ADVANCING HUMAN *Spaceflight*

THE WORLD'S BIGGEST ANALOG

An international collaboration to unite the world's analogs through a unique and historical mission. A coalition of experts tackling the challenges of living and working in space.

www.worldsbiggestanalog.com

SPACE IS A TRILLION $ MARKET

Due To An Increasing & Permanent Human Presence In Space

Global space tourism market size was valued at **USD 695.1 million in 2022.** It is expected to expand at a compound annual growth rate (CAGR) of **40.2% from 2023 to 2030**

NASA Artemis program & Lunar Gateway - plan for Artemis 4 to dock with Lunar Gateway in **2027**, with future yearly landings on the Moon thereafter

The space industry is on its way to **$1 trillion** in revenue by **2040**

IN THE NEAR FUTURE THERE WILL BE SETTLEMENTS IN SPACE

We are going beyond "the first crew on Mars" and preparing for early outpost ecosystems

BUT THERE ARE CHALLENGES WITH LIVING & WORKING IN SPACE

SOLUTION

WE TACKLE THESE CHALLENGES BY SIMULATING THE OUTPOSTS USING HABITATS HERE ON EARTH

NASA has been using analog missions since the Apollo days

HABITAT LOCATIONS

THE WORLD'S BIGGEST ANALOG

How will we live and work in Space?

Primary goal:
To conduct rigorous science, collaborative research and develop protocols.

Secondary goal:
Raising awareness via media and to educate online & in schools. Individuals will be able to participate around the globe.

A GLOBAL COLLABORATION

This will be the largest Space analog mission carried out in history and the only one simulating multiple outposts, making WBA the first of its kind. This mission will create a game-changing impact and leave a lasting legacy.


1 Month Simultaneous Mission Sept 2025
Central Mission Support Over 40 Staff
Global Habitats 60-100 Crew At Least 10 Habitats
Collaborative Research Comms Protocol Cross Cultural
Largest Coalition Of Experts
Global Educational Program
Product Testing
WORLD'S BIGGEST ANALOG
Scientific Publications
Advertising
Standard Protocols / Global Coordination
Sponsors
Documentary Film
Game / VR
Social Media Content

WHY US?

COMPETITIVE EDGE

We are the largest and only coalition of professionals and organisations, dealing in advance with the challenges of living in inhospitable environments

WORLD'S BIGGEST ANALOG COMMUNITY WITH OVER
12 HABITAT MEMBERS

LARGEST SPACE ANALOG MISSION UP TO TO
100 CREW SIZE

Advanced

The Core team made up of experienced habitats, agencies and mission organisers e.g.

OeWF - Austria
MDRS & FMARS - USA & Canada
HI-SEAS - USA
Lunares - Poland
AATC - Poland
Habitat Marte - Brazil
Iceland Space Agency - Iceland
Astroland Agency - Spain
Hydronaut - Europe
D-MARS - Israel
SAM - USA

Intermediate

Newer habitats and mission organisers across the world e.g.

Middle East
Asia
Caribbean
Australia/South Pacific
South America
Africa

Beginner

Education & Outreach allowing the participation of individuals across the globe from any country or demographic

Creating exercises and content for world-wide space enthusiasts.

EXPERIENCED TEAM

Director

Jas Purewal
Executive Director of The Analog Astronaut Foundation

Science/Research

Dr. Adriana Blachowicz
NASA JPL

Dr. Brandy Nunez

Training

Emily Apollonio
CEO
Interstellar Performance Labs

Gal Yoffe

Disaster/Risk Management

Dr. Jenni Hesterman

Safety/Medical

Dr Deepa Bangaru-Raju

Dr Dhivya Bangaru-Raju

Emerging Culture

Brenda Trinidad

Accessibility

Dr. Sheri Wells-Jensen

Education

James Burk
Director of MDRS

Outreach/Marketing

Robin Taber

EXPERIENCED TEAM

Advisors

Gernot Groemer
Director of OeWF

Trent Adams

Kai Staats
Director of Research
for SAM at B2

Dr. Miroslav Rozloznik
CSO Hydronaut Project

Agata Mintus
Director of Research at
Lunares

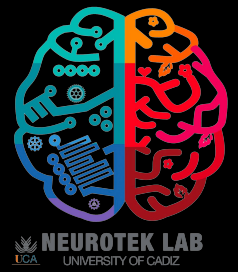
Leszek Orzechowski
Director of Lunares

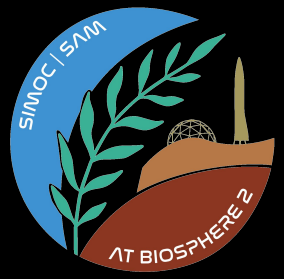
Manuel Liera Casanueva
Research Director Astroland
Agency

