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Sommario/riassunto	Three recent developments have greatly increased interest in the search for life on Mars. The first is new information about the Martian environment including evidence of a watery past and the possibility of

atmospheric methane. The second is the possibility of microbial viability on Mars. Finally, the Vision for Space Exploration initiative included an explicit directive to search for the evidence of life on Mars. These scientific and political developments led NASA to request the NRC (TM)s assistance in formulating an up-to-date integrated astrobiology strategy for Mars exploration. Among other topics, this report presents a review of current knowledge about possible life on Mars; an astrobiological assessment of current Mars missions; a review of Mars-mission planetary protection; and findings and recommendations. The report notes that the greatest increase in understanding of Mars will come from the collection and return to Earth of a well-chosen suite of Martian surface materials.