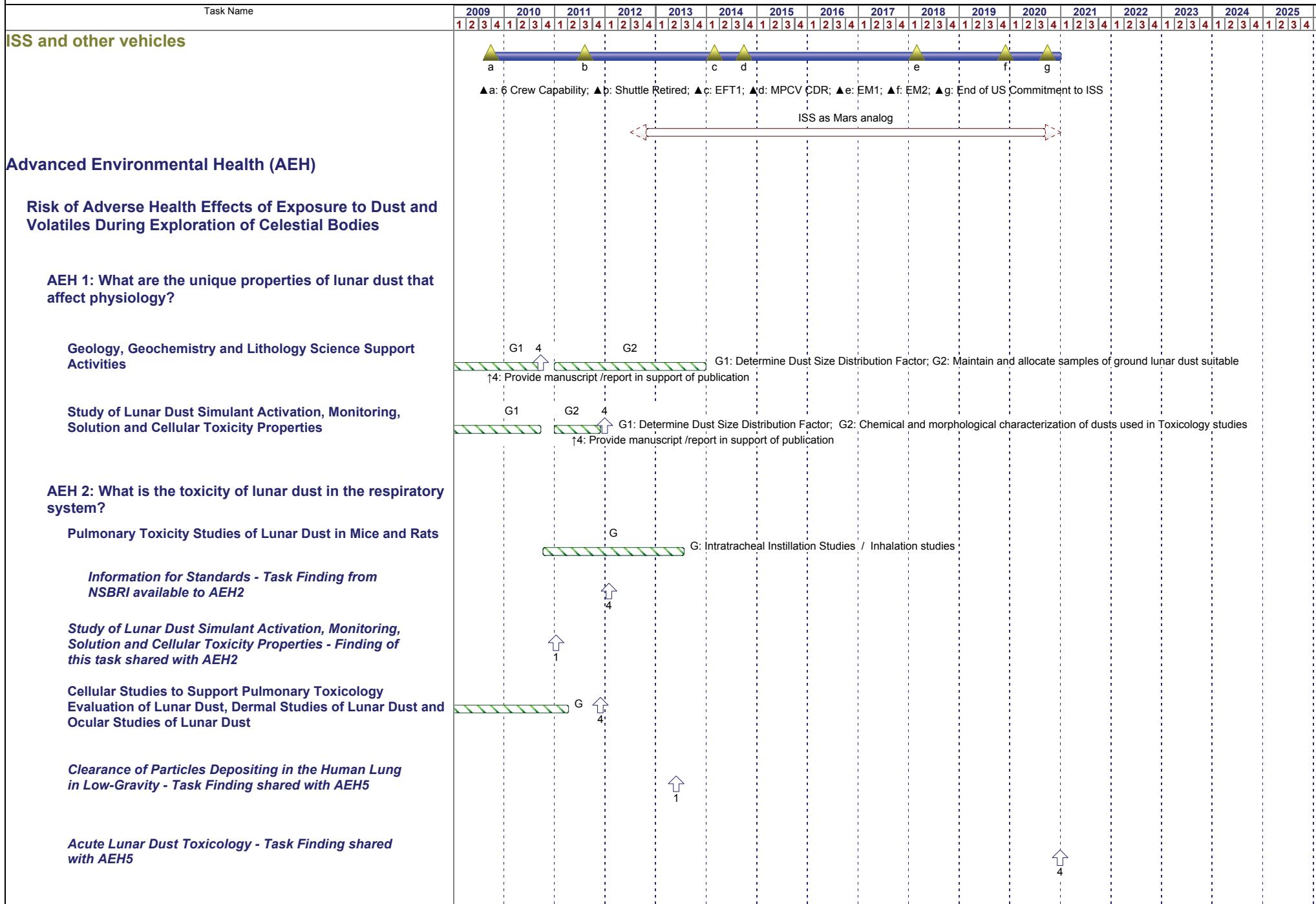




Legend

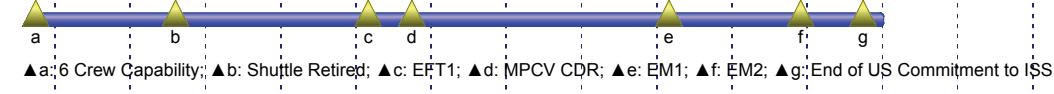
G: Ground Study		Early Start		6) Technology	
F: Flight Study		Task To Be Determined After Decision Point		7) Countermeasure	
L: Lunar		Major Milestone/Event/Accomplishment		8) Information To/From other Elements	
NSBRI		1) Risk Characterization		9) Information to HSRB	
DA&M: Data Analysis & Modeling		2) Task↓Task		10) Requirements	
FP: Flight Prep		3) Standards - New		11) Study	
AO: Add on to another study		4) Standards - Update		Stop	
Planned/unfunded		5) Tools		Major Decision Point	





Task Name	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4

ISS and other vehicles



▲ a: 6 Crew Capability; ▲ b: Shuttle Retired; ▲ c: EFT1; ▲ d: MPCV CDR; ▲ e: EM1; ▲ f: EM2; ▲ g: End of US Commitment to ISS

ISS as Mars analog

Advanced Environmental Health (AEH)

Risk of Adverse Health Effects of Exposure to Dust and Volatiles During Exploration of Celestial Bodies

AEH 4: What is the dermal and ocular toxicity of lunar dust?