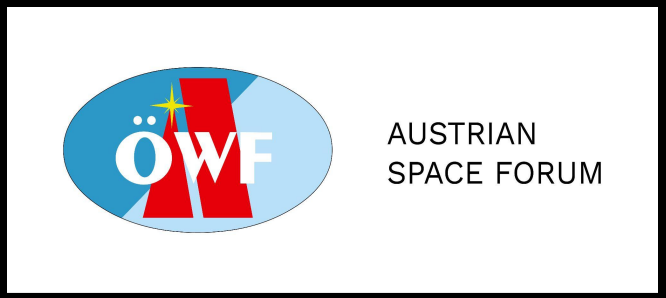
Prof. Julio Rezende
CEO Habitat Marte

Henk Rogers
Director HI-SEAS

OUR PARTNERS





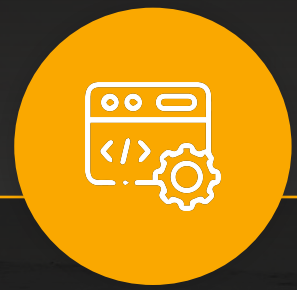


BENEFITS TO PARTNERS / SPONSORS

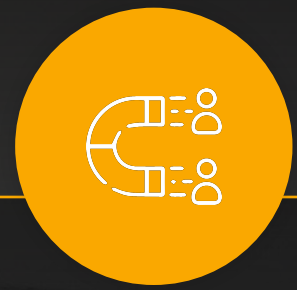
Being part of the **first** ever global collaborative space analog and historical mission.

Leaving a lasting **legacy** and educating future generations.

Innovative R&D activities that will shape the way we work and live in space.



Fast track the development of your local space exploration industry.



Take the **lead** in the exponentially growing private space exploration market.

Information for Researchers

Each habitat and participating mission will have 6 crew members on average. There will be some exceptions to this. With at least 12 participating habitats and more being added, we expect a total crew sample of over 60.

For the majority of habitats, we are able to control the crew's diet, exercise program and schedule.

Given the right IRBs are in place it will be possible to take biological samples from the crew, such as blood, saliva and urine. The majority of the participating habitats have fridge/freezers to store samples.

With prior knowledge, it may be possible to have additional equipment present across the habitats for specific research projects.

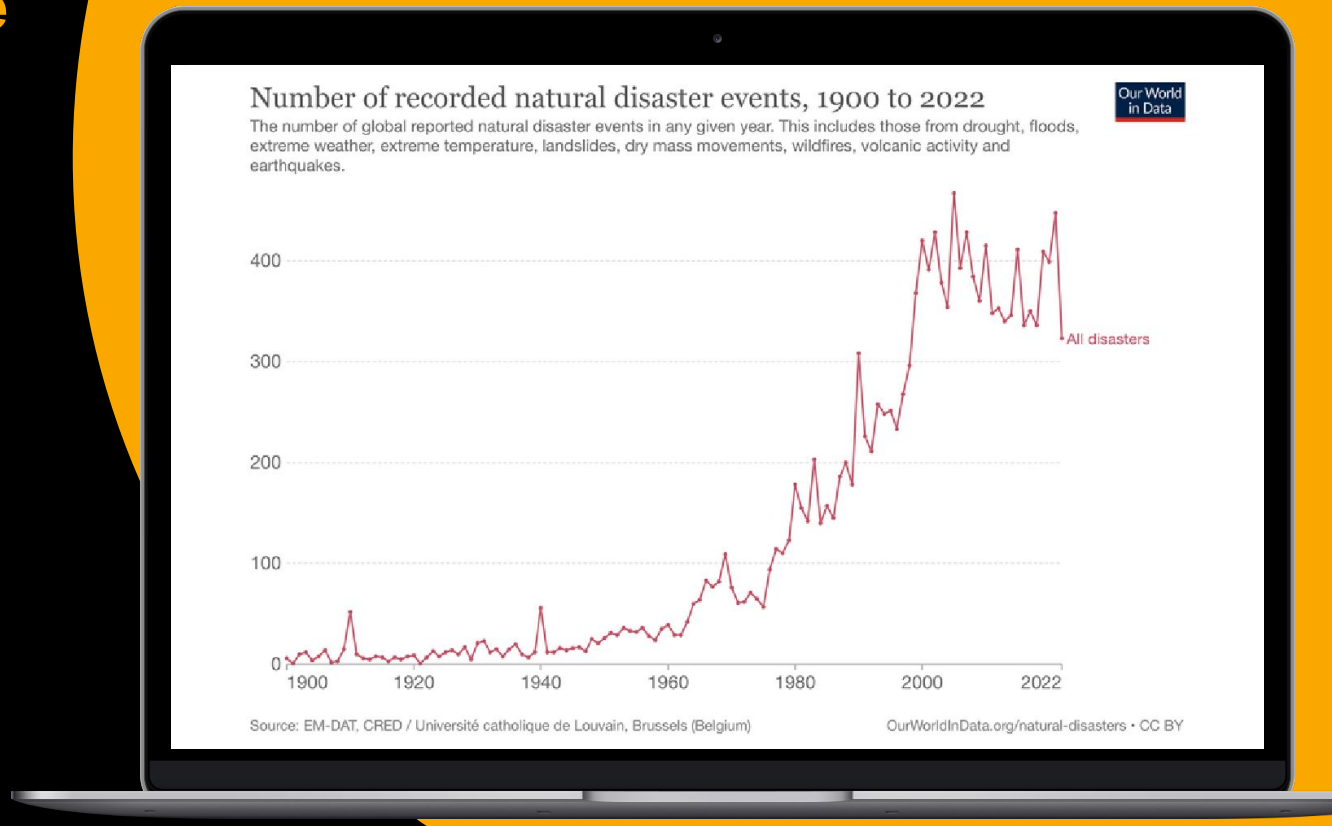
Please specify the equipment that would be required for your research when applying via our website www.worldsbiggestanalog.com

