The D.C. Art Science Evening Rendezvous (DASER) is a discussion forum organized by Cultural Programs of the National Academy of Sciences (CPNAS), held 6-8 times annually. DASER fosters community and conversation around the intersections, and interweaving, of art, science, and culture. On February 4, 2016, CPNAS celebrated DASER’s fifth anniversary with a program exploring the theme of **Ideation, Translation, and Realization**. Speakers were Kimberly Suda-Blake, David A. Edwards, Richard N. Foster, Patricia Olynyk, and Philip Beesley (see page 6 for biographies). The discussion was moderated by JD Talasek. We welcomed 125 guests to this sold out event which featured inspiring and thought-provoking conversations among the speakers and audience alike. The program was live-streamed and a recording is available on the NAS account at [https://livestream.com/accounts/7036396/2416daser](https://livestream.com/accounts/7036396/2416daser). Videos of the presentations are available on CPNAS’ YouTube channel at: [http://www.YouTube.com/CPNAS](http://www.YouTube.com/CPNAS)
This DASER revisited the themes of the November 2015 National Academies Keck Futures Initiative (NAKFI) conference held in Irvine, CA. Several of the evening’s speakers had also been conference participants. NAKFI has been catalyzing interdisciplinary research since 2003; the 2015 conference focused on intersections of art and science, specifically, “Ideation, Translation, and Realization.”

The evening began with community share time where more than a dozen audience members gave short, fascinating descriptions of their current projects at the intersection of art and science. Kimberly Suda-Blake kicked off the formal portion with an announcement that the 2016 NAKFI conference theme will be “Discovering the Deep Blue Sea.” David A. Edwards gave a talk titled “The Esthetics of Reinventing Tomorrow” on how the invention of a sustainable future we all want to inhabit entails dialogue with the public where scientific discovery and artistic expression meet. He highlighted this process through examples of his work at Le Laboratoire in Paris and Cambridge, Massachusetts, with projects exploring taste, consumption, scent, time, healthcare, and more. In a talk titled “The Art & Science of the Near Possible,” Richard N. Foster unraveled the mysteries of matching new capabilities to poorly characterized opportunities in the arts and sciences. He explored the meaning of the term *creativity*, a word first found in the dictionary in 1875, at DASER defining it as the association of two previously unassociated fields. In her presentation, “Dark Skies, Phantom Bodies + Mutable Archives: New Collaborations in Art + Science,” Patricia Olynyk overviewed a variety of idea approaches showing how biology, neuroscience, and the history of science are engaged and transformed in her studio. She described her projects exploring eugenics, cosmology, light pollution, and beyond. In his talk, “Pluripotent Architecture,” Philip Beesley described the work of his Toronto-based Living Architecture Systems Group, which combines the research and creation of scientists, engineers, architects and artists working together. They create large-scale prototypes of immersive architectural spaces with qualities that come strikingly close to those of living systems -- environments that can move, respond, and learn; environments that renew themselves with chemical exchanges and that are adaptive and empathic toward their inhabitants. During the DASER reception, visitors toured Beesley’s Sentient Chamber installation with the lead architect himself (Sentient Chamber is on view through May 31, 2016). Visitors also sampled calorie-free clouds of chocolate cake and cotton candy from David Edwards’ Le Whaf.
**CAN I QUOTE YOU? Audience and Speaker Responses**

**THIS CHANGED MY OPINION OF:**
Reaffirming ideation beyond the mainstream over usage of ideation.

**THE SPEAKER NAILED IT WHEN:**
At one point during Philip Beesley’s talk my brain was on fire, which doesn’t happen that often.

David Edwards said, “Advance toward what we don’t know.”

**THE BEST PART WAS:**
Everything! The entire talk was a surprise. It is also great that it was recorded.

I was pleasantly surprised by the contribution of Richard Foster’s “theory of creativity.”

Nice intimate surroundings, good group, complementary ideas.

Still rattled and shaken by the event, in the best possible way- I found myself amidst a hundred quite intense, searching conversations, with a whole variety of kindred spirits.

Richard Foster’s presentation set the groundwork for me.

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**#DASER Social Media Highlights**

There was lively Twitter and Instagram activity during the DASER program and we also hosted a special tour of Sentient Chamber with Philip Beesley for local social media users earlier in the day.

@bluelikechagall: Happy 5th Anniversary, #DASER! One of my favorite programs in DC, I’ve met so much of the #sciart community through you! @CPNAS

@sciartinamerica: So excited to be in DC for #DASER!

@deepsies: The word creativity originated in 1875. Creativity: to associate two previously unassociated fields #daser

@nicolatriscott: “It’s very hard for us to see our own context” - Richard Foster gives a great presentation on the qualities of creativity #DASER

@mkurlandsky: Worth attending @CPNAS #DASER to be introduced to architect Calatrava, inspired by math, skeletons, bugs #artsci

@cityecologist: Patricia Olynyk restored my view of #ideation (beyond mainstream) to include “incubating ideas thru art, in the fields of science” #DASER

@abreemurch: Living walls of moss? File under “Ideas I Can Get Behind”. The amount of #creativity in this room is incredible. #DASER
“Hate the Raindrop” and Other Reflections on DASER
by Abree Murch, Er4schen

Excerpts from Abree Murch’s blog post on DASER. Read the full post on her blog, Er4schen: https://er4schen.wordpress.com/2016/02/09/hate-the-raindrop-and-other-reflections-on-daser/

DASER is… a hard event to describe, a modern salon (as in the intellectual social gatherings of the 16th and 17th centuries) that brings together people from both the arts and the sciences to network and, more importantly, share ideas. The theme of this month’s discussion was “Ideation, Translation, and Realization,” and believe me, there was so much ideation going on in my own head during the panelists’ presentations that I was happy to just stare out the window at absolutely nothing on the hour-long Metro ride home. Once all my thoughts finally settled, I was left with four takeaways that have reshaped the way I think about the relationship between art and science:

TAKEAWAY #1
Interdisciplinary cooperation is going to be a huge part of the answer to humanity’s problems.

