

"Historic societies adapted, transformed themselves and thrived through ecological challenges to coevolve." -Peter Sagaard

The Ark is an integral project that aims to transform urban development, bringing together the **entire northern region** as a creative solution to **climate challenges**. It introduces the visionary 'Gaia 2.0 System', through **evolution**. Inspired by deep ecology philosophy, fostering **planetary self-regulation**. This architectural project incorporates innovative solutions, ranging from structural **biological** technologies to **temporary aerostatic cities**, with specific plans for **regeneration of natural resources**.

**WHAT**

**ANTHROPOCENE**  
The human being as the highest part of the hierarchy

**BIOCENE**  
Network of living beings where humans are part of

**HOW**

"Think globally, act locally." -Arne Næss

**DEEP ECOLOGY**

**HUMAN CONSCIOUSNESS**  
**INTERCONNECTION**

"Cities need to be repaired, not rebuilt from the start" -Ricardo Bofill

**WHY**

**POLITICAL SYSTEM PLUTOCRACY**  
Establish a hierarchical system by electing representatives for each station, thereby constituting a council with a single representative from each station.

**CENTRAL STATION**  
Main of 11 stations.

**STATIONS SOCIAL SYSTEM**

Each station has a **role** within the economic model that seeks to **reduce waste** and maximize the efficient use of resources.

**GLOBAL ORGANIZATION**

**MUTANT MICROORGANISM**  
Genetically modified bacteria to accelerate soil regeneration and vegetation production

**BALANCE**

**DEEP ECOLOGY**

**WHY**

**HOW**

**WHAT**

**HOW TO EVOLVE?**

**WHY**

**HOW**

**WHAT**

**HOW TO EVOLVE?**

**WHY**

**HOW**

**WHAT**

**HOW TO EVOLVE?**

**WHY**

**HOW**

**WHAT**

**HOW TO EVOLVE?**

**WHY**

**HOW**

**WHAT**

**HOW TO EVOLVE?**

**WHY**

**GRAPHCAST**

AI early warnings of extreme weather events

**CRISPR-CAS 9**  
Genetic editor instrument

**BIOURBAN**  
Ing. Carlos Morroy  
Device that uses algae to catch CO2 from the air

**ALPHAFOLD**  
AI identifies protein mutations

**GAIA 2.0 SYSTEM**  
Think globally

**GENETIC ADAPTATION**  
Act locally

**TRANSUMANISM**

**GENE MUTATION**  
Symbiosis: AI, biotechnology, human mind

"Administration planetary through which humans add awareness of themselves to self-regulation of Earth System." -Lovelock, Margulis

**GLOBAL SYSTEM FOR EARTH**  
**SOCIAL SYSTEM**  
**LAND MANAGEMENT**  
**ECO SYSTEM**

**EVOLVE**  
EVOLUTIVE PROCESS CONCEPT

**ATMOSPHERE**  
**GROUND**  
**OCEAN**

**TRANSPORT**  
**HOUSING**  
**PUBLIC SPACE**

**TEMPORARY HABITAT**  
**NATURAL RESOURCES**

**MACROSPHERE**  
**MICROORGANISM**  
**WASTE**  
**AIR**  
**WATER**

**BIOLOGICAL ADAPTATION**  
**ADN MUTATION**  
Address the deficiency of vitamin D by employing genetic editing on the gene associated with oxygen deprivation, which plays a crucial role in supporting metabolism.

**PHYSIOLOGICAL ADAPTATION**  
**ROBOTIC PROTESIS**

**LIFESTYLE ADAPTATION**  
**MOVING THROUGH THE HABITAT**  
Connections between the aerostatic city and the regenerative ring on the ground through a spacial elevator.

**LIFESTYLE HABITAT**  
Modular **spherical** housing with **sensors** for human comfort

**HUMAN ADAPTATION**

**URBAN METABOLISM**

**Regulator of CO2**  
**SOLAR ENERGY**  
Solar collector  
**GEOTHERMAL ENERGY**  
Power plant  
**WIND POWER**  
Marine turbines  
**BIOENERGY**  
Algae biodiesel



