

ELGRA offers an opportunity to house **your** experiment onboard Blue Origin's New Shepard suborbital rocket by submitting a proposal to the *ELGRA goes suborbital!* (2<sup>nd</sup> edition) call.

New Shepard launches from Blue Origin's launch site in West Texas and offers approximately 3 minutes of high-quality microgravity for your experiment.

To be eligible to submit a proposal, the team leader (main applicant) must be a regular ELGRA member, and the team must include at least one SELGRA member.

Applications with multiple ELGRA members are considered an advantage. The application should have a maximum of 10 pages and include:

- Name and affiliation of team members.
- Short CV of the team leader (max. 1 page).
- Scientific objectives of the experiment.
- Description of the experimental setup and procedure.

The best proposal among the ones received will be selected for the suborbital flight. The two main selection criteria will be the science case and the feasibility to perform the experiment within the given constraints. Therefore, the description and your motivation for performing the experiment in microgravity as well as a technical description of how the experiment is expected to perform are important.

The selected proposal will benefit from:

- One suborbital flight of the experiment according to the flight specifications (see below).

ELGRA can consider to fund the purchase of equipment or other costs related to the payload construction up to 1500€ provided it is justified in the application.

## Flight specifications:

Envelop: 100x200x200 mm (including box/structure, to be provided by user) (4x8x8 inches)

Mass: < 1 kg (up to 2.2 lbs. total mass)

Microgravity time: approx. 3 minutes

Microgravity level: < 0.01 g

On-board electrical power: Up to two (2) connectors, each with 5 V at 0.9 A via USB 2.0/3.0

On-board data feed: Up to two (2) connectors, each with basic mission state data via USB 2.0/3.0

Payloads may contain up to 100 mL of approved non-hazardous liquids –or- small approved batteries without fluids.

Payloads cannot contain significant hazards (e.g. biohazards, hazardous chemicals, stored energy, etc.).

Research team must create its own hardware according to NRFF Payload User's Guide (PUG) specifications (attached).

## Schedule:

30 January 2021: Deadline for submitting proposals to <a href="mailto:communication@elgra.org">communication@elgra.org</a>

15 March 2021: Announcement of selected proposal.

3 months before launch: Payload data package complete.

2 weeks before launch: Reception of experiment at Blue Origin.

Launch window will be coordinated with the winner. Launch will take place not earlier than 12 months after selection.

Submit your proposal and have the chance to take your research to space and back experiencing microgravity!

Best wishes,

The ELGRA Management Committee