In addition to the scientific value of research results, Human Research Program (HRP) research also supports HRP’s goal of mitigating crew health and performance risks in space flight. Research results are used to 1) build the evidence base characterizing crew health and performance risks, 2) support risk research plan development, 3) inform crew health and performance standards, and 4) provide technologies to programs for meeting those standards and optimizing crew health and performance in space.

For example, HRP research results are used to revise or even create new standards for human space flight. Standards are established to protect crew health and performance during flight and prevent negative long-term health consequences post-flight. These standards are based on the best available clinical and scientific evidence, as well as operational experience from previous space flight missions, and are reviewed as new evidence emerges. Research results are also used to update the HRP evidence base, which is comprised of a set of reports that provide a current record of the state of knowledge from research and operations for each of the defined human health and performance risks for future NASA exploration missions. This talk will describe examples of how research results are used to support HRP’s goal and the role of evidence within the HRP architecture.

The scope of HRP research results extends well beyond publications, as they are used in several capacities to support HRP deliverables and, ultimately, the advancement of human space exploration beyond low-Earth orbit.