



Press release: 15th August 2024, 1400

Dr Caswell, of Space Port Australia (www.spaceportaustralia.com.au), has joined the Subject Matter Expert Council of the Advanced Spacelife Research Institute (www.asri.space). Dr Caswell's research interests include space health, human factors, molecular structures and cellular biochemistry in microgravity. In 2024 she was a three time finalist in the AusSpace 24, Australian Space Awards (Female Space Leader of the Year – Enterprise; Mentor of the Year; Innovator of the Year).

Rapid paced technological development will propel humans into the cosmos. “Simply put, humans are Earth bound by their biology, a scientific and medical challenge recognised from the first manned space flight. Surviving and thriving in space requires a more nuanced understanding of the affects of altered gravity,” explaining further, Dr Caswell says, ‘The space environment is incredibly hostile to humans, research focussed on the affects of altered gravity and radiation insults to humans, as well as other organism’s molecules, cells and genome, is a priority area.’”

Dr Caswell points out that Space X has a projected timeline for a Mars landing in 2030, less than a decade away, “As our biochemical knowledge has grown, it appears to provide more mysteries than solutions. There are so many unanswered, untested medical and cellular oddities that occur in altered gravity, and perhaps things we can’t yet imagine.” The ultimate success of longer space flights and possible colonisation on Mars, will be dependent on the successful management or adaptation of humans to altered gravity environments

“We at ASRI are proud to welcome Dr. Caswell as a member of our Subject Matter Expert Council. She brings a wealth of experience and knowledge that we believe will prove invaluable to our efforts in the future. We are grateful for the opportunity to leverage her expertise, and look forward to our future collaborations together,” Dr. Alexander Layendecker, ASRI Director. Dr Caswell commented that, “Space exploration is now a global sport; and it is a privilege that Space Port Australia’s work is considered of value by ASRI”.

Space Port Australia has recently launched multi-accredited space medicine Continuing Professional Development (CPD) modules. Dr Caswell advised, “For any physician that has an interest in space medicine, now is the time to take the first step towards contributing. Research groups, such as ASRI, are leading the way, moving beyond keeping people alive in controlled spacecraft environments, to imaging populations of humans living off-Earth.”

End release###

Email: contact@spaceportaustralia.com.au

Phone: +61 (0) 455 321 174

Related links: www.spaceportaustralia.com.au and www.asri.space