

IAF SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)  
Space for All: Decolonial Practices in Space (2)

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OUT ASTRONAUT: ADDRESSING THE LACK OF REPRESENTATION AND INCLUSION OF  
SEXUAL AND GENDER MINORITIES IN SPACE**Abstract**

Historically, national space programs have both implicitly and explicitly excluded Lesbian, Gay, Bisexual, Transgender, and Queer (LGBTQ+) people from its ranks. While we know of several LGBTQ+ astronauts, including Sally Ride, Wendy Lawrence, and Anne McClain, none of them were out at the time of their selection nor had come out voluntarily while active.

Such historical trends and ongoing cultural biases have resulted in a continued lack of LGBTQ+ representation and inclusion in the space workforce, creating broader implications to the STEM workforce. Nationwide studies demonstrate that LGBTQ+ undergraduate students are up to 50 percent less likely to be retained in a STEM field by graduation. As the industry shifts towards the greater democratization of space, it is likely that the LGBTQ+ community will be left further behind without active efforts to make the environment more hospitable.

Today, research on medical factors affecting LGBTQ+ space travelers remain lacking. These knowledge gaps can jeopardize not only the health of individual spaceflight participants but also overall mission success, the inability for LGBTQ+ astronauts to be authentic with their colleagues and ground crew can erode trust and reduce team effectiveness, and a lack of understanding of LGBTQ+ culture on the part of the aerospace industry can lead to unintentional mistreatment of LGBTQ+ space travelers, negatively impacting the industry's public image.

Out Astronaut is a non-profit program sponsored through the International Institute for Astronautical Sciences. It seeks to increase representation and to remove barriers faced by LGBTQ+ individuals in STEM through outreach, advocacy, professional publications, and student contests. Specifically, it serves to 1) recuperate lost talent by ensuring that the space industry is safe for astronauts and employees to identify openly as LGBTQ+; 2) promote LGBTQ+ inclusive team building and cross-cultural competence while addressing psychological, performance, and biomedical factors unique to LGBTQ+ individuals; 3) identify and address gaps in aeromedical research that are specific to LGBTQ+ individuals; 4) inspire and recruit young LGBTQ+ people to consider STEM careers; and 5) to promote the space industry as a culture of inclusion and remove diplomatic liabilities from nations that promote diversity and inclusion.