

Reflecting on the First Three Quarters

Cool conference on Gravitational Physiology in Antwerp, Belgium

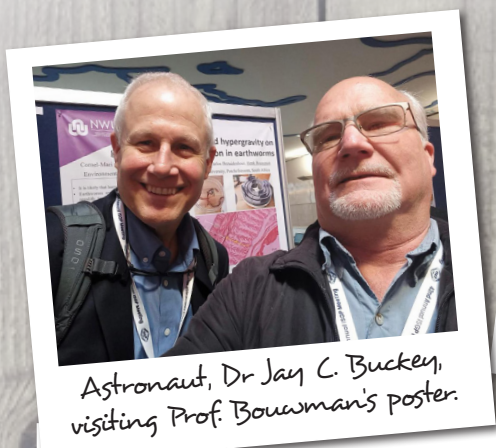
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Zoology

It was exhilarating to have a conference *blast-off* with NASA and ESA (European Space Agency) presenting their plans to send people into space and to colonise the Moon and Mars (M&M). The 42nd International Society for Gravitational Physiology (ISGP) Meeting took place from 2 - 7 July in Antwerp, Belgium. All the various iterations of equipment such as huge rockets and space stations, their designs, and the people that are needed to achieve permanent human presence in space and colonisation of the M&M were discussed. A conference where they show trillion-dollar rocket programmes and launches as part of research equipment was just so cool. And how to achieve and maintain presence and colonisation requires biological research, and a lot of it.

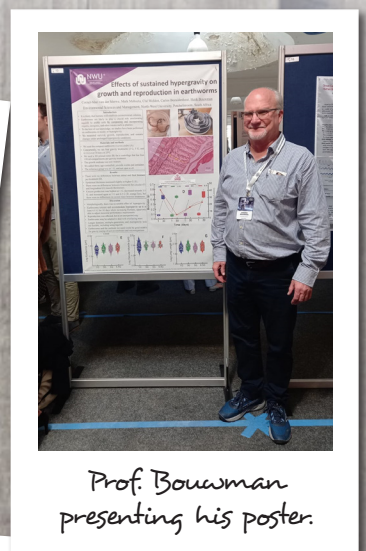
I presented a poster on earthworm growth and reproduction under hyper-gravity exposures on behalf of Cornel-Mari van der Merwe, Ché Weldon, Mark Maboeta, and Carlos Bezuidenhout, the only presence and presentation from Africa and the southern hemisphere. The earthworm theme was unique and

generated excitement, especially when considered within a food-producing ecosystem context on M&M. We were also honoured by a visit to our poster by the astronaut, Dr Jay C. Buckey.

I went in blind, having no connections whatsoever with this space biology community. However, there was such an energy and so much participation by students since they actually stand a chance to go to space. A lot of work presented was on experiments on the International Space Station (ISS). But since getting things into space is quite a costly undertaking, ground analogue experiments are often the only way to generate supporting data, something we can do here, at the NWU. Food production, radiation, and psychology were highlighted as the main challenges that will attract funding, and there are many others. Since many of us measure stressors and effects thereof on biological systems (in my opinion - probably the best group in Africa able to do so), we can contribute so much to a future in space.



Astronaut, Dr Jay C. Buckey, visiting Prof. Bouwman's poster.



Prof. Bouwman presenting his poster.



Group photo - 42nd annual ISGP meeting, Antwerp, 2 - 7 July 2023.