Cellular Studies to Support Pulmonary Toxicology
Evaluation of Lunar Dust, Dermal Studies of Lunar Dust and Ocular Studies of Lunar Dust

Dermal Toxicity Testing

Report on finding of studies on dermal toxicity of Lunar dust (for use in AEH-5)

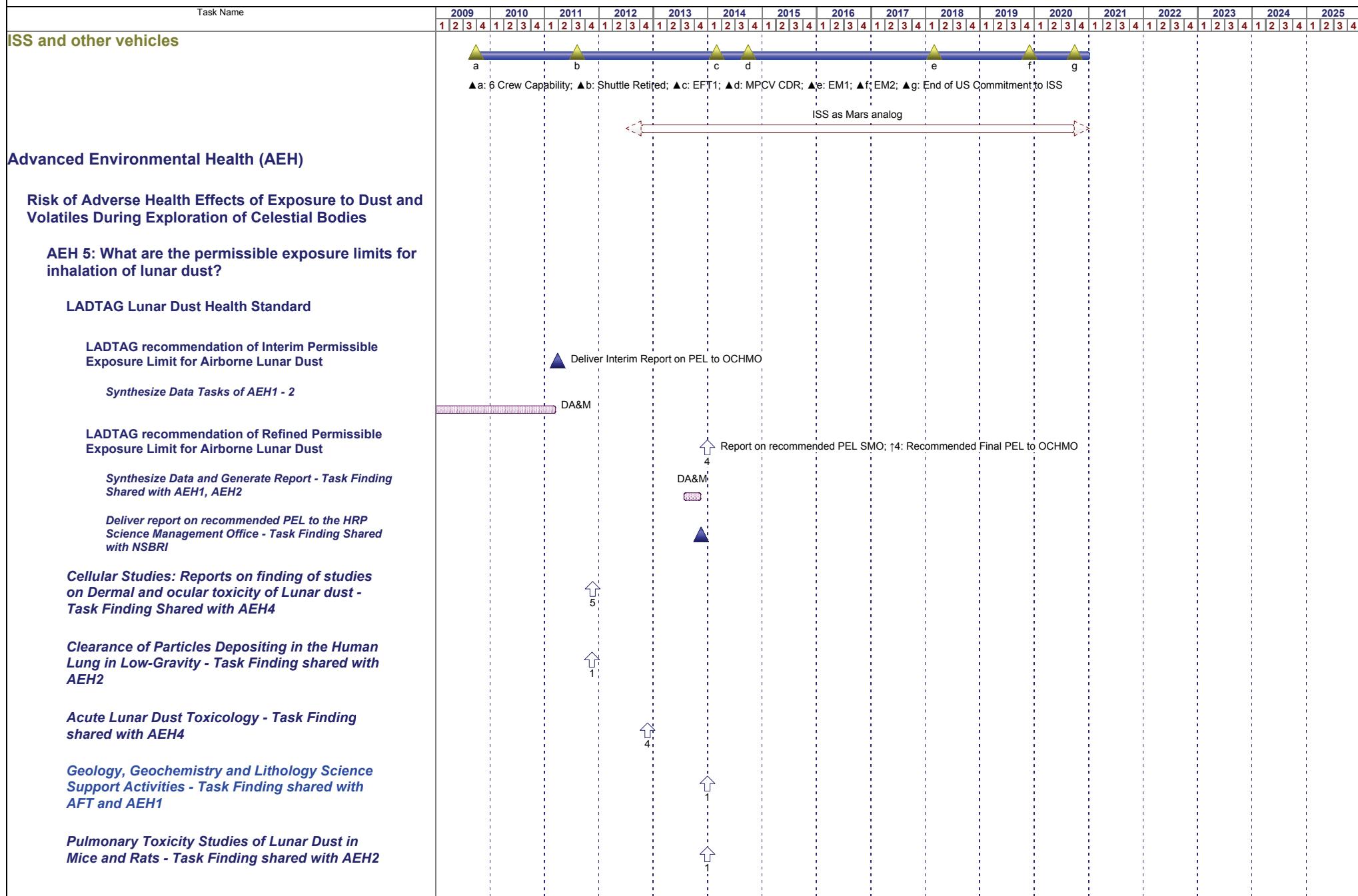


Ocular Toxicity Testing

Report on finding of in vitro studies on ocular toxicity of Lunar dust (for use in AEH-5)



Report on finding of in vivo studies on ocular toxicity of Lunar dust (for use in AEH-5)

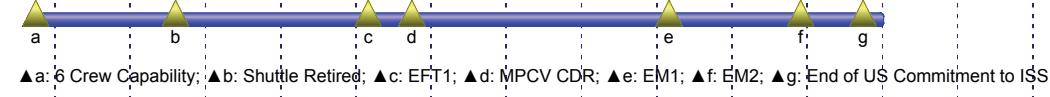




Task Name

2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025			
1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4

ISS and other vehicles



Advanced Environmental Health (AEH)

Risk of Adverse Health Effects of Exposure to Dust and Volatiles During Exploration of Celestial Bodies

AEH 11: What is the potential for acute or chronic cardiovascular toxicity of lunar dust?

Review and Assess State of Knowledge Regarding the Acute or Chronic Cardiovascular Toxicity of Mineral Dusts

NRA Solicitations for Identified Risks

AEH Watch Item/NSBRI Research: What are the effects of lunar gravity on permissible exposure limits for inhalation of lunar dust?

NSBRI What are the effects of lunar Gravity on Toxicity of Lunar Dust

Aerosol Deposition in the Lung in Fractional Gravity: Risk Mitigation for Lunar and Martian Habitats

Clearance of particles depositing the human lung in low-gravity Standard

Variability in flow distribution within the lung and its effects on deposition and clearance of inhaled particles in normal and reduced gravity (NSBRI Post doctoral Fellowship)

