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Sommario/riassunto	The frontier represented by the near solar system confronts humanity with intriguing challenges and opportunities. With the inception of the

Human Exploration and Development of Space (HEDS) enterprise in 1995, NASA has acknowledged the opportunities and has accepted the very significant challenges. Microgravity Research in Support of Technologies for the Human Exploration and Development of Space and Planetary Bodies was commissioned by NASA to assist it in coordinating the scientific information relevant to anticipating, identifying, and solving the technical problems that must be addressed throughout the HEDS program over the coming decades. This report assesses scientific and related technological issues facing NASA's Human Exploration and Development of Space endeavor, looking specifically at mission enabling and enhancing technologies which, for development, require an improved understanding of fluid and material behavior in a reduced gravity environment.

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