

## State-of-the-art facility for SA biomedical sector

By Prof Petro Terblanche 7 Sep 2021

The recent opening of a new tissue engineering facility in Cape Town is an indication of the importance of the biomedical for the country and its reputation as a leader in science, research and health innovation



Source: ©vivilweb 123rf

The facility, Vitanova, is the first in the mother city and only the third such facility in the country.

Around the world there have been massive strides in the field of regenerative medicine and tissue engineering, as the science behind tissue engineering is developing rapidly.

Therefore staying at the forefront of these developments is vital if the country is to address the major public health challenges presented by the need for organs and tissue – specifically bone, skin and corneas.

While today we are able to use implanted products made of fragments of bone to stimulate a broken or damaged bone to regenerate and grow, which is a marvel in itself, there is no doubt that what will become possible in the field of tissue engineering in the future, is beyond what any one of us is even able to imagine right now.

Scientists around the world are developing ways to 3D bio-print tissues from a person's own cells. Within our lifetimes, we are likely to see scientists reach the point where they can 3D print organs for people who need them, to reduce the need of

relying on a very small pool of donors.

Last year, NASA astronauts conducted experiments on 3D bioprinting tissue while in orbit in space to minimise the impact of gravity on the process. Every new discovery in this field brings us one step closer to using tissue in ever more advanced ways to enhance the quality of life for so many patients.

As a state-of-the-art facility, Vitanova represents the same possibilities for South Africa and its people.

## ABOUT THE AUTHOR

Prof Petro Terblanche is the chairperson of the Board, Bone SA

For more, visit: https://www.bizcommunity.com