

OCTOBER 29 & 30, 2024 - BARCELONA

**SYMPOSIUM**  
**'EXPLORING THE INTERSECTIONS**  
**OF ARTS, SCIENCE, TECHNOLOGY**  
**AND SOCIETY AS CATALYSTS**  
**FOR CHANGE'**

**S+T+ARTS**  
in the City

**Hac**  
**Te**  
Barcelona  
Hub of Art, Science  
and Technology

**UOC** Universitat  
Oberta  
de Catalunya

# GENERAL PROGRAMME

## + VENUE:

UOC, Universitat Oberta de Catalunya  
U Building. Carrer del Perú, 52. Barcelona

## OCTOBER 29, 2024

09:30 - 10:00	U Building Hall	Registration	
10:00 - 10:30	U0.2	Welcome words	
10:30 - 11:30	U0.2	Opening Talk <i>The Art-Science Complex: Observations from the Field</i>	Keynote: Chris Salter, Zurich University of the Arts (ZHdK) Respondent: Veronika Liebl, Ars Electronica
11:30 - 12:00	U0.1	Coffee break	
12:00 - 13:30	U0.2	I Panel Discussion <i>Towards Hybrid Research Scenarios</i>	Derek Curry, Jennifer Gradecki, Lúa Coderch, Marta Royo Llonch, Lucia Sommerer, Joel Ong. Moderator: Andrés Burbano
13:30 - 15:30	U0.1	Networking Lunch	
14:00 - 15:30	U0.1	Poster and Audiovisual presentations	Rocio García, Christiana Kazakou, Gioia Arieti, Andreu Belsunces, Mónica Rikic, Mark Farid, Nicolas Maigret, Ramona Van Gansbeke
15:00 - 15:30	U Building Hall	Opening of <i>Invisible Voice</i> installation, by Mark Farid	Hosted by UOC
15:30 - 17:00	U0.2	II Panel Discussion <i>Confronting Values and Measures in projects and policies</i>	Sofia Greaves, Michele Coletti, Teresa Sanchis, Mona Hedayati, Adrien Lucca. Moderator: Simona De Rosa
17:00 - 18:30	U0.2	III Panel Discussion <i>Embracing social and ethical challenges</i>	Anni Garza, Gro Sarauw, May Abdalla, Clarice Hilton, Alessia Gervasone, Antonio Irre Catalano. Moderator: Raoul Frese

## Side events

19:00h Guided tour: exhibition *The ocean speaks. New ecologies and new economies of the seas*, Disseny Hub Barcelona (Plaça de les Glòries Catalanes). [Register in advance at the Symposium registration desk between 09:00-10:30h and 15:00-15:30h](#)

19:00h S+T+ARTS family meeting at Fundació Épica la fura dels Baus (closed event).

## OCTOBER 30, 2024

09:00 - 09:30	U Building Hall	Registration	
09:35 - 11:00	U0.2	Round table <i>S+T+ARTS dialogue</i>	Christophe De Jaeger, Rosanna di Nuzzo, Jurij Krpan, Veronika Liebl, Tere Badia. Moderator: Pau Alsina
11:00 - 11:30	U0.1	Coffee break	
11:30 - 13:30	U0.3	European and Regional Policy Workshop (closed session)	Moderator: Gabriele Rosanna
11:30 - 12:00	U0.1	Poster and Audiovisual presentations	
12:00 - 13:30	U0.2	IV Panel Discussion <i>Epistemologies and Methodologies</i>	Carolyn Kirschner, Guillemette Legrand, Maxim Velli, Lola Kengen, Jessica Coldrey, Carla Molins-Pitarch. Moderator: Tomás Criado
13:30 - 15:00	U0.1	Networking Lunch	
14:00 - 15:00	U0.1	Poster and Audiovisual presentations	
15:00 - 16:00	U0.2	Presentation <i>Legacies of Transformative Collaborations: Insights from S+T+ARTS in the City</i>	Elisenda Ardèvol, Laia Blasco, Alba Colombo, Anna Pinotti Moderator: Aurélie Delater
16:00 - 17:00	U0.2	Closing talk <i>Arts, Science, Technology and Society intersections: how to navigate them in practice?</i>	Keynote speaker: Nerea Calvillo, Centre for Interdisciplinary Methodologies, University of Warwick Respondent: Laura Benítez, Universitat Autònoma de Barcelona
17:00 - 17:30	U0.2	Closing words	
17:30 - 20:00	U Building Hall	Closing reception	

