BioMedTech Horizons 3.0

Open NOW, deadline = 16 Dec 2019.

SELECTION CRITERIA:

WHAT'S YOUR PROJECT?

- a. Alignment with BMTH Objectives and Key Focus/Therapeutic Area (see below);
- b. Scope of activities proposed;
- c. Novelty of scientific/technological approach;
- d. Major milestones to be achieved; and
- e. Major risks and mitigation strategies.

WHAT'S YOUR COMMERCIAL POTENTIAL?

- a. Technical feasibility;
- b. Market potential and value proposition;
- c. Intellectual property position, including freedom to operate; and
- d. Clinical/regulatory requirements/pathways.

WHO'S ON YOUR TEAM, AND WHAT SUPPORT DO YOU HAVE?

- a. Governance structure will lead and support the delivery of the objectives;
- b. Team leadership, project management and commercialization skills available;
- c. The applicant's reputation and track record of delivering successful commercial outcomes; and
- d. Access to the facilities, infrastructure and networks needed to effectively and efficiently deliver the project.

OBJECTIVES:

- BMTH3.0 is the latest round of funding to be offered under the BMTH Program.
- Provides up to \$1 million of funding over a maximum two-year period.
- Will help eligible organisations progress medical technologies and devices through to Proof
 of Concept or beyond, the point where they are attractive to secure further venture capital
 or other funding.
- BMTH3.0 is a funded partnership opportunity that encourages, but does not require, matching funding be provided by the applicant.

ROUND 3 Focus/Therapeutic Areas:

- Digitally enabled medical devices in mobile health, health information technology, wearable devices, telehealth and telemedicine, and digitally enabled personalised medicine;
- ii. Digitally enabled implantable medical devices addressing unmet needs in any therapeutic area; and
- iii. General medical devices in the areas of regenerative medicine, women's health, cardiovascular, orthopaedics, neuroscience, general surgery and oncology.

PREVIOUSLY FUNDED PROJECTS FROM BMTH 1.0 (note long-term impact the teams describe are mostly optimistic projections rather than what will be achieved with the initial stage 1 funding)

- 3D Printing and the Manufacture of 'PoreStar€' a novel Porous Polyethylene Implant
 Material BMTH 1.0 funding used for production of 3D printed implants, possibly some
 surgeries and software development (This project aims to advance the state-of-the-art in
 pHDPE craniomaxillofacial (CMF) implant manufacturing, leveraging 3D printing to reduce
 process complexity, product turnaround time and cost of goods. Moreover, the project seeks
 to improve surgical practice by extending the use of temporary implants to patient-specific
 CMF surgeries, and develop improved software solutions for surgical planning and
 preoperative estimation of cosmesis, aiming to reduce complications and reoperation rates
 for CMF surgeries)
- A clinically-accredited and commercial-ready genome profiling platform to enable precision cancer medicine BMTH 1.0 funding to develop the data platform and market analysis (The genome-profiling platform for precision cancer medicine is set to include a clinicallyaccredited tumour profiling test and a cancer genomics data platform that incorporates a national patient matching system for precision cancer clinical trial access. It aims to provide competitively priced and rapid local testing.)
- <u>BioPen</u> BMTH 1.0 funding to work on prototypes of the device and bio-ink (*The combination of stem cell technology, engineering and surgical innovation promises to simplify surgery through a one-off surgical procedure with the capacity to bank cells for future use if repeat surgery is required. The BioMedTechHorizons funding will enable this project to advance a prototype device, methodologies and bio-ink formulations towards a commercialisable therapy.)*
- <u>B3D Cervical Interbody Fusion Device</u> BMTH 1.0 funding to produce the synthetic spinal cage ready for testing, not necessarily to actually undertake the preclinical testing (*This project will provide the necessary funding for device production for preclinical testing.*)
- <u>CAR-T immunotherapies for solid cancers</u> BMTH 1.0 funding for animal model work (It has
 also been shown to inhibit tumour growth in three animal models of human cancer. The
 BioMedTech Horizons grant will allow Carina to continue its work to achieve in vivo proof-ofconcept for its lead CAR-T cell across more animal models of human cancer as the company
 moves towards its ambitious aim of a first-in-human clinical trial in 2020.)
- Development of a 3D printed graft for surgical repair of the Scapholunate Interosseous wrist ligament (SLIL) BMTH 1.0 funding for invitro/animal work (This project will support preclinical research and development to enable Orthocell to start human clinical trials, seek regulatory approval and commercialise.)
- <u>EarGenie: Personalised management of hearing impairment for infants</u> BMTH 1.0 funding for prototype production and admin for ethics/trial approvals (*This project will allow for the development of a clinical prototype as well as plans for regulatory approval and clinical trials.*)
- Gennaris Neural Systems (GNS) BMTH 1.0 funding to set up the company and secure investors (This project will provide funding to assist the transition between preclinical and clinical programs, allowing the utility of the visual prosthesis to be demonstrated. A company will be established to manufacture MVG's Brain-Machine Interface and commercialise the visual prosthesis.)
- <u>Microwearables: Leaping towards precision medicine</u> BMTH 1.0 funding to set up the company and secure investors (this project will take the next critical step in working to advance Microwearables into an enterprise that is commercial, with technical proof-of-concept, and is investor ready.)
- Towards bedside gene therapies: Development of a microfluidic gene delivery device for immune cell modificiation and optimisation for clinical use BMTH 1.0 funding to produce the tech for testing, that will be undertaken by the company involves UniSA (*Our project will develop the only practical gene delivery technology, microfluidic vortex shedding (μVS), into a product that will be trialled by pharmaceutical companies.*)