salinero.

*However, for social and systems change constructs, embodied cognition exists and sometimes thrives in near-adjacent domains, including our favorite go-to for approaches that science may be ready for: the engineering and Information Technology sector. The book 'Software for your Head' (though it invokes the floating head on a stick that scientists often identify with) outlines techniques that the McArthies have used in IT to create and support teamwork with openness, trust, transparency and effective teams. Classic approaches in education and social betterment would include Paolo Freire's work on 'Theatre of the Oppressed'.

Embodied Leadership: A Doorway to Systems Change

By Louise Pitre

Last fall, I was invited to facilitate an executive-director recruitment process for a non-profit feminist organization in rural southwestern Ontario.

In a traditional executive-director recruitment process, as consultants, we often start with understanding the role we will be recruiting for, the skills that are important, how decisions will be made at the board level, and what the selection process will look like. In this instance, my starting point was to facilitate a board retreat at a camp along the Huron Lake shoreline.

The purpose was to hold space for discernment, for the Board of Directors to make sense of this leadership transition for themselves and the organization and to nurture with care and intention the journey forward.

Given we were outdoors for the day, I took advantage of our surroundings and invited the Board members into what is called a 20-minute dance, a foundational [Social Presencing Theater](#) practice in which we pay attention to the feeling of the body, without thinking about it or judging it. Social Presencing Theatre was created by [Arawana Hayashi](#) – it's an awareness-based change methodology based on social arts.

Fast forward to a month later, where at their next board meeting, they shared their experience with the board members that were not able to attend the retreat.

The board members shared how at first, they were confused about sitting outside on the grass starting with a mindfulness of the body exercise.



Lake Huron on Sept 21, 2024 – Near Goderich, Ontario

They reflected how given the urgency of the situation and the need to “get on with it”, they initially experienced getting grounded in their bodies as a “waste of time”; however, by the end of the retreat, they realized that “we would not have been able to get here had we not started on the grass”. All Board members present at the retreat reflected how setting the stage for their gathering with a more embodied experience resulted in a more meaningful, deeper, and richer conversation. Being embodied changed the outcome of the day.

They left with a deeper connection to themselves, their governance role and the organization. They were able to plan their next steps from this place of deep presence and authenticity. Like Arawana Hayashi often says – it was the act of a true move.

Accessing embodied wisdom isn't just a nice to have, every now and then. Learning how to access embodied wisdom and act and respond from that conscious and intentional stance is a needed leadership skill for our times.

Bringing Social Presencing Theatre practices to our work opens a door to deeper systems change. Check out the [Presencing Institute website](#) for resources and programs on Social Presencing Theatre. You can also check out [ImaginAction's website](#) for more resources on SPT.

Ocean Memory Project

In September of 2010 Executive Director Kennan Salinero was introduced to the 'National Academies Keck Futures Initiative' experiment by the late Dr. James Duderstadt, of the University of Michigan. Dr. Duderstadt was a deeply respected champion of both science and education. The [National Academies Keck Futures Initiative experiment](#) (NAKFI for short) ran from 2003 to 2018 and produced a wide array of results.

Though ReImagine Science tracked the workings of this grand experiment, it wasn't until a July 2022 [Science of Team Science](#) 'Lunch and Learn' hosted by [Steven Fiore](#) that we were really able to experience the dynamics, vision, and passion held, in particular, by the collection of oceanographers, artists, and humanists that composed the 'Ocean Memory Project' community.

The National Academies of Science book ['Collaborations of Consequence'](#), co-edited by a favorite collaborator of ours, Anne Heberger Marino, shares feedback from the evaluations of this 15 yr, \$40 million program that scientists and non-scientists alike are eager for opportunities to work collaboratively through a NAKFI style experience.

Some History

In 2002 Bruce Alberts, William A Wulf and Harvey Fineberg, Presidents of the National Academy of Sciences, National Academy of Engineering, and Institute of Medicine, respectively, proposed a radical new approach to creating interdisciplinary projects, which they felt would lead to unique and valuable break-throughs. In the book *Collaborations of Consequence*, they noted that in spite of NSF and NIH focusing on interdisciplinary research, parking lots remain the most likely location for scientists, engineers and researchers to encounter each other on university campuses.