## KEYNOTES

### OPENING TALK

#### ***The Art-Science Complex: Observations from the Field***

**Keynote speaker:** Chris Salter, Zurich University of the Arts (ZHdK)

**Respondent:** Veronika Liebl, Ars Electronica

#### **The Art-Science Complex: Observations from the Field**

This talk examines the “art science complex” a certain set of genealogical and epistemological assumptions about the histories, theories, methods and practices involved in the long gestation attempts to bring together artists and scientists to enable new forms of knowledge production. Despite radically different contextual, socio-technical-political and aesthetic motivations and institutional setups, a certain narrative continues to operate that seeks to smooth out the frictions in what is in reality a much more messy, conflict-prone and turbulent arena.

In effect, in order to understand what lies beneath the art science rhetoric, I aim to examine these inherent frictions within socio-technical networks linking artists, scientists, research and innovation agendas. Such frictions include the problematic of “epistemic cultures” in how knowledge itself is constituted and contested in the arts as compared to the sciences, the much ballyhooed (but rarely criticized) concept of interdisciplinarity and the continued belief in the unity of the sciences (from the arts) and the unity of the arts (from the natural/human/social sciences).

Going below the surface of these socio-technical networks thus reveals larger issues of dynamics, disruption and change in the sociology of innovation as well as the ongoing tension in art-science collaborations between the production of durable, representational and normative knowledge versus the deployment of aesthetic strategies inherited from the genealogies of the avant-garde such as ambiguity, confusion, agonism and defamiliarization.

## CLOSING TALK

### ***Arts, Science, Technology and Society intersections: how to navigate them in practice?***

**Keynote speaker: Nerea Calvillo**, Centre for Interdisciplinary Methodologies, University of Warwick

**Respondent:** Laura Benitez, Universitat Autònoma de Barcelona

#### **Arts, Science, Technology and Society intersections: how to navigate them in practice?**

The talk will explore these questions through the experience developing In The Air, an ongoing collaborative project to make visible – and sensible, knowable, questionable and an object of design – the material components of air and its pollution. Initiated in 2008 at a workshop in Medialab Prado (Madrid) and expanded through multiple iterations with different teams across countries, it allowed to grasp the material, institutional, affective, spatial, economic, elements that, looking back, were needed.

Calvillo will also unpack how science and technology studies, feminist technoscience and transfeminist, intersectional and queer approaches have contributed to In The Air, both in theory and in practice. They have been the lens and sensibility that have shaped her and the project's critical approach - and its contribution. They have also helped to navigate the ASTS intersections and to bring ethics and politics into the processes of knowledge, art and technology production. To -hopefully- contribute to more just changes.

The intersections of Arts, Science, Technology and Society look good on paper, but they are inevitably messy, exciting, challenging and fragile - the ingredients required for innovation and change to emerge. However, how to navigate these intersections in practice? What is at stake at personal, professional, collective and institutional levels? Who -with whom, where, when- has the capacity, desire, courage – and privilege- to do so? What are the conditions that can facilitate, support, enhance, trigger or encourage these processes?

## PANEL DISCUSSIONS

### I PANEL: TOWARDS HYBRID RESEARCH SCENARIOS

Moderated by: **Andrés Burbano**, Universitat Oberta de Catalunya

- + Exploring innovative methodologies and frameworks to facilitate profound research within the arts, emphasising the inherent values at the intersection of science, technology, arts and society.
- + Scrutinising past, present, and emerging projects and their impact on shaping the field.

**Lúa Coderch, BAU, Centre Universitari d'Arts i Disseny de Barcelona and Marta Royo Llonch, SHOOK Studio / ICM-CSIC**

***Gleaning the art and science collaboration field: a data ecology prototyp***

Based on the logic offered by Agnès Varda's film "The Gleaners and I" (2020), researchers from BAU Centre Universitari d'Arts i Disseny and the Institut de Ciències del Mar (CSIC), are developing a project where artists and scientists work from a data ecology paradigm. The metaphor of going back through a field that has already fulfilled a first productive function can be deployed, collecting what was initially dismissed or overlooked.

