

# IMNA

## Mutant Institute of Environmental Narratives



**MATADERO**

# Mutant Institute of Environmental Narratives



IMG ↑ MATADERO MADRID / BEGO SOLÍS

Today, more than ever before, we are in need of initiatives that can have a positive impact on public opinion and can allow us to imagine new scenarios for dealing with the current climate and health crises. In this context, the Mutant Institute of Environmental Narratives (IMNA) is the laboratory for cultural innovation in response to the climate emergency. Located at the Center for Contemporary Creation Matadero Madrid, and partnering with many institutions and universities, IMNA supports and proposes projects at the intersection between art, fiction, science and strategies based on collective intelligence.

The current planetary challenges require the practice of empathy and thinking beyond disciplines. Based on this belief, IMNA advocates for the formulation of a pact of justice and coexistence between all species, as well as for a sense of responsibility towards the future generations. Rather than being a traditional institution, IMNA functions as a mutant device that facilitates the adaptation to uncertain futures. It does so through artistic disruption and new forms of storytelling. It is a space for research, interdisciplinary experimental creation, and collective learning; a meeting place for highly diverse agents where the model to follow is the behaviour of ants, bees or slime molds with a thousand heads.



# METHODOLOGY

## ↳ Tools for co-creation through collective intelligence processes

In 2019, IMNA launched a joint research line together with national and international research centres and focusing on the study of swarm methodology. Inspired by living organisms such as ants, bees or molds, the project brings together artists, biologists, experts in virtual reality, public policy makers and other agents in the creation of cooperative games and tools for co-creation through collective intelligence.

IMNA's methodology is designed to be applied in small or large interdisciplinary working groups of decentralised structure. Inspired by the theory of swarms, hybrids and mutants, IMNA focuses on the development and optimization of processes, rather than on immediate or short-term results. These processes or protocols, enable to address multiple approaches or mediation tools, obtaining optimised, implementable, scalable and adaptable results to multiple problems.

These groups for co-creation that we call swarms, are formed by members with specific and interdisciplinary roles. They also work in a coordinated and cooperative way. Swarm intelligence systems typically comprise a population of simple, specialised agents interacting locally with each other and with their environment. Like ant colonies, the alignment of birds in flight, the behaviour of flocks as they graze or the growth of bacteria, swarms function can be compared to the nervous system of a complex organism. It functions through

simple interaction, fluid communication and the coordinated movement of agents.

Swarm methodology aims to develop tools for mediation and to solve specific problems using processes that are based on **collective intelligence**, i. e. processes that depend on the way in which tasks are organised, on groups of agents, and on a participatory approach. Moreover, by incorporating the proposal of artists who have collaborated with IMNA, such as Paula Nishijima or the Laboratorio de Pensamiento Lúdico (the Laboratory of Recreational Thinking), the methodology makes use of **games as a fundamental tool** in the learning process.

Through these processes, the super-organism stays alive: it thinks, talks, moves, interacts with its environment, and makes decisions. But one important element is missing: a conscience, another agent of the super-organism that analyses the objectives of our actions and our mediation methods and proposes new approaches. Our ethos. This role can be played by coordinating agents or by appointing specific agents. This conscience is also optimised, it grows and mutates. By developing new tools and mediation capacities, this new organ acquires complexity. With each self-evaluation loop, the identity of the IMNA mutates and develops a personality of its own, a defined way of behaving, a way of understanding or feeling the unique environment.

# SWARM

## ↳ The IMNA operates through an interdisciplinary network that brings together an international group of artists, designers, researchers, scientists, engineers, architects, public policy makers and many other agents.

As a cultural platform for climate innovation, the IMNA is promoted by the Centre for Innovation in Technology for Human Development of the Polytechnic University of Madrid (itdUPM); Madrid City Council, through its Environment and Mobility Department; and the Matadero Madrid Centre for Contemporary Creation. Together with these institutions and other entities, the IMNA is promoting the Deep Demonstrations of Clean and Healthy Cities initiative in Madrid - part of the Climate-KIC of the European Institute of Innovation and Technology (EIT) - which seeks to support 10 cities that demonstrate change to ensure a resilient future with zero net emissions in 2030.

In addition, the IMNA is supported by the Daniel and

Nina Carasso Foundation as part of its Compose Knowledge programme to understand contemporary challenges.

