## The APUS Analog Research Group (AARG): Preparing the Next Generation Space Workforce Through Analog Research APUS/PSO Space Education & Strategic Applications Conference September 19-20, 2024

## 1. Purpose of the Workshop

To highlight the importance of analog research in preparing protocols, testing technologies, and training crew members in a simulated space environment.

## 2. Rationale

Analogs are facilities or environments which simulate aspects of space habitats. These can include structures on Earth designed to mimic living conditions in space, remote and/or extreme environments on Earth, submarines, underwater facilities, systems trainers, and research facilities such as the National Buoyancy Laboratory, McMurdo Station in Antarctica, and even the International Space Station in Lower Earth Orbit. Analogs differ widely in fidelity and purpose, but each can be used effectively as a means of testing technologies, training crews and mission support staff, and developing protocols for use in space exploration and development. Analogs are currently used by NASA, commercial companies, universities, and private citizens to perform research and crewed 'missions.'

The purpose of this workshop is to highlight the role of analog facilities and research in preparing a space-ready workforce.

3. Workshop Panels/Sessions (Questions will be entertained after each presentation)

Panel Moderator: Terry Trevino

## 4. Presenters Information

1. Terry Trevino, Ms.

Wallace E. Boston Observatory Assistant Co-Advisor, APUS Exoplanet Research Group

Doctoral Student, University of North Dakota

Moderator

2. Arnauld Nicogossian, M.D., FACPM., FACP.

Distinguished Senior Fellow, Schar School of Policy and Government, GMU and

Former NASA Associate Administrator Life and Microgravity Science Office.

Part-time Instructor, STEM Program, APUS

Analog Research at NASA

3. Kristen Miller, PhD.

Professor, Department of Space Studies, American Public University System

Faculty Advisor, APUS Analog Research Group

Co-Advisor for the American Institute of Aeronautics and Astronautics, APUS Student Chapter

Co-Editor in Chief, SESA Journal

The Role of Private and Commercial Analog Research