**Derek Curry and Jennifer Gradecki, Northeastern University**

***From Algorithms to Allegories: Leveraging Scientific and Artistic Epistemologies to Combat Digital Disinformation***

Epic Sock Puppet Theater (MediaFutures 2023) uses a combination of analytic methods, social science research, and artistic practices to create an interactive traveling theater with animatronic puppets that helps viewers critically reflect on the tactics used by imposter social media accounts to polarize and disinform the public. This presentation will focus on how different epistemologies and methodologies were navigated during the artistic research process.

**Joel Ong, York University**

***Untitled Interspecies Umwelten***

I will discuss the motivations, processes and failings of an artistic research project Untitled Interspecies Umwelten exploring expanded and computer-mediated experiences of conversation with a microbe. Through various digital strategies, the project proposes the speculative intermingling of the natural and cultural worlds of bio-semiotics and extra-verbal language. Its goal is to develop an interspecies futurity through collaborative practices with multiple species of plants, animals, fungi and microbes.

**Lucia Sommerer, Halle University (Germany) and Yale ISP (USA)**

***Law x Art. A two-way street of mutual productive irritation***

The author – legal scholar and artist herself – explores in this presentation the potential of artistic research in the legal sciences, sharing her own path and emerging practice. She introduces Law x Art as a new supplemental modus operandi in academia setting it apart from pre-existing ideas of "poet-lawyers" as well as legal scholars specializing in art world disputes.

## II PANEL: CONFRONTING VALUES AND MEASURES IN PROJECTS AND POLICIES

Moderated by: **Simona De Rosa**, T6 Ecosystems

- + Investigating indicators and metrics to assess the impact and value of projects, initiatives, institutions and industries.
- + Engaging in discussions about the challenges and opportunities associated with measuring the multifaceted contributions to society.
- + Studying the transformative role of historical and current policies in nurturing the interdisciplinary intersection of art, science, technology, and society.

**Michele Coletti, Grenoble École de Management**

### ***Towards a management map of Arts+Science projects***

Arts+Science initiatives have existed for long, their initial objective being to trigger creativity and innovation at the host organization, then broader societal challenges. However, there is little research on the managerial side of them. This study aims at identifying the key components of Arts+Science projects and their success factors. Leveraging experts' inputs, and applying the theory of collaborative research, a map of Arts+Science project management elements will be proposed.

**Sofia Greaves, Postgrowth Innovation Lab**

### ***SciArt Collaborations at the Joint Research Centre: Knowledge Valorization beyond Economic Value***

This presentation contributes to our understanding of how artists working with scientists generate innovation, of which kinds, and their impact. I present the first ethnographic study of the SciArt project conducted at the Joint Research Centre the knowledge-for-policy service for the European Commission. To analyze this material, I use the knowledge valorization framework adopted by the Commission's R&I strategy. However, with examples, I argue that theories of arts based research must be integrated into the KVF to understand how transdisciplinary research structures generate research outputs with impacts beyond economic value.

**Mona Hedayati, Concordia University, University of Antwerp**

### ***ASTS as Method: Towards Critical Interdisciplinarity***

This proposal explores the merging of technoscience and artistic inquiry within Art, Science, and Technology Studies (ASTS). It emphasizes how intelligent machines as socio-technical systems reshape human interactions with the world. ASTS can highlight art's distinct stance in critiquing and engaging with technological infrastructure, providing a public-facing platform for raising ethical and critical questions, and making complex human-machine dynamics accessible and tangible through artistic inquiry.

**Adrien Lucca, Studio Adrien Lucca**

### ***Rethinking Artificial Lighting: Balancing Human and Animal Visual Needs in Urban Environments***

Light pollution represents a critical challenge for urban ecosystems. I will draft a methodology for designing lighting schemes that harmonize the needs of human residents with those of our ecological co-inhabitants. Examining the impact of artificial lighting - designed around human visual characteristics - on the color rendition of natural objects, such as flowers, I show that white LED light degrades visual experiences for other species, such as hawkmoths. I will present alternative findings, a critical review of existing literature and discuss potential solutions.