The following institutions collaborate with the IMNA: Banco de Sabadell Foundation, L'Oréal, Laboratory for Environmental Narrative Strategies (LENS - UCLA), Experimental Architecture Group, Centre for Research in Animal Cognition of the Centre National de la Recherche Scientifique of the University of Toulouse (CNRS), Area of Biodiversity and Conservation of the University Rey Juan Carlos, Greenpeace Spain, Extinction Rebellion Spain, Cineteca Madrid (film archive), Intermediae Matadero, Matadero Centre for Artists in Residence and many other entities and citizen groups.

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What would our cities be like if our health depended on their level of biodiversity? What processes do we need to adapt to climate change in urban areas? Our bodies are composed of many more non-human cells than human cells, and if we have evolved and we are alive it is thanks to the cooperation of tiny species that need a certain environment and nutrients to live. The balance of this environment, the good quality of the air and water, or the healthy food on which our health depends, maintains an optimal balance in relation to its biodiversity. Human settlements already exceed the planet's resource capacity and increasing urban development puts further pressure on cities' resource systems and infrastructure. If we are to adapt to certain health and climate emergency scenarios such as the present one, and if we are to create resilient communities, we must consider cities as the environments that most need to be transformed.

This line of work links urban greening - the planning of green infrastructure within the city to increase biodiversity - and our health. With the aim of contributing to removing the cultural barrier between nature and human society, "Greening and Health" investigates issues such as biophobia or other cultural limitations that have determined how our cities are designed, and opens up possible imaginaries regarding urban forestry processes.

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What sort of planet are we going to bequeath to future generations? How can we promote global governance models that ensure our resilience as a species? What institutions need to be reformed to achieve this? In 2004, the Bolivian representative to the United Nations, Angélica Navarro, spoke of the need for a "Marshall Plan for the Earth" and of the urgent need to mobilise resources and people as never before to ensure that future generations may have a future. Since then, proposals for a Green Deal have followed one after the other. In the context of European institutional policy, the Green Deal is put forward as a framework to promote an efficient use of resources through circular economies, as well as to restore biodiversity and reduce pollution. All this with the social objective of "not leaving anyone behind".

This line of work focuses on research into long-term global governance policies that promote a pact of responsibility towards future generations. It places special emphasis on the development of the European Green Deal and proposes spaces for criticism and institutional reform.

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One of the basic tenets of the traditional division between "nature" and "human society" is so-called speciesism, or the idea of limiting culture to the human species. Specificity has led to the definition of planet-wide, human-run models of governance, whose notions of collective action and justice are dominated by Western political thought. However, the environmental struggles and ecological thinking of recent years have highlighted the idea that to survive this and other contemporary

crises, we must understand politics as something that goes beyond the human species and rather as the governance and organisation of the societies of the different species that share the planet.

This line of work is proposed as a collective exercise in understanding our impact on other species and as a way to approach them. In response to speciesism, it proposes speculative exercises in communication and empathy with non-human entities and the study of initiatives that acknowledge their rights.

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What kind of networks are we building in our human relationships and with other species? What would happen if we understood the Planet as several brains thinking and acting in one and the same body, as occurs in certain microorganisms? And what if that model of cooperation was the rule rather than the exception in adaptation processes?

Beginning with a revision of the theories of competition-based evolution, the line of work of cooperative resilience studies the adaptation processes of other species based on cooperation and horizontal learning. This line follows the reference work of biologists such as Lynn Margulis or Margaret McFall-Nagi, who have proposed revisions of the dominant competitive paradigm derived from Darwin's evolutionary theory through the idea of symbiosis (from the Greek 'living together') and cooperation. Cooperative resilience studies, from art, species such as *Physarum polycephalum*: a multi-headed mold or a giant rhizomatic cell that mutates depending on its nutritional needs: although it lacks a brain, it has a great capacity for learning.



IMG ↑ ACCIÓN MUTANTE. TALLERES

# Action-research projects

The IMNA has been promoting a series of projects and, through them, it has been experimenting with formats such as TV series, documentaries, podcasts and radio, radical and critical cartography, gamification and playful thinking, or online collaboration and digital platforms.