### MEDICAL LAB

Campaing before entering THE ARK



MAIN CONCEPT FOR EVOLVING

### DNA SEQUENCE

Method



NORMAL GEN

### CRISPR

Gen editor



MUTATED GEN



MUTATION PROCESS

IMPROVED ORGANS

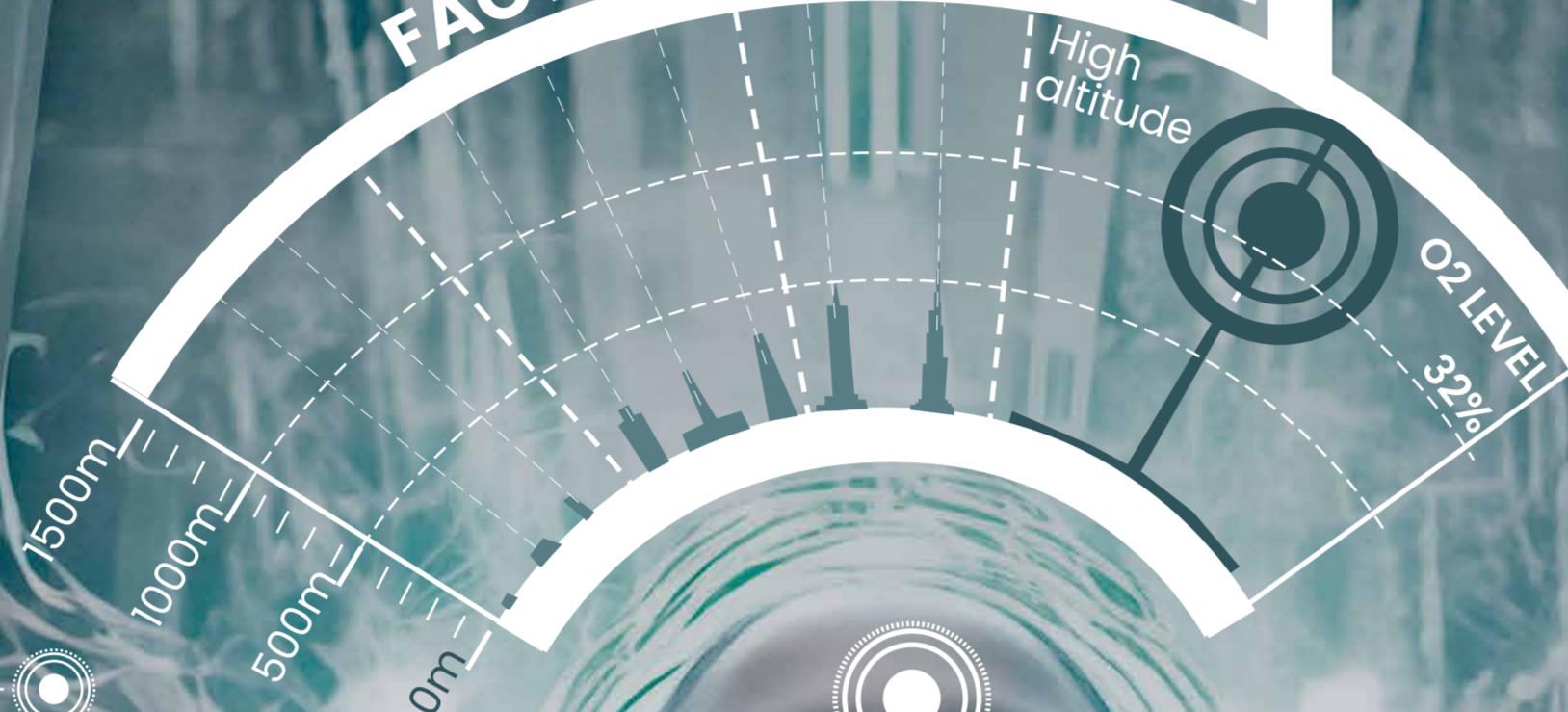


MUTATION IN HUMANS, BACTERIA AND PLANTS

# BODY SCALE

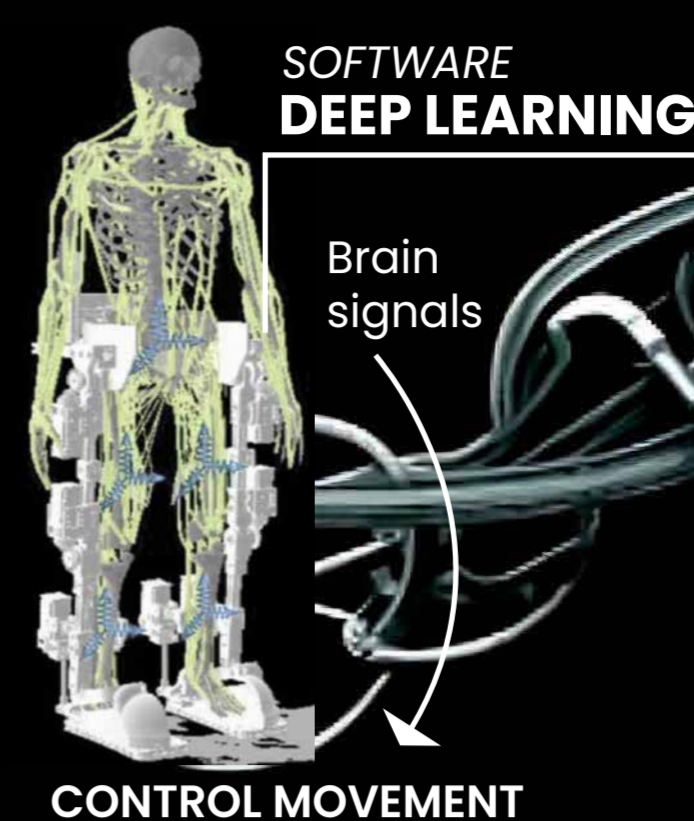
Evolution focus on **biological adaptation** and genetic to face challenges living on high altitud. Through **biological evolution structural** and the help of artificial intelligence in medicine.

