

**Project Final Report for
Professional Services Advancement Support Scheme (“PASS”)**

1. Project Details

1.1 Project Reference No.	:	<u>PS203003</u>
1.2 Project Title	:	<u>International Symposium and Workshop on the Applications of 3D Printing in Orthopaedics</u>
1.3 Grantee	:	<u>The Chinese University of Hong Kong</u>
1.4 Collaborating Organisation(s)	:	<u>(i) Materialise N.V.</u> <u>(ii) Federation of Hong Kong Industries</u>
1.5 Implementation Agent(s)	:	<u>(i)</u> <u>(ii)</u>
1.6 Sponsoring Organisation(s)	:	<u>(i) Koln 3D Medical Company Limited</u> <u>(ii)</u>
1.7 Consultant(s)	:	<u>(i)</u> <u>(ii)</u>
1.8 Project Co-ordinator	:	<u>(Name) YUNG Shu-hang, Patrick</u> <u>(Post title) Professor and Chairman</u>
1.9 Deputy Project Co-ordinator	:	<u>(Name) LAW Sheung-wai</u> <u>(Post title) Clinical Professional Consultant</u>
1.10 Project Period (duration)	:	<u>from 01/04/2023 to 31/03/2024 (12 months)</u>
1.11 Major Beneficiary Sector(s)	:	<u>Health-related and building and construction related-services</u>
1.12 Approved PASS Grant (HK\$)	:	<u>284,000</u>

2. Project Implementation

2.1 Project Summary

(Please give a summary of the project including objectives, deliverables and target professional service sectors within 100 words.)

The International Symposium and Workshop on the Applications of 3D Printing in Orthopaedics aimed to disseminate knowledge, facilitate collaboration, and enhance skills and competencies of professionals in the field of orthopaedics. The event attracted 306 attendees from diverse backgrounds, including medical doctors, nurses, physiotherapists, prosthetists, orthotists, engineers, and computing professionals, promoting the applications of 3D printing in orthopaedics and contributing to the improvement of Hong Kong's professional services in this domain.

2.2 Project Deliverables

(Please compare the actual results achieved with the agreed targets for each item.)

Agreed Targets		Actual Results Achieved (Please submit copies of all relevant supporting materials, e.g. proceedings, attendance records.)	
Date / Deliverables (with quantity)	Beneficiaries (estimated no. of local / non-local participants)	Date / Deliverables (with actual quantity)	Beneficiaries (actual no. of local / non-local participants)
01/10/2023 to 31/12/2023 One 1-day Symposium	A total of 240 participants, including 180 Hong Kong healthcare professionals and 60 Hong Kong engineering professionals	Completed: 09/09/2023 One 1-day Symposium	A total of 221 participants, including 147 Hong Kong healthcare professionals and 74 Hong Kong engineering professionals (For Hong Kong professionals: 92% of the target met)
01/10/2023 to 31/12/2023 One 1-day Workshop	A total of 50 Hong Kong healthcare professionals	Completed: 10/09/2023 1-day Workshop	A total of 48 participants including 33 Hong Kong healthcare professionals, 10 Hong Kong engineering professionals and 5 others (For Hong Kong professionals: 86% of the target met)
01/01/2024 to 31/3/2024 One final report on the project outcome	Browsers on the Internet	Completed: 16/07/2024 One e-final report uploaded	Browsers on the Internet

2.3 Project Promotion and Dissemination

(Please compare the actual means used / outcomes with the agreed activities for each item.)

Agreed Activities	Actual Means Used / Outcomes (Please submit copies of all relevant supporting materials, e.g. posters, leaflets, invitation letters, publications, website printouts, dissemination e-mails, newsletters, feedback surveys and analysis.)
(a) For Project Promotion:	
Promotional materials and invitations will be sent to the relevant professionals and related professional bodies by email	Mass email was scheduled for all clinical staff and student in CUHK. Second and third announcement were launched for Association of Private Orthopaedic Surgeons and all related secretaries in Prince of Wales Hospital for dissemination and distribution.
E-poster and details of the symposium will be posted in official website (www.ort.cuhk.edu.hk)	Poster and program book were posted in both ORT and OLC official website.
Advertisement will be placed in billboards of our hospital department (Prince of Wales Hospital)	Posters were posted in the billboards.
(b) For Dissemination of Project Deliverables:	
To provide video recordings of presentations and compile an online final report on the symposium and workshop. To allow wide dissemination to doctors, nurses, physiotherapists and occupational healthcare professional and engineers and postgraduate students.	Creation of a dedicated activity platform to host highlighted presentations, and materials (e.g., program book, poster) from the symposium, allowing participants and interested individuals to access and download information shared during the event. https://www.olc-cuhk.org/e/event.html
A feedback survey will be conducted at the end of the symposium and workshop.	Post-event surveys or feedback mechanisms to gather insights from participants on the effectiveness of the symposium in disseminating project deliverables, identifying areas for improvement, and measuring the impact of the event on advancing the field of 3D printing in orthopaedics.