**Teresa Sanchis, Institute for Bioengineering of Catalonia**

### ***Art and bioengineering to explore human condition and knowledge generation***

The Art & Science programme of the Institute of Bioengineering of Catalonia aims to transcend the dichotomy between social and natural sciences to create spaces where research activity is carried out in a transdisciplinary way that include all aspects of human experience. With our initiatives, IBEC aspires to create connections between disciplines to address fundamental questions about the human condition and the way knowledge advances.

## III PANEL: EMBRACING SOCIAL AND ETHICAL CHALLENGES

Moderated by: **Raoul Frese**, Vrije Universiteit Amsterdam

- + Presenting case studies and projects led by artists, scientists and technologists aimed at addressing pressing social challenges and delving into the potential to foster community development and sustainable innovation.
- + Examining emerging social trends and models that promise to shape the future while addressing ethical issues and societal challenges.
- + Current debates around freedom of expression vs. censorship, ethical considerations like data privacy, access and equity, or environmental impact.

**May Abdalla and Clarice Hilton, Anagram; Lucy Watkins, The University of the West of England**

***This is not a simulation: measuring impact of a virtual reality documentary created to inspire empathy towards people diagnosed with schizophrenia with a view to improving medical outcomes***

Schizophrenia is a stigmatised condition, immersive studio Anagram developed “Goliath” an interactive VR documentary about Jon, a man with schizophrenia who finds community in the online gaming world. In collaboration with the University of West of England this has been adapted into a training tool. This presentation explores the impact on empathy and understanding of the experiences of psychosis, exploring the sensitivities and ethical requirements working with the lived-experience community.

**Anni Garza Lau and Gro Sarauw, Ghost Agency**

***Ghost Agency: Women's rights in the digital age***

The artistic research by Ghost Agency, proposes a radical rethinking of data agency, women’s and human rights in the collapse of physical and digital spaces. Their practice is multi-methodological, blending artistic, theoretical, and community-centered approaches to investigate non-visibility as a tool for social change. Generating new knowledge, by co-designing software and strategies that empower communities to evade surveillance, their work is an advocacy for human rights in the digital age.

**Alessia Gervasone, University of Barcelona**

***Post-extractive and decolonial imaginaries in transdisciplinary researches***

In recent years, art and science collaborations have expanded across natural and social sciences, combining rational and non-rational approaches to foster creativity and innovation. Despite their proliferation, few studies examine how these collaborations can support just, post-extractive futures. This research explores how arts, science, and technology can promote eco-social and ethical research, influencing human-non-human relationships and encouraging decolonial imaginaries, eco-social behaviors, and cooperative values towards a more equitable post-capitalist world.

**Antonio Irre Catalano, Independent artist and researcher**

***PLart: research practices on wilderness between art and science***

The PLart Project by Italian artist and scientist Antonio Irre, in cooperation with the Ecology Center of the Swedish University of Agricultural Sciences, is an R&D, production, and popularization action focused on Plant Communication. What would you ask if you could talk to a plant? The project stems from this question, and from the observation that the biology underlying all living beings has a lot in common.

## IV PANEL: EPISTEMOLOGIES AND METHODOLOGIES

Moderated by: **Tomás Criado**, Universitat Oberta de Catalunya

- + Examining the epistemological foundations that underpin research and practice and the way it delves into the very nature of knowledge production.
- + Discussing methodologies employed in research and their implications for interdisciplinary collaboration. Processes, perspectives and dynamics that have proven to be helpful.
- + Debating challenges and proposing solutions for integrating distinct disciplinary methods within projects.

**Jessica Coldrey, Independent engineer**

### ***Epistemologies of Healing: Hybrid Visual Research in Flood-Affected Communities***

This presentation explores the visual research methodologies employed by Coldrey and Ragus in response to severe flooding in Australia and South Africa. Their participatory mapping and clay modelling approaches documented the changing sense of space in affected informal settlements while considering the community's active role in healing. The resulting animation, *Tracing Precarity*, connects scientific data with lived experience, illustrating the role of hybrid methodologies in advancing post-disaster humanitarian practices and advocacy.