# CYBORG GARDEN

## ↳ A space where species can meet

The Matadero Madrid site, with its vast spaces devoid of vegetation or shade, is located in the middle of a **“heat island”**, which means that it suffers greatly from the extreme temperatures and heat waves that are tending to occur more and more frequently in the city. Taking this adverse situation as its starting point and through a series of working groups led by artists and architects and with the participation of geologists, botanists, engineers, sociologists, anthropologists and designers, in April 2018 a process was launched to create a **Cyborg Garden**, put forward by Matadero as a testing ground and case study with which to develop strategies for adapting to climate change and prototypes that can be replicated in other spaces in Madrid. The IMNA Garden is also a meeting place for different species in which to try out ways of co-inhabiting with non-humans from a space of desire and care. During 2020, the process of interdisciplinary co-creation will continue with monthly meetings of the working groups and the implementation of the first phase of the Cyborg Garden. During the first quarter of the year, the interdisciplinary working groups will meet in the Centre of Artistic Residencies (Nave 16) in Matadero on the following dates:

↳ Interdisciplinary working table I, 16 January 2020, from 12 noon to 2:30 pm

↳ Interdisciplinary working table II, 27 February 2020, from 12 noon to 2:30 pm

↳ Interdisciplinary working table III, 18 March 2020, from 12 noon to 2:30 pm



IMG ↑ MATADERO MADRID / BEGO SOLÍS

# GAME OF SWARMS

## ↳ Cooperation methodologies based on natural systems

*Game of Swarms* is a joint line of research between IMNA and national and international research centres that seeks to study and imitate the behaviour of other species in order to develop innovation strategies. The project brings together artists, biologists, experts in virtual reality, public policy makers, and other agents engaged in the study and imitation of living organisms such as ants, bees or molds in order to build a **game of cooperation** that helps to articulate **collective intelligences capable of promoting**

**social transformations.** An analogue version of the game was developed in 2019 and has been tested by more than a hundred participants including the public at the Eco-Visionaries exhibition in Matadero (from 14 June to 6 October 2019) and students taking the master's degree in “Systems Organisation” at the Polytechnic University of Madrid. The digital version of the cooperation game will be developed in 2020 and will also be the interface of the new IMNA website.



# ARTISTIC RESIDENCY

## ↳ Art and journalism in response to climate change

Our worldview is largely formatted by the media, films, literature and the entertainment industry, through which we share languages and ideas and interact with our environment. But what imaginaries do contemporary journalism and the information flowing through the networks actually produce as far as the climate emergency is concerned? Are the traditional discourses of such media as newspapers or TV news broadcasts sufficient to convey the urgency of the crisis and the need for action? What role can art play in this context? In response to this and other questions, the Centre for Artistic Residencies in Matadero Madrid and IMNA are launching a residency to support artistic practices at the intersection of art and journalism. **From 13 January to 5 April 2020**, Matadero will welcome the artist **Andrea Molina**, the winner of the call. A trained architect, with a postgraduate degree from the ETSAM, a member of the Extinction Rebellion collective and winner of the Mies Van der Rohe Foundation's Young Talent Award, among others, Molina's proposal involves research into the impact of climate change on the district of Usera through the creation of a participatory audiovisual map.

Together with artist Gabriel Ruiz-Larrea, Molina will conduct a series of eco-fiction workshops with local residents of Usera, the contents of which will form the basis of the mapping. The first three meetings will be held on the following dates (time to be confirmed):

↳ **Eco-fictions meeting: Imagining Usera I, Thursday 6 February 2020**

↳ **Eco-fictions meeting: Imagining Usera II, Thursday 20 February 2020**

↳ **Eco-fictions meeting: Imagining Usera III, Thursday 05 March 2020**

Andrea Molina's residency will be covered by the **Metrópolis TV programme on the Spanish TV channel La 2**. They will report on the entire creation process and on the final result of the residency. The cartography will also be presented at the final exhibition of the Matadero Centre for Artistic Residencies in December 2020.

