OPENING STATEMENT
Ranking Member Ami Bera (D-CA)
of the Subcommittee on Space

House Committee on Science, Space, and Technology
"Advances in the Search for Life"
April 26, 2017

Good morning and welcome to our distinguished panel of witnesses. Thank you, Mr. Chairman, for holding this hearing on "*Advances in the Search for Life*".

Based on years of investigations across NASA's science portfolio, researchers are increasingly finding evidence of life's basic building blocks– liquid water, organic molecules, minerals, and a source of energy - occurring beyond Earth.

From the deep oceans on the moons Enceladus and Europa, to the surface of Mars, and possibly planets and planetary systems now being identified beyond our solar system, the list of potentially habitable locations for life in the Universe continues to grow.

I look forward to hearing from our witnesses on highlighting the many compelling findings about these and other advances in the search for life beyond Earth.

This abundance of scientific discovery is just one example of the return on our nation's investments in basic research within NASA's science portfolio and across the Federal government.

No one imagined that when the Cassini/Huygens mission was launched in 1997 to study Saturn and its moons, it would wind up identifying plumes spewing material from Enceladus, or let alone flying through the plumes and detect the elements needed to support potential life.

And no one could have known about the diverse environment that exists on Mars without the systematic investigation of the planet by orbiting spacecraft, landers, and rovers over several decades.

Our understanding of Earth and its capacity to support life - its origins, evolution, and its ability to survive in extreme environments – strongly inform the search for life beyond Earth and wouldn't be possible without our investments in basic scientific research including chemistry, biology, geology, and physics.

The discoveries of today are the result of our past investments in research. Robust investments now and into the future will shape the story our children and grandchildren tell 20 or 30 years from now about Earth, our solar system, and perhaps even the existence of life beyond planet Earth.

However, that story will partially depend on advances that we make in research and technology across NASA's mission areas, including telescopes, instruments, spacecraft and the other systems needed to investigate potentially habitable locations across our universe.

And while today's search for life relies solely on robotic missions, NASA's Journey to Mars program offers the pathway for humans to one day contribute to the study of whether Mars supports or once supported life.

So, as we consider the details of the President's Fiscal Year 2018 budget proposal that are expected next month, I urge all of us to consider:

- the importance of NASA's multi-mission role in the search for life beyond Earth,
- the relationship of investments in basic science research to the multidisciplinary study of astrobiology and the search for life, and
- the impact of potential budget cuts on extended missions such as the one that led to Cassini's recent scientific discoveries.

Thank you and I yield back.