**Carolyn Kirschner, Goldsmiths, University of London**

### ***A Case for the Intentional Mis-Use of Scientific Tools and Processes as a Productive Approach to Art/Science Research***

Productive art/science collaborations often seek out or emerge from spaces of playful experimentation, error, or accident – beyond the boundaries of established disciplinary methodologies. This presentation will draw on a range of experimental art/science case study projects to explore ways in which the intentional mis-use of scientific tools and technologies can offer unconstrained spaces for interdisciplinary exchange, the chance for new perspectives on familiar processes/topics, and possibilities for new collaborative approaches.

**Guillemette Legrand, Ecole des Arts Décoratifs (PSL) / Basel Academy of Art and Design (FHNW)**

### ***Computing Tragedies with Hector***

In this presentation, I explore the climate model Hector by tracing the interrelations of the technical, institutional, political and socio-economic realities that I argue are co-constitutive to how Hector emulates and predicts climate futures, raising questions about the onto-epistemological imaginary the model carries. I explore how artistic-led research through computational 'bugs' (*The Underground Division*, 2021) can help document the model's logic and socio-political implications and produce transdisciplinary knowledge.

**Carla Molins-Pitarch, CITM -UPC**

### ***Transdisciplinary Design Toolkit: Lab to Street. Tangible Science Framework to collaboratively create art, tech & science experiences***

"The Toolkit: Lab to Street" is an open-access tool based on design methodologies that effectively supports the change in how design practice can translate complex multidisciplinary research to multiple audiences. We'll discuss the tool's potential within different contexts involving agents from different disciplines entangled in a collaboration that can be led by design to produce artifacts that, through the arts and technology, can communicate science to society in a more experiential way.

**Maxim Velli and Lola Kengen, Learning Planet Institute, Paris**

### ***Solarpunk Science: Transforming Epistemologies for a Regenerative Scientific Praxis***

How can solarpunk act as a memetic engine to inspire new ways of producing knowledge? This presentation explores solarpunk's potential to visualise sciences rooted in conviviality, relationality, and justice. Speculative thinking will illustrate how Science could break free from its current epistemological limitations, inspiring us to embody a new scientific paradigm aligned with the social and ecological imperatives of the present.



## POSTER AND AUDIOVISUAL AREA

**Gioia Arieti, Wide Time**

***Wide Time- Space Psychology for improving quality of life after cancer***

As space exploration progresses, the focus has increasingly shifted towards addressing the psychological well-being of astronauts. Recognizing the complexities of time perception distortion during long-duration missions, interdisciplinary research has developed a novel calendar structure to measure meaningful time units in space. This innovation, rooted in design and psychological science, is currently being tested with cancer survivors to assess its applicability in post-treatment adaptation. The study underscores the potential of integrating design, science, and technology for future advancements.

**Andreu Belsunces Gonçalves, Engineering Fiction**

***Metabolism of Techno-Financial Worlding***

"Metabolism of Techno-Financial Worlding" is a speculative video essay that explores the process of financialization through the relationship between finance, imagination, and the computational production of uncertainty and futures. It focuses on how Venture Capital exploits the mythological aura of technology to advance with its libertarian and technocratic agency. This video essay, still under production, tells the story of the Venture Capital Capacitor, a device that exploits the energy of an invisible territory called Reality<sup>3</sup> to summon techno-financial entities from the imaginary realm to material reality.

**Mark Farid, University of the Arts London**

***Invisible Voice***

Invisible Voice is a digital arts and research project featuring a browser extension, mobile app, and interactive installation. Developed over three years with EU support, it challenges societal narratives on key issues like human rights and corporate ethics. The plugin seamlessly integrates into browsing, using data from 37 open-access sources to reveal company practices. The app offers product scanning for deeper insights. An interactive installation adds a dynamic layer, spotlighting brands' impacts. Invisible Voice empowers users to align their actions with their values, driving change in politics and media.

**Rocio Garcia-Robles, University of Seville**

***ASTER+S>ART^SEALIFE: SciArt works concreated in transdisciplinary teams in collaboration with marine biologists of the Institut de Ciències del Mar (ICM-CSIC)***

ASTER+S > ART^SEALIFE (@asterproyecto) arises from the SciArt collaboration between the Institut de Ciències del Mar (@icm.csic) and the ASTER+S research group from the University of Seville with invited participants (Netherlands, Barcelona). We focus on how marine life is developing beneath the surface under the influence of climate change, with the dimension of citizen science supported by the EMBIMOS research group (<https://minka-sdg.org/>), and using our eco-SciArt methodology for transdisciplinary co-creation.

