



F U N D A C I Ó N  
Q U E R E R

PROPOSAL FOR A PROJECT

Magical Nature: A Therapeutic Garden

**GENERAL DATA**

PROJECT NAME	Magical Nature: A Therapeutic Garden
DATE OF SUBMISSION	May 2024
DURATION OF THE PROJECT	Between 9 and 12 months
PROMOTORS / PROJECT DIRECTOR	Querer Foundation - Multidisciplinary Cabinet

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## 1. SCOPE

### CONTEXT

The Querer Foundation is a non-profit institution dedicated to education, research, dissemination and social awareness related to children with special educational needs derived from their neurological diseases.

On average, there are 8 to 10 per cent of children with learning difficulties in each country. In Spain, these data are corroborated by the statistics on students with specific educational support needs of the Ministry of Education of Spain, which shows in recent years an increase in students with these characteristics and represents between 8% and 10% of the total number of students. Of these, approximately 30% have special educational needs associated with disability or severe disorder.

With the aim of helping with this problem, the Querer Foundation opens the Multidisciplinary Therapies Cabinet, which is a clinical-educational intervention center where three areas of differentiated activity are offered:

- Evaluation unit
- Therapeutic Care Unit
- Socio-Family Care Unit

Our services, until now, have been offered to people from 0 to 18 years old with rare diseases, developmental disorders, with disabilities or risk of suffering from it. This comprehensive multidisciplinary intervention is coordinated by different professionals (doctors, psychologists, psychopedagogues, speech therapists, occupational therapists, physiotherapists and social workers) with the minor and his family.

The cabinet is located in La Florida, a wonderfully quiet and green residential neighborhood on the outskirts of Madrid. It opened its doors in 2019 with the aim of supporting children attending the school "El Cole de Celia y Pepe," which was established in 2018. Additionally, it aims to provide specialized assistance to children from nearby urban centers and neighborhoods who suffer from neurological disorders.

During the pandemic, the Department of Psychology of the Multidisciplinary Cabinet created a free channel aimed at children between 3 and 12 years of age, with explanatory videos: 'El Cole en Casa', with the aim of helping families to cope significantly with the impact of the quarantine months.

Likewise, we have developed specific talks and courses in City Councils of the Community of Madrid. In 2020 Querer Foundation collaborated with the Department of Family of the Municipality of Boadilla del Monte, providing an 'online workshop cycle for parents with children with neurodevelopmental problems'.

In 2021, the Psychoeducational Support Program for Families was created for the Department of Family of the City of Pozuelo de Alarcón through three different actions: group training sessions for families in a series of "Growing in the Family" conferences, individual psychological support sessions for families, and group therapeutic support sessions for children. Subsequently we have created the Friends Club so that children with neurological needs can carry out socialization activities outside their school and their usual therapies.

We have also increased collaborations with Town Halls and Universities within the Foundation's Training Department, giving courses to educators and therapists in different points of the Spanish geography such as Catalonia or the Canary Islands.

## JUSTIFICATION

As part of our commitment to the integral development of people with neurological disorders, we are pleased to present the project ***Magical Nature: A Therapeutic Garden.*** This project is based on the premise that a stimulating and enriching environment is crucial to promote the cognitive, emotional and physical development of people with special needs. Through the integration of carefully selected sensory elements, our sensory garden seeks to provide a safe and conducive space for exploration, learning and play.

There are numerous studies that talk about the benefits of contact with nature in people with special needs:

- **Hussein, 2010; Lautenschlager & Cherry, 2007:** gardens increase people's ability to work in groups or participate in teamwork.
- **Funkenbusch and Downs, 2010:** Gardening, when used as a muscle-strengthening activity, can help cultivate fine and gross motor skills.
- **Hartig, 2003:** Gardening provides the environment for self-regulation.
- **Taylor, Kuo, and Sullivan, 2001:** Green environments increase attention span in children with Attention Deficit Disorder.
- **Justin Wilson, 2012:** Those who work in the garden, or were gardeners their entire lives, have fewer cases of depression than their non-gardener peers.

## PROPOSAL FOR A PROJECT

Our vision is to set a benchmark in the creation of sensory spaces adapted to the needs of **children and adults with special needs**. We aspire to be recognized as leaders in promoting physical and cognitive development through the implementation of this innovative and high-quality sensory garden, which inspires other communities to adopt similar approaches for the benefit of the population with neurological disorders.