## FACTORS TO ADAPTATE



## PERFORMANCE OPTIMIZATION ROBOTIC PROSTHESIS

Advanced devices designed to improve mobility and performance in daily activities



## ADAPTIVE GENES EGLN1 - PPARA GENES MUTATION

genetic variants can contribute to improved breathing and increased resistance to hypoxic conditions at high altitudes.



### HYPOXIA RESISTANCE

Improve the lungs' ability to uptake and use O2



### LOWER RISK CARDIO DISEASE

Influence on the metabolism and heart function



### COGNITIVE ABILITY

Increased oxygen availability in the brain



### STRONGER IMMUNE SYSTEM

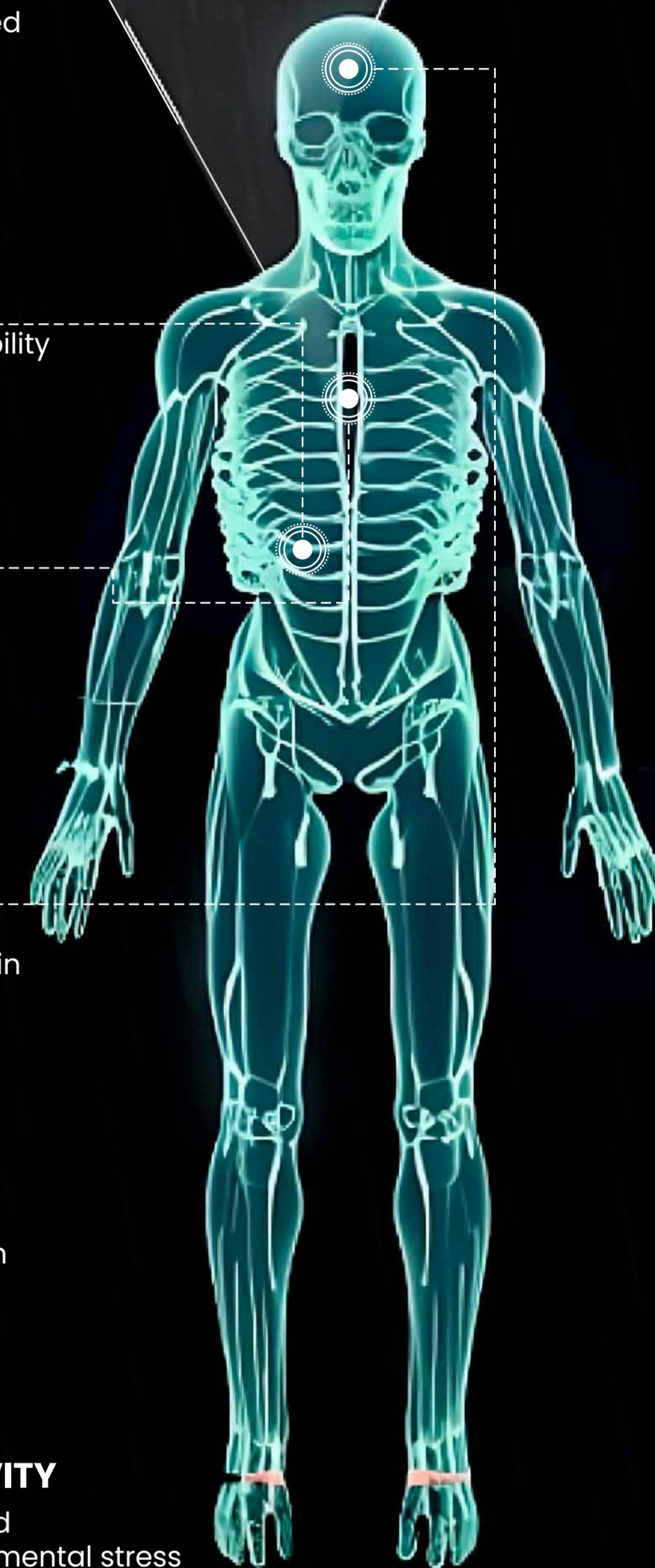
Greater availability of oxygen in the brain



