

OPENING STATEMENT
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of the Subcommittee on Space

House Committee on Science, Space, and Technology
Subcommittee on Space
Subcommittee on Research and Technology
“Astronomy, Astrophysics, and Astrobiology”
July 12, 2016

Good morning and thank you, Mr. Chairman, for holding this hearing on *“Astronomy, Astrophysics, and Astrobiology”*. Welcome to our distinguished panel of witnesses.

Throughout human history we have looked to the stars to measure the passage of time, navigate our ships, and decide when to plant our crops. While the study of the night sky has practical benefits to society, its real value is far less tangible but no less important.

Astronomy opens our eyes and offers us a new way to look at the world. When Copernicus discovered that the Earth orbits the Sun, it started a revolution. When astronomers discovered that stars are made of the same elements as we are, it deepened our connection to stars and galaxies that are unimaginably far away. The recent explosion in exoplanet discoveries has brought us closer to finding out if life is common or rare throughout the universe.

Many fundamental questions remain, and it is our job to ensure that scientists have the tools they need to address them. In February, this committee held a hearing to celebrate and learn more about the first ever detection of gravitational waves by the LIGO facility. If LIGO taught us anything, it is that investing in science, even when there is no foreseeable concrete benefit to society, pays off.

Large telescopes like the James Webb Space Telescope, the Wide-Field Infrared Survey Telescope, and Large Synoptic Survey Telescope are critical to the next generation of astronomers. We often express our support for science, technology, engineering, and math education, but those efforts are wasted if we don't make decisions now to ensure the development of the researchers, facilities and missions that will enable them to do their work.

Astronomical discoveries resonate with the basic human drive to understand our surroundings. The awe they inspire is perhaps the reason that astronomy is one of the most accessible fields of science to the general public.

Astronomy serves as a gateway for students who may not otherwise enter a science discipline. Every year, nearly 400 students receive bachelor's degrees in astronomy. Many students who start out studying astronomy go on to pursue careers in medicine, engineering, and data science.

In addition to attracting more students to study science, astronomy inspires members of the public to pay attention and even to participate in astronomy. The Hubble Space Telescope made a huge impact on the public's engagement in astronomy. It is often called “the people's telescope” because its beautiful images brought the awe-inspiring sights of the cosmos into classrooms and living rooms around the world.

Citizen science has deep roots in astronomy. Amateur astronomers have discovered supernovae, comets and asteroids, and even exoplanets. With the advent of the internet, an even broader group of the public is now able to contribute to research efforts led by the astronomy community.

This morning's hearing will give us a chance to discuss the compelling questions astronomers have dedicated their careers to answering as well as the programs, facilities, and missions that are necessary to enable their investigation of those questions.

We live in the era of multi-messenger astronomy. We can see the universe with light, with particles, and now with gravitational waves. As we look ahead we must acknowledge that the measurements that are required to advance future astronomical investigations are rapidly evolving. We need to plan ahead to ensure that the development of cutting-edge detectors and analysis software keeps pace with the needs of scientists. We have the chance to speak to the leaders of the astronomy community today and to find out where astronomy is going.

One thing is clear. We, in Congress, need to provide the resources needed to ensure that all areas of science, including astronomy, can continue to carry out ground-breaking discoveries in the years to come.

Again, I'd like to thank our witnesses for being here and I look forward to your testimony.

Thank you Mr. Chairman, and I yield back.