The design of the Sensory Garden is based on a careful selection of elements that seek to stimulate the senses of children and adults and promote their integral development. Key components include:

- **Miscellaneous textures:** Surfaces that range from soft to rough, allowing you to explore through touch and develop your sensory sensitivity.
- **Aromatic plants:** Herbs and flowers that not only stimulate the sense of smell, but also promote relaxation and emotional well-being.
- **Living Colors:** Colorful flowers and plants that capture visual attention, facilitating the development of color perception.
- **Sound elements :** Musical instruments made with recycled materials and seed pendants that emit sounds, stimulating the sense of hearing and encouraging creativity and musical expression.
- **Path of Textures:** A tour designed with different soft and rough textures, which invites children and adults to explore barefoot and experiment with touch.
- **Interactive elements :** Touch panels, sensory games and exploration areas that promote active participation and hands-on learning.
- **Safety and Nature:** Organic and safe materials that allow you to explore in direct contact with nature, while ensuring your safety and well-being.

The integration of these elements in our sensory garden offers a holistic experience that nurtures the physical, cognitive and emotional development of children and adults with neurological disorders. We firmly believe in the transformative power of a sensory rich environment and are committed to providing the tools and experiences necessary for them to reach their full potential from an early age.

This project represents a significant step towards creating inclusive and accessible spaces that promote child and adult development, and strengthen the ties between these people and their natural environment. We are excited to embark on this journey and look forward to seeing the positive impacts our sensory garden will have on their lives and the communities we serve.

## GENERAL OBJECTIVE

We know that there is a waiting list of months in Madrid to treat children with special needs in the therapy cabinets of the public social security system. Therefore, we have requested, and have been granted by the Community of Madrid the approval of Early Care Center. We have recently acquired a new building to welcome new patients referred from the Community of Madrid, in which we have built a new therapeutic gym where these children can benefit from the different therapies they need.

In this same building, which contains a garden of approximately 500 m<sup>2</sup>, we want to build a multisensory garden where children and adults can benefit from different activities that stimulate their senses as part of a multisensory therapy. A multisensory or therapeutic garden becomes another tool to ***support the integral development and well-being of children and adults with specific needs***. It offers tangible benefits in terms of sensory stimulation, relaxation, motor development and cognitive stimulation.

## SPECIFIC OBJECTIVES

- **Sensory stimulation:** People with special educational needs usually have sensory needs. A multisensory garden offers a wide variety of tactile, visual, auditory, olfactory and, in some cases even gustatory stimuli, which can help these people develop and explore their senses in a safe and controlled way. This sensory stimulation may be especially beneficial for those with autism spectrum disorders, Down syndrome, multiple disabilities, or other special needs.
- **Calm and relaxation:** Through these gardens you can experience the reduction of stress, anxiety or difficulties in regulating emotions. A multisensory garden provides a peaceful and relaxing environment where you can find peace and quiet. Water, greenery and aromatic plants can help promote relaxation and reduce alertness.
- **Motor development:** For those with physical or developmental disabilities, a multisensory garden can offer opportunities to develop fine and gross motor skills in a playful and motivating way. Planting, watering plants, exploring textures, and walking trails can help improve coordination, balance, and muscle strength.
- **Cognitive stimulation:** The natural and dynamic environment of a multisensory garden provides numerous opportunities for experiential learning and active exploration. You can learn about nature, the life cycle of plants, ecology and other concepts through practical and observational activities.
- **Language development:** In the field of language and communication, the program will focus on stimulating the development of receptive and expressive language

by associating words and gestures with sensory experiences. Verbal interaction between children and adults and professionals during sensory activities will be encouraged, thus providing opportunities for the development of language and communicative skills from an early age.

## BENEFICIARIES

We will use the different areas of the multisensory corner with people between 0 and 90 years dementia.

Among children and young people, it is intended for children with social, emotional or cognitive difficulties derived from neurodevelopmental disorders, such as ADHD, ASD or learning disorders, intellectual disability and socio-emotional disorders, including anxiety, depression, phobias.

Within the group of adult patients, it is intended for intervention with people with mental health disorders (anxiety, depression, etc), and sequelae derived from neurological disorders (stroke, tumor, head trauma) and dementias in the case of elderly patients.

## 2. EQUIPMENT AND INSTITUTIONS INVOLVED

Entity	Name and position in the project	Liability
Agronomists and Architects  Company to be decided (Simbiotia, Juan XXIII Foundation or DOIT multisensory)		Visit of the garden. Knowledge of the environment and users. Creation of the project adapted to these users. Presentation of the project and adaptation to the budget.
Works and Services TAGA  Landscaping and sustainability experts	Violeta Roch  Forestry engineer. Dept. Technician	Implementation of the project carried out by agronomists and specialized architects. Phases installation of irrigation, lighting, unnatural elements and natural elements. Adequacy to the budget.