**Christiana Kazakou, LEONARDO/ISAST LASER Talks**

***LEONARDO/ISAST LASER Talks: Interdisciplinary Creativity for Innovation***

Leonardo/ISAST LASER Talks is an international program that “democratizes” knowledge by bringing together artists, scientists, humanists, and technologists for informal presentations, performances, and conversations with the wider public. The mission of the LASERs is to encourage contribution to the cultural environment of a region by fostering interdisciplinary dialogue and community building in over 57 cities across five continents. LASER's local & global nodes build a creative infrastructure to address the world's most challenging problems and help us engineer a better future.

**Nicolas Maigret, DISNOVATION.ORG**

***THE SOLAR SHARE: An Edible Solar Currency***

THE SOLAR SHARE stages a form of planetary economics based on photosynthesis. THE SOLAR SHARE project challenges prevailing economic models with insights from sunlight-harvesting organisms, crucial to life's metabolism. Featuring a one-square-meter microalgae bioreactor, it highlights human dependence on photosynthesis and proposes edible microalgae as a new economic unit, representing daily biomass yield. It offers a transformative economic system that reintegrates human metabolism and energy needs with photosynthesis, redefining sustainability within planetary limits.

**Mónica Rikić, Universitat Oberta de Catalunya**

***Somoure***

Somoure is an artistic research project developed during an EU S+T+ARTS residency, focusing on improving the social acceptance of assistive robotics. The project explored various ways of integrating robots into healthcare systems to enhance the independence of patients requiring assistance. Conducted in collaboration with the Institute of Industrial Robotics (IRI) at CSIC-UPC in Barcelona, the research investigated how robots could be effectively integrated into assistive roles while ensuring patient comfort and trust.

**Ramona Van Gansbeke, GLUON**

***Fostering Interdisciplinary Alliances: Gluon's Six-Stage Methodology***

The six-staged methodology developed by Gluon puts its emphasis on local ecosystems and global challenges, representing a novel approach that pushes the boundaries of innovative practices. It is based on the belief that the contribution of the arts is key in facilitating new social imaginaries and transformational narratives for the twin green and digital transitions. This methodology enables organisations to bundle and expand expertise and existing networks and raise the skills and innovation levels within the challenges put forward.

## ROUND TABLE

### **A S+T+ARTS Dialogue**

The discussion will focus on the experiences and challenges of the S+T+ARTS programme, with particular emphasis on its impact in the potential role of Regional S+T+ARTS Centers (RSC) in leading rooted transdisciplinary innovation and promoting cross-cutting collaboration between European regions.

**Tere Badia**, HacTe

**Christophe De Jaeger**, GLUON

**Rosanna di Nuzzo**, MEET Digital Culture Centre

**Jurij Krpan**, Kapelica Gallery for Contemporary Investigative Art

**Veronika Liebl**, Ars Electronica

Moderated by: **Pau Alsina**, Universitat Oberta de Catalunya

## PRESENTATION

### **Legacies of Transformative Collaborations: Insights from S+T+ARTS in the City**

This session will critically examine the methodologies developed by the S+T+ARTS in the City to assess the impact of collaborative projects between artists, scientists, and technologists.

Presenters will articulate the framework employed for generating assessment processes and share key findings and insights from the evaluation of the residency programme and the academies implemented across six European regions. The discussion will focus on enhancing transdisciplinary collaborations and will propose strategic tracks for future S+T+ARTS projects.

**Elisenda Ardèvol**, Universitat Oberta de Catalunya

**Laia Blasco**, Universitat Oberta de Catalunya

**Alba Colombo**, Universitat Oberta de Catalunya

**Anna Pinotti**, HacTe

Moderated by: **Aurélie Delater**, GLUON

More information on: [starts.eu](https://starts.eu)

# A S+T+ARTS SYMPOSIUM TO REFLECT ON IMPACT AND SHAPE THE FUTURE

ORGANIZED BY:

**S+T+ARTS**  
in the City

**Hac**  
**Te**  
Barcelona  
Hub of Art, Science  
and Technology

**UOC**  
Universitat  
Oberta  
de Catalunya

WITH THE SUPPORT OF:

**S+T+ARTS**



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