# CLI-FI SERIES

## ↳ Visions of greened urban futures

The Cli-Fi series is a project to create a **television series** about the future of humanity and other species in cities such as Madrid after they have undergone **extreme greening processes**. In 2050, 80% of the population of Europe will live in towns and cities, putting increasing pressure on all their resource and infrastructure systems. In their urban planning, in order to adapt to the uncertain scenarios of the climate emergency and as they move towards the goal of decarbonisation, cities are beginning to place greater emphasis on green infrastructure (trees, woods, gardens, etc.) as opposed to traditional grey infrastructure. But what consequences might the implementation of extreme greening processes have? What other

species would we have to live with? What opportunities are there for human beings and what sacrifices do we need to make? In response to these and other questions, Cli-Fi series is inviting artists and filmmakers to work together with public authorities, scientists, urban planners and other agents to create **audiovisual fables** that imagine possible urban futures, investigating the tensions between so-called sustainable development and sustainable retreat. In this way, the process by which the series was created is presented as an **essay on the potential of fiction to help us design new policies to adapt to climate change** in our cities.



# MINISTRY OF THE FUTURE

## ↳ Girls, boys and young climate activists

Imbued with the urgency expressed by groups of young citizens such as Youth for Climate or Fridays for Climate who are demanding long-term social and political changes to ensure a sustainable future, the aim of the project is to imagine what the portfolio of a hypothetical Ministry of the Future should be, which would develop a pact between generations of humans and between non-human species. It is conceived as a meeting place for children, citizen action groups, philosophers, artists, lawyers and other national

and international agents in response to the need to **define heterogeneous policies that recognise the rights of non-human beings and promote long-term approaches**, with future generations in mind. Conceived by IMNA and Cineteca Madrid (film archive) and with the collaboration of **Greenpeace and Ciudad DIWO**, the project is developed through meetings and summer camps during which a **video manifesto** is produced as a roadmap towards a binding Ministry of the Future.



IMG ↑ MATADERO MADRID / BEGO SOLÍS

# 2020 Programme

The IMNA proposes for 2020 a programme of activities and projects linked to the territory and associated with the action areas and research projects described above.



IMG ↑ LUKASZ MICHALAK

# MATADERO MUTANT ACTION

↳ From 17 to 22 February

Within the framework of the **Madrid Design Festival, di\_mad** and the **IMNA** propose the Matadero Mutant Action Week: an intensive week of workshops and activities at the Matadero Central de Diseño. Within the framework of the IMNA research project Cli-Fi series and with the collaboration of the **Sabadell Bank Foundation**, the aim of this year's workshop will be to prepare the pre-script for the first episode of the television series on urban greening fables. Directed by architect and filmmaker Liam Young, who works in the field of design fiction, the first episode explores the tensions between the idea of sustainable development and sustainable retreat with the following proposal: **What would Madrid be like if we had to rearrange it within the space of just a couple of blocks to make way for a wilderness in the rest of the territory?** Students of design, architecture and film in Madrid will work together with artist **Liam Young** and with urban planners, scientists and other agents to develop this exercise of densification of Madrid and to build possible narratives for the pilot episode of the series. The sessions will focus on the co-creation of parts of the episode's **storyboard** that will be presented at an **open studio** on Saturday **22 February**.



IMG ↑ LUKASZ MICHALAK

# 5TH ISTANBUL DESIGN BIENNIAL

↳ From 26 October to 8 November

The prototypes of the Cyborg Garden and the IMNA's programming will travel to Turkey this year to participate in the **5th edition of the Istanbul Design Biennial**. Curated by Mariana Pestana and entitled **Empathy Revisited: Designs for More than One**, the biennial explores the structures of collective empathy from design and ways of

designing that take into account more than one perspective, dimension or body. Under a post-human philosophical perspective and in the face of the new technological horizon, the biennial proposes an exhibition, an Observatory, and a programme of activities, Kitchen.

# IMNA X TENTACULAR

↳ From 19 to 21 November

As part of Climate-KIC's Deep Demonstrations of Clean and Healthy Cities, which aims to transform Madrid into a city with zero net emissions by 2030, the IMNA promotes cultural innovation projects for cities. Together with other European cities, Climate-KIC supports Madrid as a city that is demonstrating a change towards more sustainable models. Unlike other cities where the transformation process is led solely by public authorities, scientific research centres and companies, Madrid has a partner for the initiative in the cultural sector, none other than Matadero Madrid, through its Mutant Institute.