Multidisciplinary Cabinet, Fundacion Querer	Sara Herrero  Director of the Cabinet, Psychologist.	Coordination of the project with the entities involved. Decision-making together with the management of the Querer Foundation. Coordination of training, creation of activities, identification of indicators.
Multidisciplinary Cabinet, Fundacion Querer	Team of therapists	Receivers of training. Creation of activities and implementation with users.
The Querer Foundation	Eva Revuelta  Dir. Communication and PR	Advertising campaign, image and publications in RRSS.

### 3. DURATION, COMPONENTS AND ACTIVITIES

What		Estimated Planning								
Component / Activities		2024						2025		
		Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
STEP 1: PROJECT DESIGN										
1.1	Appointments with potential companies, creation of the final project									
1.2	Signature of contracts									
STEP 2: IMPLEMENTATION										
2.1	Implementation works				1	2	3	4		
STEP 3: TRAINING OF PROFESSIONALS AND CREATION OF ACTIVITIES. METHODOLOGY										
3.1	Professional training therapists									
3.2	Creation of activities									
3.3	Identification of measurement indicators									
STEP 4: STARTING AND CONTINUOUS MAINTENANCE. BUSINESS MODEL										
4.1	Launch with patients									
4.2	Advertising and communication									
4.3	Hiring of a company for maintenance of the garden									

## 4. BUDGET

We detail below the estimated budget for the project. We have spoken with three companies that can potentially offer us the necessary services and we have included a tight price range.

ACTIVITY	COST
Creation of the Therapeutic Garden project	€20,000
Implementation of the garden in stages	€60,000
Irrigation	
Lighting	
purchase and installation of non-plant material, including signage	
plant material installation	
wooden house	
Training and creation of activities	€6,000
Maintenance contract - (biannual)	14.000 €
Communication and advertising	€4,000
<b>TOTAL</b>	<b>€104,000</b>

## 5. POSSIBLE THREATS AND SOLUTIONS

We have identified as a possible threat that families who come with patients to the cabinet will also want to make use of the garden. This can be a problem, due to the lack of guarantees that they use it correctly, that the accessories can be broken without the therapists knowing, etc.

For this we consider it convenient to close the areas of therapeutic garden with a fence that shows the limited and exclusive access to the users of this.

## 6. COMMUNICATION STRATEGY

Once the project begins, press releases and actions will be made visible on the social networks of the Querer Foundation, as well as progress and completion of the project.

Additional communication actions with the funding entities may be negotiated with the communication department.

## 7. MONITORING, REPORTING, EVALUATION AND INDICATORS

The monitoring of the project will be carried out by the Management of the Querer Foundation and the Management of the Multidisciplinary Cabinet.

Each stage includes several documents that will be used for monitoring and evaluating the implementation of the project by stage.

There are two specific milestones marked in red on the schedule:

- The signing of contracts, which is estimated for September 2024, once the management of the Querer Foundation approves the project and budget to be implemented.
- The launch with patients, estimated for January 2025, with the whole year ahead to make the most of it.

The management of the Querer Foundation, together with the management of the cabinet, will have the necessary meetings with the companies they implement once stage 2 has begun. There will also be technical team meetings in stage 3 for training, the creation of activities and the identification of indicators to measure the effectiveness of this therapy.

## 8. METHODOLOGY/ IMPLEMENTATION

The implementation of the project will be carried out in four stages:

### **STEP 1: PROJECT DESIGN**

**JUN – SEP 2024**

This first stage focuses on the creation of the garden, seen from the point of view of creating an agricultural architecture design project. In Spain there are only three companies that carry out this type of project, and we have spoken with all three.

There are two outside Madrid, and one located in the city. During the month of June we will invite companies to come and see the landscaped space in person. We will meet with them to explain the profile of beneficiaries who will make use of the form garden and ask them to create an ad-hoc project for those needs.

Once the projects are received, the Querer Foundation will decide the project that best helped our needs. Next, the Querer Foundation will sit down with the garden implementation company to close with them the purchase of the necessary materials for the implementation, from irrigation to the necessary therapy elements. If there is something to modify, add or delete, we will bring the two companies together for coordination.

We have estimated that, in September, we will be able to sign the contract with both companies.

## **STEP 2: IMPLEMENTATION**

**SEP – DIC 2024**

During the second stage, the contracted entities will coordinate and organize the work of preparing the space for the implementation of the garden. These include clearing the ground and bringing in new land. Install irrigation, lighting, prepare the relevant signaling in each therapeutic area, implementation of the elements.

