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Singapore University investing in medical research

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Singapore: In a bid to increase innovation in dental and bio-medical engineering, the National Dental Centre Singapore (NDSC) and Nanyang Technological University (NTU) have collaborated. They will accomplish this by researching and teaching how 3D printing can be integrated into medicine.

The group has said that the new collaboration will be funded to the tune of 1 million Singapore dollars and will be used primarily for training and research into the field of bone bio-engineering and 3D printing.

According to NTU, bone is the second most transplanted tissue in the world. To help staunch some of the enormous demand for this material, researchers at both institutions will study how 3D printed bio-reabsorbable scaffolds can be built to assist bone growth.

In addition to bioreabsorbable scaffolds, researchers will also look to develop 3D printable tissues that can replace portions of a patient's jaw or gums that have been removed or damaged during oral surgery.

"With NTU's strength in biomedical engineering solutions and global leadership in 3D printing, we are well positioned to create breakthroughs for clinical work and technological advancements in dentistry. Increasingly, 3D printing is the preferred route taken by many industries to produce prototypes rapidly, so by developing the ability to print bone scaffolds, real tissue and organs, it will directly impact the way healthcare professionals treat their patients in future," said NTU Engineering Professor Ng Wun Jern.

While a $1M (SGD) investment in 3D printing is hardly a monumental sum, the tide is certainly shifting for 3D printing and investments in the technology are trending upward. As more collaborative efforts between academia and industry begin to arise the opportunities for additive manufacturing to make its mark on industry are sure to increase as well.