TO JOIN US
VISIT
worldsbiggestanalog.com

ADDITIONAL SLIDES…

Additional Benefits for Earth & Space

- Global natural disasters are increasing in frequency and severity, so the development of innovative equipment for better disaster assessment and aid management is necessary.
- Considering the ever growing population of Earth and the ever decreasing resources available, self-sufficiency and sustainability have become important issues.
- Analog space habitats and simulations can and have been addressing the challenges of living sustainably, with limited resources.



MARS DESERT RESEARCH STATION (MDRS)

General Info

- Executive Director: James Burk
- Location: Utah, USA
- Crew Size: 6-9
- Duration: 2 weeks to 1+ months
- Cost: $3.5K professional, $2K full-time season in a degree awarding program (for 2-week mission)

Environment

- Landscape: Several sq miles of natural desert, Mars geological analog
- Slope: Variable
- Trafficability: Roads
- Surface Material: Soil, Clay, Silt, Sand, Rock, Basalt, Water
- Privacy (1-5): 5
- Temp/Humidity: Interiors heated and cooled

Research:

- True geologic Mars analog environment, complete science lab, greenhouse
- EVAs, exploration, drones, rovers, astrobiology, geology, ecology, astronomy, plant production, engineering, monitoring, emergency rescue
- Requirements: IRB approval for HF research
- Forbidden: Human factors without an IRB, anything dangerous/explosive/damaging to the environment or required dangerous chemicals to conduct, nothing illegal or medically dangerous
- Bandwidth unlimited

Accessibility:

- Visual limitations, Hearing limitations,
- Movement limitations, Height limitations
- Habitat not accessible via wheelchair

ANALOG ASTRONAUT TRAINING CENTER (AATC)

General Info

- Director: Dr. Agata Kołodziejczyk
- Location: Poland
- Crew Size: 4-6
- Duration: 1 week to 3 months
- Cost: 650 EUR per 1 week mission including pre-training, medical examinations, food, flight suits and accomodation and transport to the habitat and back, two dinners, cryotherapy, sauna

Environment

- Environment
- Landscape: Mountains, Valley, Underwater
- Slope: Variable
- Trafficability: None
- Surface Material: Basalt, Water
- Privacy (1-5): 2
- Temp/Humidity: Space heater, fan, central heat and air; dehumidifier, humidifier (all controlled by MCC)

Research:

- Space biology, space medicine, space psychology, chronobiology, endurance, human performance, group dynamics
- Requirements: safety, ethics, feasibility
- Forbidden: all experiments which does not
- follow ethics and safety

Accessibility:

- Visual limitations, Hearing limitations, Movement limitations, psychological limitations
- Someone in a wheelchair can easily navigate the habitat

LUNARES RESEARCH STATION

General Info

- Director: Leszek Orzechowski
- Location: Pila, Poland
- Crew Size: 6-8
- Duration: 2 weeks to 1+months
- Cost: 2200 Euro for 2-week mission + pre/post flight