### **Among the elements that the project will need we will have:**

1. Plants and Flowers:
  - Variety of aromatic plants, colorful and with different textures.
2. Materials for Construction:
  - Wood, stones, substrate, materials for touch and interactive panels.
3. Decorative elements
4. Gardening Tools
5. Furniture:
  - Benches, small tables, soft swings, cushions.
6. Signage and Educational Materials:
  - Labels, posters with information about plants, appropriate educational materials.
7. Way of Textures:
  - Recommendation not to use footwear.
  - Soft textures: sand, earth, etc.
  - Rough textures: basic grains, stones, etc.

### **STEP 3: PROFESSIONAL TRAINING AND CREATION OF ACTIVITIES: METHODOLOGY-DIC 2024**

In Madrid, there is only one garden similar to the one we want to create. This garden is in a special education school and the therapists who work there are practically the only ones who have begun to create specific activities for this group of users.

We have already applauded with them the possibility of training our cabinet professionals. And these, once formed, will begin to create our own activities not only for children and adolescents but also for adults.

A total of 12 therapists from the multidisciplinary office will make use of this therapeutic garden:

- 2 neuropsychologists,
- 3 psychologists,
- 4 speech therapists,
- 4 occupational therapists,
- a physiotherapist,
- a Psychopedagogue and
- a language therapist.

### **METHODOLOGY**

To assess the positive effects of the use of this therapeutic tool, which will be used as a complement to other intervention techniques, we will make measurements in the specific aspects to work within the intervention plan of each patient, so that we can see the impact of the use of the garden on the domains that have been worked on.

Thus, in those cases in which we work from areas of mental health we will apply questionnaires related to the feeling of well-being, which allow us to measure if there is a positive perception in the mood of the person.

From areas of neurological rehabilitation or cognitive stimulation, we will use tests at the beginning of the intervention and at the time of high therapeutics that allow us to assess the evolution at the cognitive, motor and sensory level and we will pass these tests again at the time of therapeutic discharge.

In the processes of cognitive deterioration, these pre-post measurements will not be possible, but the impact on the quality of life of the person will be possible, through self-reports of emotional well-being, scales and questionnaires completed by family members and main caregivers.

This tool can be used, as a complement, in the following areas and with the following uses:

- **Stimulation of language:** speech therapists and the language therapist will be able to use the different areas of the garden to work on aspects related to the expression and understanding of language.
- **Cognitive stimulation:** Neuropsychologists will be able to use the different areas of the garden to stimulate, maintain and rehabilitate the different cognitive functions through tasks of attention, memory, organization and planning.
- **Sensory stimulation:** the occupational therapist will use the different areas and elements of the garden to stimulate the senses, proprioception and the vestibular system
- **Psychology:** from the area of psychology psychologists will use the different areas as relaxation vehicles
- **Physiotherapy:** the physiotherapist will carry out activities to promote development at the motor level using paths and garden elements.

#### STEP 4: STARTING AND CONTINUOUS MAINTENANCE:

##### BUSINESS MODEL

DIC 2024 – FEB 2025

In the last stage, we will begin therapies with our patients.

Therapists will identify, according to patient profiles, the activities that can gradually be included as a reinforcement tool in the garden. This moment will be the most important milestone: the beginning of the use of the therapeutic garden with patients.

##### **BUSINESS MODEL**

We know that the garden will need important maintenance for most of the year, with expenses that we will have to cover and we hope, over time, to be able to improve the facilities and adapt new activities to the needs of the different profiles that come to the cabinet. With this in mind, we have thought of offering the use of the garden, always through our therapists, to other schools for children with special needs, to nursing homes, etc.

It is a unique therapeutic “product” in Madrid – since the other one that exists is only for a special education school, so we think that its demand, once known, can be significant.

We already know that the multisensory garden will be used by El Cole de Celia and Pepe, so that their students can also benefit from the different areas of this space to perform stimulation of cognitive functions, language stimulation, sensory, relaxation through areas intended for calm, assemblies or outdoor classes. The frequency with which the students will visit the garden, always accompanied by a therapist, will be weekly, attending one class at a time.

And we hope to be able to make similar agreements with other schools, so that we get the maximum use and potential out of this garden.

We will launch a major promotional campaign targeting these organizations, starting as early as December and extending for at least three months.

We must also ensure at this stage the signing of a maintenance contract for the garden.

## 9. EVALUATION AND CLOSURE

After the completion of the last stage, the creation and implementation of **Magical Nature: A Therapeutic Garden** will be completed, and it will have a continuation in time through the therapies that will be carried out there with the patients (children, adolescents and adults) who attend the Multidisciplinary Cabinet.

Likewise, it would be of great interest, over time, and after seeing the results, to share with the scientific and school community these successfully proven interventions, since there are very few published studies about the benefits of this type of therapies in the field of special needs.