3. Achievements and Grantee's Evaluation of the Project

3.1 Number of participants and eligible beneficiaries

Project Deliverables	Eligible Number of Beneficiaries (if known)
(i) One 1-day Symposium	147 Hong Kong healthcare professionals 74 Hong Kong engineering professionals
(ii) 1-day Workshop	33 Hong Kong healthcare professionals 10 Hong Kong engineering professionals

3.2 Feedback from participants / users / professional services sectors

Symposium:

- Should be extended to 2-3 days with some hands in practice on some 3D tools used for orthopaedics
- The content of day 2 workshop is too complicated and there is not much support from the tutor during the lesson
- Excellent and fruitful conference, great presentations throughout. Thanks for organising
- Thank you very much for such a meaningful event

Workshop:

- Maybe can have an instruction manual for us to bring home/ refer too so it will be easier to follow when using the software
- Thank you very much for a fruitful event

3.3 Dissemination of project deliverables to relevant professionals

The event saw a total of 221 attendees at the Symposium, including 52 medical doctors, 2 nurses, 69 physiotherapists or occupational therapists, 24 prosthetists or orthotists, and 74 engineering professionals. Additionally, the Workshop had a total of 48 attendees, comprising 5 computing professionals, 22 doctors, 6 engineering professionals, 4 medical students, 1 nurse, 9 prosthetists or orthotists, and 1 physiotherapist therapist.

3.4 PASS and other objectives reached (May choose more than one)

- ☒ Increasing the exchanges and co-operation of Hong Kong's professional services with their counterparts in external markets
- ☐ Promoting relevant publicity activities
- ☒ Enhancing the standards and external competitiveness of Hong Kong's professional services
- ☐ Others

Please elaborate on how the objective(s) was/were met:

The symposium and workshop provided a platform for professionals from different fields, including medical doctors, nurses, physiotherapists, prosthetists, orthotists, and others, to come together and exchange knowledge and expertise. Also, by inviting speakers from various backgrounds and external markets, the event facilitated discussions and collaborations between Hong Kong professionals and their counterparts from around the world. Networking opportunities during the symposium and workshop also allowed participants to establish connections and explore potential cooperation in the field of 3D printing in orthopaedics.

Two events attracted a total of 306 attendees, including medical professionals, engineers, computing professionals, and students, which helped in promoting the event and raising awareness about the applications of 3D printing in orthopaedics. Publicity activities such as email promotion, and word-of-mouth from attendees further enhanced the visibility of the event and its objectives. The diverse range of attendees and speakers contributed to the dissemination of information and knowledge about the advancements in 3D printing technology in the field of orthopaedics.

By bringing together professionals from different disciplines and backgrounds, the symposium and workshop provided a platform for learning about the latest standards and practices in 3D printing technology for orthopaedic applications. Workshops conducted during the event offered hands-on experience and practical knowledge sharing, which helped enhance the skills and competencies of participants in utilizing 3D printing in orthopaedics. The exchange of ideas and best practices among attendees and speakers contributed to the overall enhancement of standards and external competitiveness of Hong Kong's professional services in the field of orthopaedics.

3.5 Overall achievements of the project

The project attracted a total of 269 attendees from different professions, including medical doctors, nurses, physiotherapists, prosthetists, orthotists, and others. This diverse range of attendees and speakers contributed to the dissemination of information and knowledge about the advancements in 3D printing technology in the field of orthopaedics. It provided a platform for professionals to come together and exchange knowledge and expertise. It facilitated discussions and collaborations between Hong Kong professionals and their counterparts from around the world, allowing participants to establish connections and explore potential cooperation in the field of 3D printing in orthopaedics.

It also conducted during the event offered hands-on experience and practical knowledge sharing, which helped enhance the skills and competencies of participants in utilizing 3D printing in orthopaedics.

Publicity activities, such as social media promotion and word-of-mouth from attendees, further enhanced the visibility of the event and its objectives. The event helped in promoting the applications of 3D printing in orthopaedics and raising awareness among the participants.

The exchange of ideas and best practices among attendees and speakers contributed to the overall enhancement of standards and external competitiveness of Hong Kong's professional services in the field of orthopaedics.

In summary, the project engaged a diverse audience, facilitated knowledge sharing and collaboration, enhanced the skills and competencies of participants, increased the visibility and awareness of 3D printing applications in orthopaedics, and contributed to the enhancement of standards and competitiveness of Hong Kong's professional services in this field.

The Project Final Report is prepared by the Grantee.