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Media Release

AUSTRALIAN MEDTEC MANUFACTURER OPENS WORLD-FIRST ADVANCED SURGICAL TRAINING CLINIC IN ADELAIDE

- *Australian manufacturer opens the world's first advanced surgical training facility in Adelaide*
- *State of the art facility to use locally developed and manufactured 3d printed cadavers with support from the Advanced Manufacturing Growth Centre (AMGC)*
- *3D printed cadavers offer greater training opportunities for de-risking complex surgeries*
- *Fusetec to grow local operations and export opportunities*

Australian MedTech manufacturer and 3D printing pioneer, Fusetec, has launched a world-first, $6.8 million Advanced Surgical Training Clinic (ASTC) in Adelaide. The facility will use the company's innovative advanced manufactured human cadavers that create realistic and anatomically accurate bone, skin, and muscle structures. This solution is safer and more affordable and reusable when compared to actual human cadavers.

Commercialised with the assistance of a co-investment grant from AMGC, Fusetec's ground-breaking development in the field of additive manufacturing (3D printing) has resulted in revolutionary medical products that are designed and manufactured to simulate specific pathology. This enables students and surgeons to practice specific procedures on complex areas, such as, tumours, broken bones, or defective heart valves.

According to Fusetec's Chief Executive Officer, Mark Roe, "There is a growing need globally for safe, affordable, customisable, and reusable medical devices – which has accelerated in the last two years due to COVID. Much like we have seen shortages of certain items this past two years, COVID has impacted the supply of 'fresh' cadavers* for medical purposes, furthermore, the cost of purchasing them has risen substantially,

"Fusetec's solution solves this and does not have any of the inherent risks associated with cadavers – there are no harmful bacteria, no strict storage and disposal protocols, and no regulatory burdens. Our medical devices are mass-produced, sterile, readily available, and come with pathology on-demand," said Roe.

Used exclusively at the company's new 25-bed training centre, the teaching equipment, and facility are part of Fusetec's broader ambition which will see the company invest over $25 million into expanding its operations and facilities in South Australia over the coming years.

"The decision to open a training facility was a logical next step for Fusetec. In fact, during the height of the pandemic we had manufactured numerous training devices to assist with the rapid training of COVID testing staff – I'd like to think we helped save a few nasal passages over that time," said Roe.

Globally, ASTC is currently the only location where surgeons can study complex procedures to increase positive outcomes for patients. Students will be able to hone their surgical skills earlier in their careers, rather than waiting for the first year of their residency – generally five years into their studies.

Additionally, because the cadavers are customisable, surgical teams could order training devices mimicking specific anatomical needs to support the planning of high-risk surgeries. The facility will be used to program and train surgical robot systems and support preparation for remote surgeries – where the surgeon is remotely located to the patient.

National Director of Industry and South Australia, Michael Sharpe, said "While surgical practice and outcomes have improved immeasurably over time, the use of cadavers, which dates back centuries has not. Fusetec has, as its name suggests, fused technology with traditional medical practices to improve the training process and patient outcomes,"

"Fusetec's locally manufactured medical devices and world-leading training facility demonstrate the ability of local manufacturing capability to solve emerging issues and drive global change," said Sharpe…

To learn more about how AMGC is working with Fusetec to develop its world-leading 3D printed training devices visit www.amgc.org.au/project/3d-printing-of-anatomical-tissue

* https://www.economist.com/britain/2021/05/06/the-pandemic-has-caused-a-shortage-of-cadavers

About Advanced Manufacturing Growth Centre (AMGC)

The Advanced Manufacturing Growth Centre (AMGC) is an industry-led, not-for-profit organisation established through the Australian Government's Industry Growth Centres Initiative. AMGC's vision is to transform Australian manufacturing to become an internationally competitive, dynamic, and thriving industry with advanced capabilities and skills at its core.

Through the delivery of its world-leading research, Manufacturing Academy, workshops, and ground-breaking projects, AMGC aims to develop a highly skilled and resilient local manufacturing industry that delivers high-value products – via the integration of innovative technology – to domestic and international markets. http://www.amgc.org.au

About Fusetec

Fusetec is revolutionising medical training using advanced additive manufacturing of human body parts for use as teaching aids during surgical training. Body parts, complete with realistic, anatomically accurate bone, skin and muscle. A range of medical devices can be designed and manufactured to simulate specific pathology, such as, tumours, broken bones or defective heart valves, enabling student and surgeons to practice specific procedures.

Fusetec collaborates with highly respected medical professionals, institutions and universities, continuously evolving additive manufacturing technology to improve medical device applications. Fusetec along with our partnership arrangements will continue to develop, new materials and IP to better simulate the human anatomy. We believe that within the next decade it may be possible to manufacture human organs for transplant and every aspect of our learning will get us one step closer to this quantum leap forward in healthcare.

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