



## BUSINESS IMPLEMENTATION & EXECUTION

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The second valley of death for getting a health technology innovation to market is at the implementation phase, for which speed of execution is of essence. For this, SB aims to assist project teams via a fee-for-service approach to de-risk their projects via either of the following:

- Market Validation and KOL identification, especially in China, Indonesia, Singapore and the U.S.
- Preliminary business model scoping and planning
- Preliminary health technology assessment and pricing
- Sourcing & curation of vendors in our extended network in areas such as clinical trials, regulatory, intellectual property and reimbursement



8SSB Fellows at Zhongshan Hospital Fudan University uncovering nuances about the Chinese diabetes patient journey for validation against their initial needs discovery from the U.S.

### IN-OFFICE CLINIC CONSULTATIONS BY DOMAIN EXPERTS TO ASSIST EARLY PROJECT TEAMS

These consultations are highly popular and valuable especially for teams who have limited resources and knowledge to further their projects. Due to limited spaces, the clinic consultations are currently closed-door and open to SB alumni and partners only, unless otherwise stated.

Modelled after the established Biodesign Programme at Stanford University, Singapore Biodesign is a capability development initiative that aims to train and nurture the next generation of healthtech innovators for Asia.

#### CONTACT US

EMAIL: SBENQUIRY@HQ.A-STAR.EDU.SG

TEL: +65 8793 6406

ADDRESS: 79 AYER RAJAH CRESCENT  
#05-03 SINGAPORE 139955

SGBIODESIGN

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HOST INSTITUTION:



JOINT PROGRAM PARTNER:



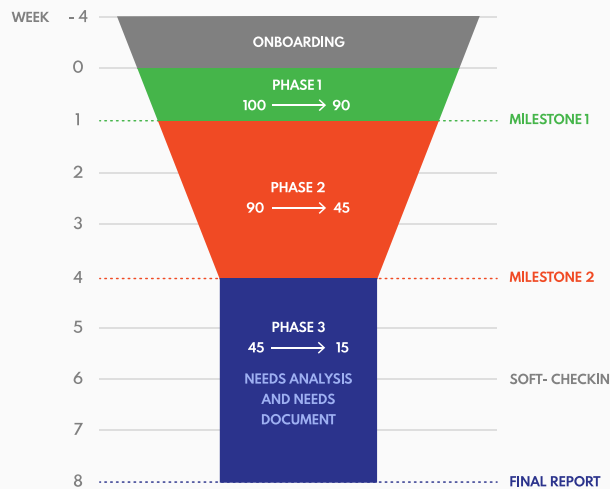
# SINGAPORE BIODESIGN

## In-House Services for Advancing Health Technology Innovations



## NEEDS ASSESSMENT & CURATION

Needs finding is an integral part of the Biodesign process which allows a patient journey to be charted from start to end, extending beyond the hospital into the community so as to create contextualized and impactful innovations. Every year, our Fellows are immersed in a specific clinical theme for 3 - 4 months, for which they would have witnessed first-hand how hospital procedures and operations are conducted in various countries such as the U.S., SG, China and Indonesia. These observations are further processed and stored in a needs database which may be accessed for a fee. Separately, a needs investigation and/or validation study may be commissioned according to your requirements.



Sample timeline of a needs finding and curation study

YEAR	CLINICAL THEME	YEAR	CLINICAL THEME
2011	Ophthalmology	2016	Rehabilitation
2012	Ent	2017	Respiratory Medicine
2013	Cardiology	2018	Diabetes
2014	General Surgery	2019	Ophthalmology
2015	Plastic Surgery		



## PRODUCT DEVELOPMENT SUPPORT

### TINKERLAB

SB has set up a rapid prototyping space at the engineering lab at A\*STAR Central, our host institution A\*STAR's open innovation lab. This space has been upgraded to improve access to our equipment and in-house engineering services so as to support the early engineering needs of healthtech projects. In particular, we provide an array of materials for general brainstorming and more specialized equipment for prototyping.



Bootcamp participants having fun during brainstorming, putting their hands together to use simple materials to test their hypotheses

### PRODUCT ENGINEERING SERVICES

SB provides consultation and dedicated support with our product development team. Our product engineering services is led by **Mr Tan Hee Choon**, In-House Principal Product Engineer.

#### SKILLS

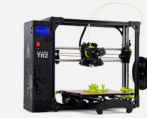
- Proficient in 3D CAD Modelling
- Competent in novel part development, device construction and use of prototyping tools such as 3D printing
- Strong in using hands for thinking to evaluate ideas
- In-depth knowledge in requirement analysis, design controls and design for manufacturing

#### EXPERIENCE

- More than 15 years of experience with multi-national corporation R&D
- Involved with product development of more than 10 projects, of which, has seen 5 products from conceptualization to launch

### EQUIPMENT & SOFTWARE

For a small fee, you and your team may get access to our equipment and software at our dry lab and/or wet lab space. The equipment available at our Tinkerlab are generally good for quick modification of parts once you have a skeleton. Some of the key equipment available in our lab are as follows:



3D Printer with single and dual extruder



Soldering Station



Micro Miller



Band Saw

### OTHER EQUIPMENT AVAILABLE INCLUDE:



- Drill Press
- Bench grinder
- Bench buffer
- Scroll Saw
- Mitter Saw
- Dremel tools
- Air compressor
- Small Benchtop Muffle Furnace
- Microscope

SB has curated a list of vendors for the various prototyping needs required by a project/startup team ranging from components to systems to user design and manufacturing should you require recommendations for. Prior to engaging these vendors, teams may seek follow-on advice/consultations with our in-house staff and mentor network. For example, a basic design history template is made available to teams to get them started on their QMS journey.

Availability of use is on a first-come, first-served basis; subject to safety clearance of protocol and personnel. T&Cs apply.