

The Earthlings Hub Initiative for displaced middle- and high-school children.

The [Earthlings Hub](#) initiative was formed under the auspices of the 501(c)(3) nonprofit Blue Marble Space Institute of Science (BMSIS), EIN: 27-0184094. Our dedicated team of educators, scientists, and psychologists aims to help children displaced by war in Ukraine (including those in refugee camps and evacuated orphanages) strengthen their desire to learn, expand STEM knowledge and skills, adapt to their current situation, and develop habits of mind required for addressing global existential challenges.

Since its inception in March 2022, The Earthlings Hub team has been working continuously in **four main directions**:

- A. Designing and conducting science-rich courses and activities for refugee children.
- B. Equipping our extensive network of Russian and Ukrainian scientists with necessary educational skills.
- C. Providing young scientists and educators with a unique opportunity to develop public outreach and STEM education skills, helping them learn working with different groups of children and organizing public events and webinars.
- D. Increasing the number of Ukrainian instructors, coordinators, and tech support. Many of these people were displaced and are currently suffering, and the lack of required language skills hampers their ability to find employment in hosting countries. Thus, we cannot ask them to volunteer their time and must compensate them financially.

Statement of Need: As of June 10, nearly 12.8 million people are estimated to have fled their homes in Ukraine, including 5.2 million children. We expect the total number of displaced children between 8 and 18 years old to be over 3 million.

At the moment, we are serving hundreds of families and orphans - still a tiny fraction of those millions of children whose lives can be changed for the better through our support.

We are getting daily requests from orphanages and refugee camps. So far, the programs exist as a 100% volunteer effort. Getting external funding is crucial for expanding our programs.

We seek funding for our current and future online programs (free for all students):

1. Daily classes for evacuated orphanages. Since March 2022, the Earthlings Hub has served over 60 children ages 10– 15 in an orphanage evacuated to Poland, offering classes in physics, nature studies, geography, history, and more. We start offering science and computer science classes to two more orphanages in early July. Still, eight

orphanages applied to the program and are waiting until we raise enough money to include their children in the program. The total number of students expected to participate is over 1,000.

2. Intensive 6-week summer science camp for high school students scattered across Europe. Researchers and scientists from the world’s leading institutions will provide interactive lessons to the groups of students. Scale – 70 students. Furthermore, we plan to hold sessions to inform students about the opportunities available in western universities and how to pursue careers in science.

3. Daily inquiry-based lectures and short courses for elementary and middle-school children scattered across Europe. As of June 10, we served 230+ children with 30+ classes and short courses in science, as well as provided psychological webinars for parents and career sessions for high school students. Since 6/14, we have served children in a refugee camp in Chernivtsi that hosts over 800 children and the children in the smaller refugee camp in Maalot, Israel.

Budget Estimate. The money will go to teachers’ and coordinators’ salaries, tech support, invited speakers and mentors compensation, teacher training, public outreach, materials, software, laptops, and headphones, as needed.

	summer 2022	fall 2022
Daily classes for orphanages	\$6K	\$12K
A 6-week intensive STEM summer camp	\$24K	\$0
Daily classes for students at refugee camps	\$30K	\$30K

Key personnel of the Earthlings Hub:

- Julia Turchaninova, Ph.D. in Education, M.Sc. in Physics — a world-renowned educator with over forty years of experience, leader of multiple large-scale educational projects in the USA and Europe. Author of 14 books and over 70 publications on education and scholarly research.
- Alexander Kaurov, Ph.D. in Astronomy and Astrophysics from the University of Chicago, BMSIS researcher, research associate in the Department of the History of Science at Harvard University, and the Program in Interdisciplinary Studies at the Institute for Advanced Study (IAS).
- Julia Brodsky, M.Sc. in Astrophysics, Director of BMSIS STEM ED, former NASA astronaut instructor, founder of Art of Inquiry online science program, Forbes Education contributor, and experienced STEM educator with over 25 years of experience, including low-income and underrepresented students and children with autism and disabilities.