The overarching goal was to break down barriers to interdisciplinary research in both the academy and institutions outside of higher ed.



This was accomplished. 'Ocean Memory Project', whose name was inspired by a question artist Daniel Kohn posed during the Deep Blue Sea NAKFI conference in 2016, and lead by Dr. Jody Deming of the University of Washington, has generated a generous collection of social scientists, artists, humanists, oceanographers, artists, and ecologists who have developed a thirst for this new sort of more-than-interdisciplinary work that invites in people from outside the academy.

ReImagine Science has been involved with the Ocean Memory Project since that lunch-and-learn in 2022. Daniel Kohn was a co-lead at our Open Space event ['Science and the Arts - Together at the Edges'](#) in 2023. ReImagine Science introduced the OMP community to Keith McCandless of Liberating Structures, who helped lead a Nov 2023 'Cresting Conference', a virtual gathering to help formulate a shared vision on how to keep going as a self-run entity.

Two major themes emerged from Keith's facilitation at the Cresting Conference. One, a hope that the seed funding program can be continued, to embrace venture science by funding grants for innovative, collaborative, interdisciplinary research, regardless of risk. The inclusion of artists in these cross-disciplinary, cross-domain teams was an innovation that emerged several years into the NAKFI project

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Volunteer Spotlight

Where are they now?

Gabe Lee and Poly Popova

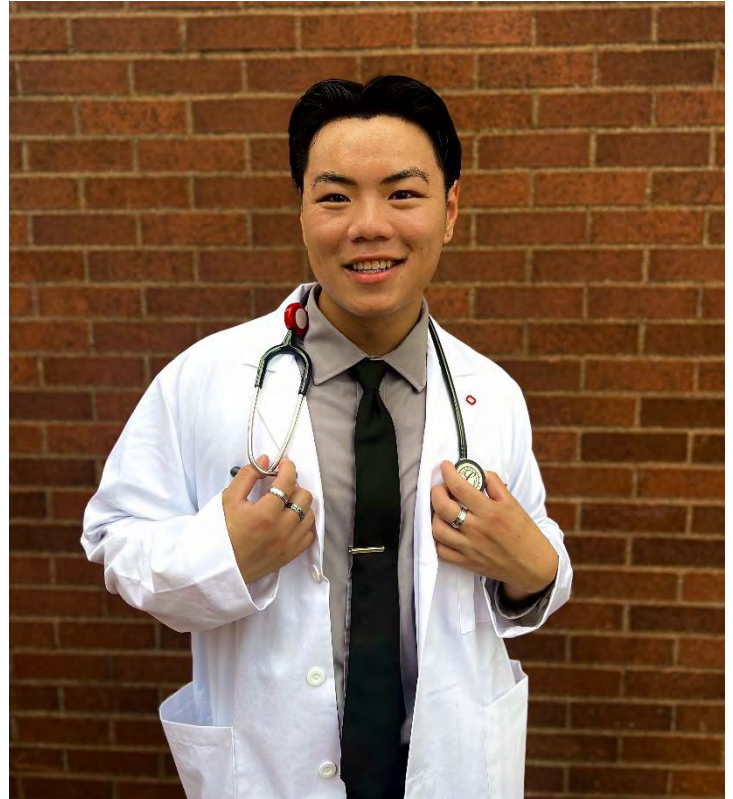
Gabe Lee and Poly Popova have a storied history with ReImagine Science. They came to this work through Gabe, who answered an ad in VolunteerMatch that we had posted to recruit a new member to the board. He and Poly met with Executive Director Kennan Salinero at the Starbucks near Dougherty Valley High School in San Ramon CA in July of 2017. They were each too young to be an official member of the board. Instead, they fulfilled a perhaps even more important role from that point forward, becoming advisory members, collaborators, and a resource for insights from very insightful individuals on the beginning arc of careers and adulthood.

Poly and Gabe have worked with ReImagine Science on many projects over the years, including, along with Isabel Lee, as coproducers for ReImagine Science's TEDxReImagineScience/ TEDCountdown in 2021.

Poly's ['big welcome'](#) for that event is worth a re-watch.

So, where are they now?