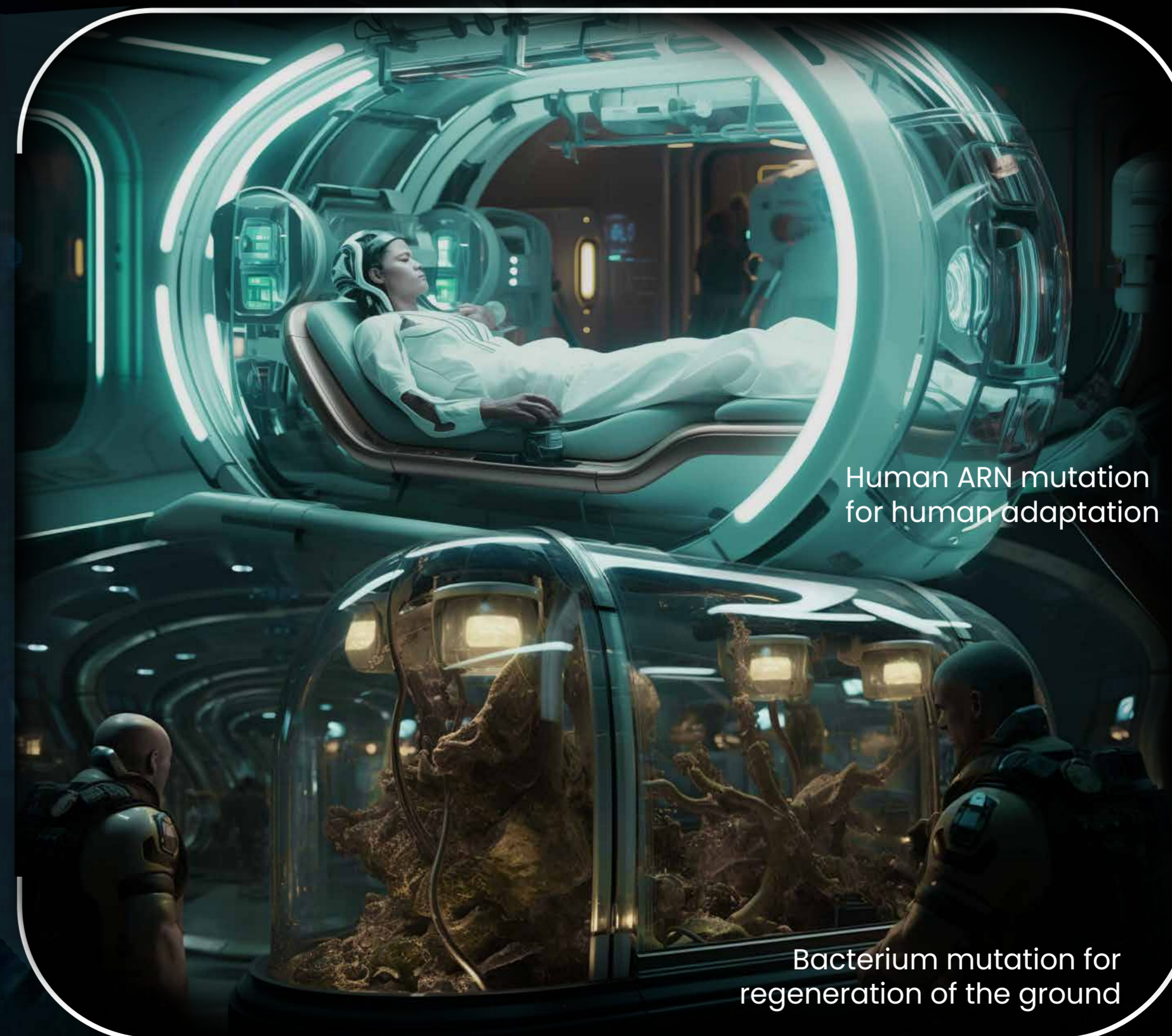
### GREATER LONGEVITY

Easier adaptation and resistance to environmental stress

PHYSIOLOGICAL ADAPTATION



## MEDICAL HUB



Human ARN mutation for human adaptation

Bacterium mutation for regeneration of the ground