Environment

- Landscape: Isolation Facility
- Slope: 0-15 degrees
- Trafficability: None
- Surface Material: Sand, basalt; cobbles
- Privacy (1-5): 5
- Temp/Humidity: Space heater, central heat and air; dehumidifier, humidifier

Research:

- Isolation, Full video coverage, full habitat environment and resources overview, medical and psychological overview, enclosed EVA area allowing for day/night simulations.
- Requirements: Reviewed by LunAres (procedures, consumables, equipment). Insured equipment. Ethical
- review board.
- Forbidden: Including dangerous chemicals, xplosives,
- experiments on humans without ethical board clearance, experiments interfering with whole mission structure.
- Bandwidth: 5mbs

Accessibility:

- Visual limitations, Hearing limitations, Movement limitations, height limitations
- Someone in a wheelchair can easily navigate the habitat

HABITAT MARTE SPACE ANALOG STATION

General Info

- Director: Julio Rezende (+5584999818160)
- Location: Caiçara do Rio do Vento - Brazil
- Crew Size: 2-14
- Duration: 1-2 weeks
- Cost: 170/day/participant. Regular missions (1 week): US$ 1190.
- Contact: juliofdrezende@hotmail.com

Environment

- Landscape: Mars-like Habitat / semi arid landscape.
- Slope: Mountains and a extinct volcano close by.
- Trafficability: Remote rural area. 7 km from closest city
- Surface Material: sand/ rocks
- Privacy (1-5): 4
- Temp/Humidity:Temp: 28/ Hum: 40% (normal temperature). Inside station: 23 celsius.

Research:

- Capabilities: Close Food production, lava cave simulation, Mental Health, Underwater Extravehicular Activity(UEVA), Life in Extreme Environments, spacesuits and more.
- Requirements: Fee payment, interest for research.
- Forbidden: Drug’s use, guns and not-appropriates participants with mental diseases
- Bandwidth: internet by radio. Regular quality.

Accessibility:

- Someone in a wheelchair can easily navigate the habitat

SPACE ANALOG FOR MOON & MARS (SAM)

General Info

- Director: Kai Staats
- Location: Biosphere 2, Arizona, USA
- Crew Size: 1-4
- Duration: 6 to 10 days (will expand in fall 2024)
- Cost: $1500 per team + $350 per person per day + pre-mission $100 per night stay at B2

Environment

- Landscape: Indoor Mars yard with 3200 sq-ft realism sculpted concrete crater (complete in Dec `23); outdoor Mars yard varied per team.
- Slope: Indoor Mars yard relatively flat with vertical crater walls; Outdoor Mars yard sculpted to requirement of visiting teams.
- Trafficability: None
- Surface Material: Basalt, sand, rock, boulders
- Privacy (1-5): 4
- Temp/Humidity: Total habitat temperature control by means of mini-split units.

Research:

- Capabilities: Food cultivars, plant ecology, microbiology, air quality, water quality, CO2 Scrubbing, EVA, rover, drone and terrain exploration. SAM is hermetically sealed and pressurized facility with fully functioning airlock.
- Requirements**:** At least one of the crew has graduate level research experience with one or more existing publications.
- IRB required for all human data collection. Psychology studies must be approved by senior UA faculty and conducted by a seasoned, professional psychologist.
- Bandwidth**:** Email only, with time delay

Accessibility:

- ADA approved fire warning system
- Braille tags and available 3D map; appliances pending.
- Not wheelchair accessible.

FLASHLINE MARS ARCTIC RESEARCH STATION (FMARS)

General Info

- Executive Director: James Burk
- Location: Haughton Crater, Devon Island Nunavut, Canada
- Crew Size: 6-7
- Duration: varies
- Cost: Varies (currenting 20K per person per season)

Environment

- Landscape: High arctic desert, impact crater,
- Slope: varies
- Trafficability: roads, fly in
- Surface Material: impact materials, breccia, soil, sand, water (stream and lakes), polygons, snowpack
- Privacy (1-5): 5
- Temp/Humidity: Indoors has simple heating

Research:

- Capabilities: Mars analog impact crater, extreme isolation, exploration, astrobiology, geologic and biological fieldwork, climate change research, monitoring, field laboratory
- Requirements: IRB needed for HF research, permits needed to access most of the crater, permit required for research, firearm protection when outside
- Forbidden: HF without an IRB, dangerous research of any kind,
- Bandwidth: limited

Accessibility:

- Not accessible by wheelchair