Gabe is in medical school at Ohio State, where he also completed his undergraduate degree. At Ohio State, Gabe majored in Biomedical Engineering, where he was able to better understand the applications of technology in medicine. Gabe was heavily involved in clinical research with the Ohio State Wexner Medical Center Department of Emergency Medicine, where his research focused predominately on geriatric and cancer disparities in the emergency department. He was also heavily involved with several organizations, including the Trevor Project, an LGBTQIA2+ Youth Crisis Hotline. Additionally, while Gabe was an undergraduate, he co-founded the Rainbow Clinic, a free clinic that focuses on serving uninsured and underinsured LGBTQIA2+ identifying patients.



Gabe Lee

He founded the clinic after recognizing the microaggressions that queer patients were facing at the free clinic and advocated for a safer space for them to receive their care. He has stayed involved with the clinic during his medical degree studies, and is now an Albert Schweitzer Fellow for his work to expand Pre-Exposure Prophylaxis (PrEP) services to uninsured and underinsured patrons of Columbus.

One special feature of the clinic is the use of expertise and infrastructure at Ohio State to train patient navigators, giving undergraduates first-hand experience in advocacy in the complex medical system of today.

Gabe's focus continues to be both community-driven and introspective, as he puts it 'Finding a mutual relationship with the world.'

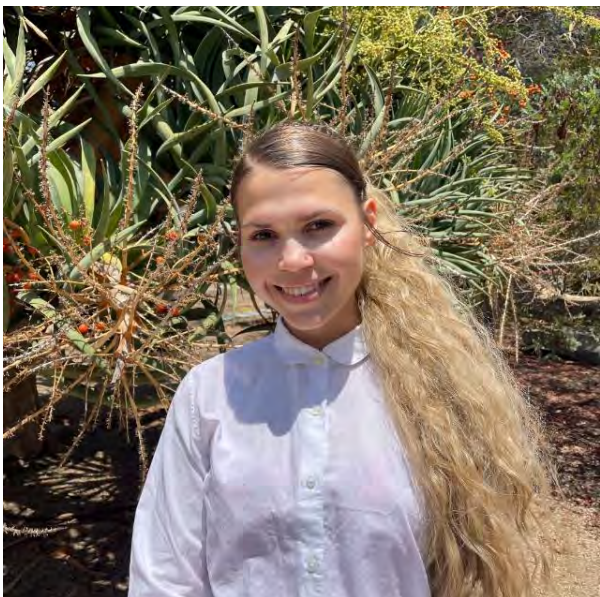
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Volunteer Spotlight (cont. from page 6)

Poly Popova

Poly Popova has completed her undergraduate studies in environmental engineering, attending the prestigious honors program at San Diego State University. That time gave her exposure to amazing women role models, including her time in a research lab gaining hands-on experience. Her focus for her undergraduate work was biological wastewater treatment. She has since taken up a chemical engineering focus as a compliment to that specialty. Poly interned at Dr. Natalie Mladenov's Water Innovation and Reuse lab at San Diego State University and was a member of the NIH's MARC program, which, under the guidance of the National Institutes of Health, sought to increase the number of underrepresented scientists in STEM fields through research training opportunities.

Poly is now pursuing a PhD in Chemical and Environmental Engineering at Yale University under the guidance of Dr. Jaehong Kim, supported by the National Science Foundation Graduate Research Fellowship. Through her graduate work, Poly intends to develop catalytic materials for advanced oxidation in water treatment, with the goal of mitigating global water scarcity and improving clean water access in resource-limited areas.



Poly Popova

Ocean Memory Project

(cont. from page 5)

This desire for seed funding is strongly held by the visionary artists in the community. Their work embodies ways to impact cognitive processes at the deepest levels - an impact that changes outcomes, cohesion, and vision, all for the better.

The second community desire to emerge from Keith's visioning exercise was a strong shared goal of activism for the 'deep blue sea,' with a passion and love for the oceans that is shared by each and every member of this highly skilled community, no matter what domain they work in.

We see the NAKFI experiment, and our dedication to continuing that work into the future, as a big step toward realizing the vision Nicholas Maxwell spent his prolific career as a philosopher of science working toward: to bring the work of the ivory tower directly to society, to address critical societal challenges.

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' science together. Email kennan@reimaginescience.org.