The Madrid Deep Demonstrations (MDD) initiative proposes the creation of a working model of

multi-stakeholder collaboration to develop a portfolio of projects adapted to the current context of Madrid. Its objective is to design and deploy interconnected interventions that will make it possible to link mobility, urban energy renewal, new forms of regulation, and greening and health as vectors for the urban planning and decarbonisation of the city of Madrid. These interventions seek to promote employment through the generation of new models of financing and territorial co-management, the recovery of industrial land and the increase of biodiversity. They also seek to bring about a change in how society perceives the natural environments that are necessary for the well-being of our species.

# IMNA x Intermediae: climate emergency and territory

## ARGANZUELA 2059

*ARGANZUELA 2059.* Fictions against Climate Change is a project of collective artistic creation and dissemination on the theme of climate change that seeks to generate new narratives on the need to accept the fact that global warming is one of the greatest challenges facing citizens today. Structured around a series of **collaborative workshops in**

**which the residents of Arganzuela work alongside artists**, radio professionals, scientists and environmental activists, the project generates a series of guerrilla materials (posters, illustrations, stickers, comics, stencils, radio spots...) and actions designed to raise awareness of the fight against climate change in the district's mindset.

## ARGANZUELA ECOSYSTEM

The aim of the Arganzuela Ecosystem project is to reconnect local residents with their natural environment, the neighbourhood, through an artistic practice based on citizen science as a method of analysing climate change. And, through it, to weave a bond of affection between the neighbourhood and its natural environment. To do this,

they develop a narrative centred on the Arganzuela neighbourhood as a natural ecosystem in the city of which its inhabitants form part, and they participate directly and indirectly in it, fostering a community that is aware of the environment and the effects of climate change.





IMG ↑ MATADERO MADRID / BEGO SOLÍS



IMG ↑ LUKASZ MICHALAK

## SEED EXCHANGE BANK

The Seed Exchange Bank is an initiative aimed at **decentralising the control of seeds** and it is also a way of questioning the management models that we generate or of which we are a part in culture and in life. **It will celebrate its tenth anniversary in 2020.** Based in Intermediae, its mission **is not to conserve but to exchange seeds**

and with them the knowledge accumulated around them. The Seed Exchange Bank is also intended as an initiative to promote food sovereignty and a critical review of how proprietary seeds are exploited and genetically modified to give higher yields in all climates and situations.

## WHAT ARE WE HARVESTING? BIODIVERSITY FORUM

**The Biodiversity Forum is an annual meeting** that brings to Matadero the tradition of the **harvest celebration**, giving new meaning to and symbolising this very important moment in the life of a community. Its objective is to allow people to share different types of experiences of

horticultural production within the framework of food sovereignty, with the participation of various experts, from such disciplines as botany, biology, environmental activism, ecology or ecofeminism, among others, and from the recognition of old and new knowledge.

The IMNA operates through an interdisciplinary network promoted by the Centre for Innovation in Technology for Human Development of the Polytechnic University of Madrid (itdUPM); Madrid City Council, through its Environment and Mobility Department; and Matadero Madrid itself. This work platform promotes the Climate-KIC project in Madrid, Deep Demonstrations of Healthy, Clean Cities: an initiative of the European Institute of Innovation and Technology that seeks to support cities demonstrating change in order to guarantee a resilient future of zero net emissions in 2030.

The IMNA is supported by the Daniel and Nina Carasso Foundation as part of its Compose Knowledge programme to understand contemporary challenges.



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**Idea and co-direction::** *Matadero Madrid*

**Co-director and curator:** *Amanda Masha Caminals*

**Co-director and curator of the Cyborg Garden:** *Elii [oficina de arquitectura]*

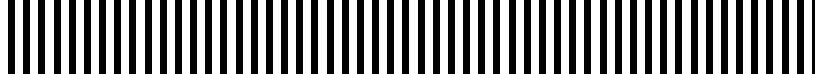
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**The following bodies collaborate with the Institute:** Banco de Sabadell Foundation, Laboratory for Environmental Narrative Strategies (LENS UCLA), Experimental Architecture Group, Centre for Research in Animal Cognition of the Centre National de la Recherche Scientifique of the University of Toulouse (CNRS), Area of Biodiversity and Conservation of the University Rey Juan Carlos, Greenpeace Spain, Extinction Rebellion Spain, Cineteca Madrid (film archive), Intermediae Matadero, Matadero Centre for Artistic Residencies and many others.



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