Overview of The Inaugural Space Health Impacts for the NASA Experience (SHINE) Training Program – Virtual Space Radiation Curriculum

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The Space Radiation Element part of NASA Human Research Program initiated a virtual, annual space radiation curriculum. The SHINE space radiation curriculum aims to educate participants not only in the scientific aspects of space radiation but also in the agency's risk management strategies. SHINE combines weekly seminars by speakers from NASA, other government agencies, academia, and industry, with networking sessions designed to foster collaboration between participants and interactions with NASA scientists. A total of 59 applications were received from which 25 participants were selected. The 25 participants, with citizenship from a total of 8 countries, are composed of 5 graduate students, 4 postdocs, 11 scientists and 5 professors/medical doctors. Participants have a wide range of expertise including molecular and cellular biology, microbiology, botany, physiology, engineering, physics, aerospace medicine, planetary science, biostatistics, and modeling. The inaugural course ran weekly from February 2023 to August 2023 and was comprised of lectures, less formal coffee hours and office hours. The topics covered ranged from space environments to health effects to granting opportunities. The second annual SHINE training program is scheduled from February to August 2024. In addition, a separate competitive practicum session, to allow participants to gain hands-on radiation experience, will be held Fall 2024 at the NASA Space Radiation Laboratory (NSRL).

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