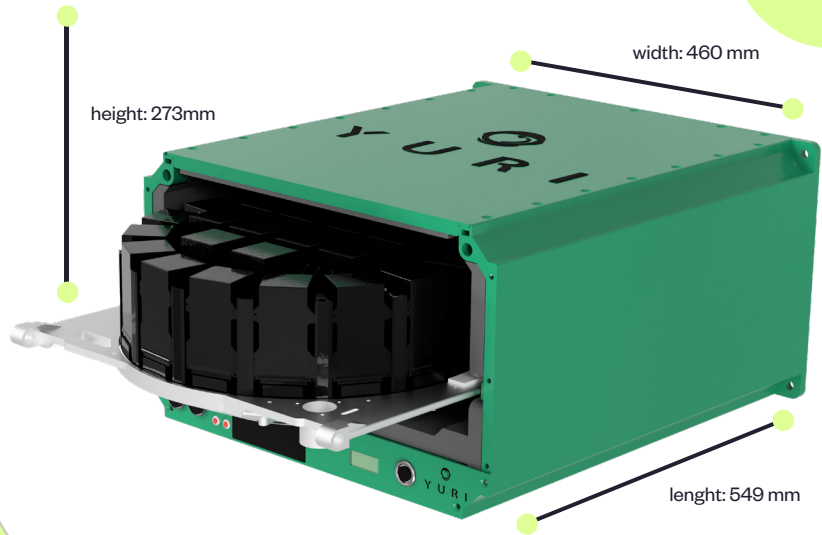
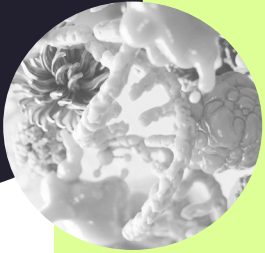


## SCIENCETAXI Your Space Incubator

**Interfaces and developments based on ISS SSP 57000 standard**

**Internal Volume:**  
length: 400mm  
width: 380mm  
height: 190mm

**Payload mass:**  
< 33 kg



## Life time

**8** years of service lifetime

## Electrical

- Power supply required from spacecraft: 75W (min) and 150W (max). Additional power can be partially supplied to ScienceShells or to enhance thermal capabilities
- Compatible with normal supply voltage (24-32.5V)
- 8P8C Modular Shielded Jack (RJ-45) data connector
- Follows ANSI/IEEE-STD-802.2 100 BASE T Ethernet standard

## Temperature

- To be cooled by an equivalent of the EXPRESS Rack Avionics Air Assembly, from which cool air is drawn via own fans.
- Temperature range: 4°C – 40°C

	Minimum	Maximum
Cooling air flow	12 cfm	36 cfm
Cooling air inlet temperature	18,3 °C	29,4 °C

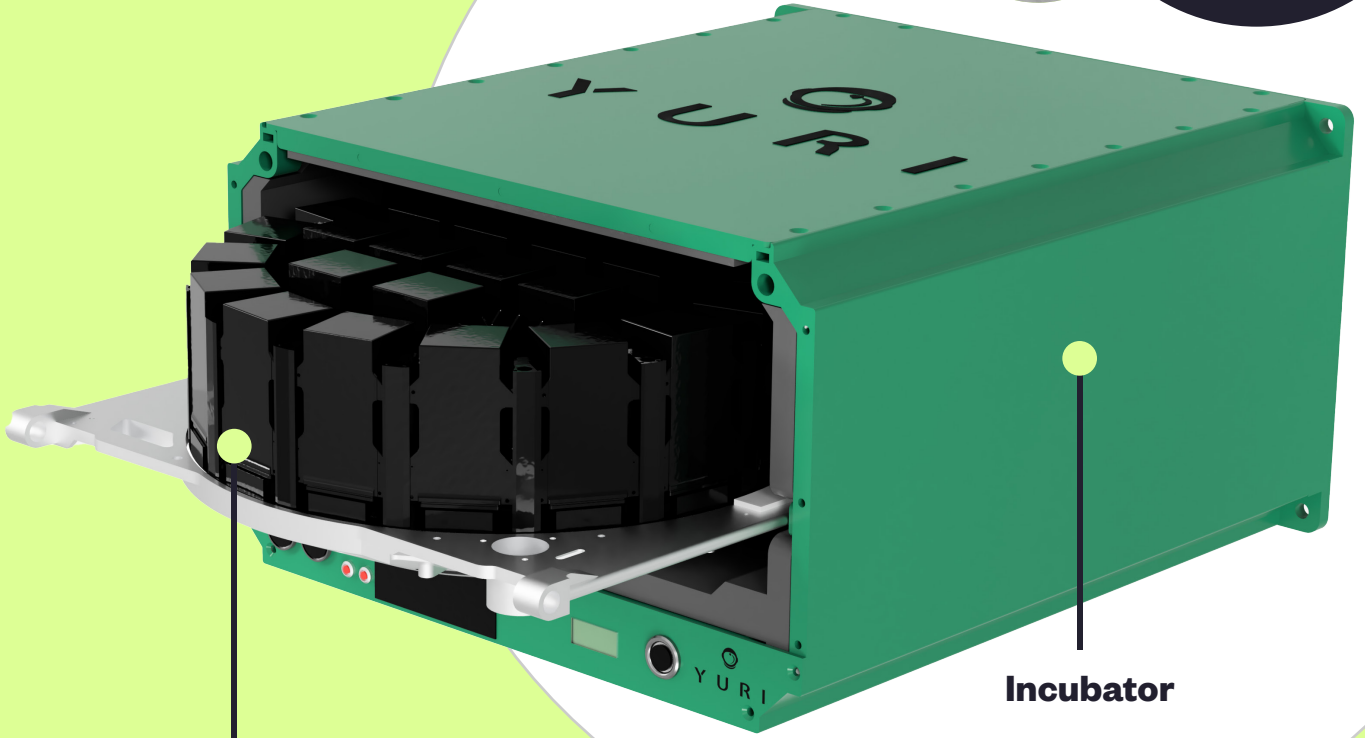
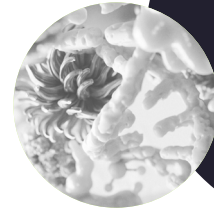
## Flight heritage

- 1990s** - Successor (BioBox) first launches on Bion, Foton and Space Shuttle
- 2007** - Latest configuration of successor produced
- 2022** - TRL 7 of ScienceTaxi
- 2023** - New flight model of ScienceTaxi ready
- 2024** - Maiden launch with SierraSpace

# YURI

SCIENCE TAXI  
more than just an incubator

MODULAR  
DESIGN



Incubator

Experiment Platform (EP)

## SCIENCE SHELLS



ScienceTaxi is completely modular and can host various experiment platforms (EP). The first EP is a centrifuge that can host 38 of Yuri's automated bioreactors, the ScienceShells. We have an existing flight-proven portfolio for cell cultures, plants, fish and much more.

Further EPs could be a 3D bioprinter or a larger plant facility.

Our modular design also allows for various  
**INCUBATOR ADAPTATIONS:**

### ADD FREEZING CAPABILITIES

Instead of air-cooling we would use water-cooling in this case and could offer temperatures between  $-20^{\circ}\text{C}$  and  $+40^{\circ}\text{C}$  in a single facility.

### ADD CO<sub>2</sub> CONTROL

A newly developed experiment platform will provide 5% CO<sub>2</sub> control for ScienceTaxi. This EP will provide 340x220x130 mm of internal volume for experiments with CO<sub>2</sub> control for at least 180 days without maintenance and the same temperature that ScienceTaxi provides.