GUMS: Growth Unit for Mushrooms in Space is an ingenious mushroom growing hybrid system consisting of an electromagnetically treated polyphasic pressurised homogeniser for nutrient mixing and solution sanitising and hydroponic porous ceramic tubes for the nutrient delivery and recycling. The growing environment will be wirelessly monitored via an autonomous sensor system, which transmits the air sensing (air temperature, relative humidity, atmospheric gases concentration, light intensity) and water sensing (solution temperature, pH, electrical conductivity, concentration of oxygen and nutrients) data to a mobile app. Further improvements would include a treatment and dehydration stations.