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HCG035-P09

Room:Convention Hall

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Human reproduction in bioecology systems in the space environment

Tsuyoshi Shimizu^{1*}

¹Shimizu Insti of Space Physiol, SMC,

Since 2004, when we first presented a paper entitled Prospects for reproductive medicine in space at the 20th Space Utilization Symposium, we have continuously studied and discussed together with our colleagues the topics of the human reproduction in the space environment. For example, we have investigated the effect of gravity on the fetus development in the uterus on the earth, or discussed face to face feeding behavior for mother milk in the space environment. During the past half a century development of space exploitation and utilization greatly progressed. It is not a surprise that astronauts or cosmonauts stay for several months and even one year on a space station, and now space tourism is commercially planned and promoted extensively. There will be more opportunities that much more people will visit or contact with the space environment, and it will become realistic and definite that housing structures for human being will be constructed on the moon, Mars or orbits of the earth. In the present meeting we summarize a series of our previous studies and discuss the necessity of a systematic approach to the study of space reproductive medicine for the coming human society that will be built in complex bioecology systems in the space environment. We also presented most of this discussion at the 27th Space Utilization Symposium, January, 2011, Sagamihara.

Keywords: reproduction, sexuality, space, fetus, gravity, microgravity