TAKEAWAY #2
Creativity is not exclusive to art.

TAKEAWAY #3:
Hate the raindrop, embrace the snowflake.

TAKEAWAY #4
Communication is one of the biggest barriers to interdisciplinary cooperation.

This discussion and the smaller ones that continued into the reception led me to draw my own conclusion that our natural instinct to categorize things is what’s really working against us, especially when it comes to sustainability. Old-school approaches that encourage thinking across the lines that have previously divided the art and science disciplines are key to finding solutions to new-school problems. In the space of three hours, I witnessed more creativity in a
single room than you could find in the most expensive gallery or in a campus-worth of labs. Now more than ever, the world needs more events like DASER that shun confining ideologies and take a data-first approach to hypothesis-first issues: physically put thinkers and makers in a space with each other, lay out the problem, and see what happens.

**CITY SIGHTS:** The National Academy of Sciences by Julia Buntaine, Editor-in-Chief, SciArt in America

An excerpt from Julia Buntaine’s article. To read the full article, visit: [http://www.sciartinamerica.com/blog/city-sights-the-national-academy-of-sciences](http://www.sciartinamerica.com/blog/city-sights-the-national-academy-of-sciences)

[Philip] Beesley, speaking on his work that evening… noted that yes, as architects we can aim to reduce energy and material use and go ‘green’, but what about creating buildings which mimic the life forces of transformation, that can naturally grow and expand according to our needs? In Beesley’s vision, architecture would act like a pluripotent cell, not yet determined, the embodiment of potential. This conversation was particularly poignant given our location in the neoclassical-monumental architecture capital of the country; beautiful as it is, one couldn’t help but wonder what the world would be like if those grand columns’ function went beyond aesthetics.

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**SPEAKER BIOGRAPHIES**

**Kimberly Suda-Blake**, Senior Program Director, National Academies Keck Futures Initiative (NAKFI), Irvine, CA. Kimberly Suda-Blake joined NAKFI in 2007. During her time with NAKFI, she has worked with a team to develop a model for innovation that challenges boundaries between disciplinary silos by providing opportunities, support and tools for the best researchers to move fluidly across disciplines, fields, and sectors.

**David A. Edwards**, Gordon McKay Professor of the Practice of Idea Translation, Harvard University; Core Member, Wyss Institute for Biologically Inspired Engineering; Faculty Associate, Center for Nanoscale Systems. David Edwards is a scientist, inventor, and innovator working at the intersection of art, science, and design. He is the founding director of Le Laboratoire, a cultural center in Paris, France and Cambridge, Massachusetts, where experiments in art and design at frontiers of science promote cultural and societal innovations. He is a member of the American and French National Academies of Engineering, and the US National Academy of Inventors.

**Richard N. Foster** is an Emeritus Director of McKinsey & Company where he started the Innovation and Private Equity practices. He is Co-Chair of the Presidents’ Circle of the National Academies and Chair of the Medical Research Committee of the W. M. Keck Foundation.

**Patricia Olynyk**, Artist; Director, Graduate School of Art; Florence and Frank Bush Professor of Art, School of Design & Visual Arts, Washington University, St. Louis, MO. Patricia is an artist who investigates science and technology related themes. She is particularly interested in the ways in which culture and institutional structures shape our understanding of science and the natural world. Her exhibition, *Sensing Terrains*, was on view at the National Academy of Sciences in 2006. She is the co-founder with Ellen Levy and Victoria Vesna of the LASER salon series in New York City.

**Philip Beesley** is a practicing visual artist, architect, and Professor in Architecture at the University of Waterloo and Professor of Digital Design and Architecture & Urbanism at the European Graduate School. He is Director of the Living Architecture Systems Group, Toronto. His installation, *Sentient Chamber*, is on view at the National Academy of Sciences through May 31, 2016. Philip’s work focuses in the rapidly expanding technology and culture of responsive and interactive systems. His practice combines the disciplines of professional architecture, science and engineering, and expressive art. The studio’s methods incorporate industrial design, digital prototyping, instrument making, and mechatronics engineering.
TWEETREACH SNAPSHOT FOR
#DASER

ESTIMATED REACH

114,555
ACCOUNTS REACHED

EXPOSURE

459,365
IMPRESSIONS

Bars show number of tweets sent by users with that many followers

< 100  1k  < 10k  10k+  100k+
0  1  89  74  35

ACTIVITY

199
TWEETS
51
CONTRIBUTORS
10
DAYS

TOP CONTRIBUTORS

@CPNAS  210.6k
IMPRESSIONS

@CPNAS  33
RETWEETS

@CPNAS  62
Mentions

MOST RETWEETED TWEETS

8
CPNAS @CPNAS
At #DASER tomorrow, try calorie-free cake & cotton candy from Le Whaf, generating clouds of flavor!
@LeLabCambridge https://t.co/VRbmNvpxL9

5
@finchandpea
"Radiant Soil" thoughtful ecological #sciart of Phillip Beesley #DASER via @artologica
thefinchandpea.com/2015/10/07/art...
hits://t.co/lupeVZTx2L

4
Nicola Triscott @nicolatriscott
"It’s very hard for us to see our own context" - Richard Foster gives a great presentation on the qualities of creativity #DASER

PHOTO CREDITS

Page 1: Florent Déchard; Patricia Olynyk; Abree Murch; Page 2: Tracey Bell, Heather Spence, Ronald W. Simms, Jr.; Pages 3-5: All photos by Ronald W. Simms, Jr.