# XMELAGENLABS

#### Team

Muhammad Hunain, CEO James Secrest, CTO Joe Rico, Chemist Hari Mahesh, Business & Strategy

#### Financial Information

Company stage: Pre-seed Raised: \$180,000

Seeking: \$750,000

### **Use of Funds**

Product Development: 30% Sales & Growth: 50% Operating Expenses: 20%

# Highlights & Traction

- 2 upcoming Space Launches in Cislunar & LEO
- CTO with over 25+ years in Biotechnology R&D
- Chemist with over 20+ years in Radiochemistry R&D
- Several LOIs & MOUs
- Terrestrial & Space Applications

#### Contact

Muhammad Hunain, CEO muhammad@melagenlabs.com +1 (347) 348-6747

#### **Partners**













615<sub>SPACE</sub>



## Background

Space is increasingly becoming a densely populated frontier. There are already 12,000+ satellites orbiting Earth, our Moon, and several plants, with 24,000+ more satellites expected to be launched in the next 3 years. And it's not just machines, with more than 30 Space Tourism companies across the world, there are expected to be 100s of extraterrestrial travelers in just the next year.

However, as space becomes more populated by electronics and humans, we have to protect ourselves from the greatest danger that comes with stepping outside of Earth's protective bubble: cosmic radiation.

## Opportunity

Current industry-standard radiation shielding fails to actually protect our machinery, electronics, and humans in extraterrestrial environments.

- 1. 38% of satellites & electronic systems still fail.
- 2. Industry-standard shielding add millions to build and launch costs
- 3. Industry-standard shielding decays 3-5% annually, leading to failure before mission completion.
- 4. Within 90 days of LEO exposure, Astronauts increase the risk of developing 13 different types of cancer to 100%.

In order to achieve interplanetary status for our species, we need to step up our battle against cosmic radiation. This is

## Melagen Labs

We have developed a proprietary composite of a hydrogen-infused polymer and biomaterial to effectively shield our electronics and humans against radiation. Our proprietary composite is over 3x lighter, 2x more effective at shielding, extends the lifespan of systems by 5-7x, and helps our customers save over 63% in shielding-related launch costs.

We are currently in final terrestrial scientific trials of our proprietary composite, and we will be testing our proprietary composite in CisLunar and LEO through 2 upcoming space launches.

## **Other Markets**

- 1. Aerospace
  - I. Male pilots: 100% higher brain cancer risk.
  - II. Female aircrew: 40% higher breast cancer risk.
- 2. Medical
  - I. Lead shielding is heavy and toxic.
- 3. Nuclear Reactors