

MEMORANDUM OF UNDERSTANDING

BETWEEN



BIOMEDICAL INSTRUMENTS AND DEVICES HUB:
A CENTRE FOR INNOVATION, DESIGN AND CLINICAL VALIDATION.
PGIMER, CHANDIGARH

And



SANT LONGOWAL INSTITUTE OF ENGINEERING & TECHNOLOGY
(SLIET)
LONGOWAL, DISTRICT SANGRUR

In furtherance of their mutual interest in the fields of education and research, and as a contribution to increased national cooperation, the Biomedical Instruments and Devices Hub (BID Hub), located at Room no: 6015-6019, 6th Floor, Dr PN Chutani Research Block B, PGIMER, Sector 12, Chandigarh, India 160012, and the Sant Longowal Institute of Engineering & technology having its registered address at Longowal, District Sangrur Punjab mutually agree to the following:

The **DST Biomedical Instruments and Devices Hub** has been setup at **PGIMER Chandigarh** with the support of Department of Science and Technology (DST), Govt of India to promote indigenous development of biomedical instruments; and their testing & clinical validation. The Principal Investigators and Coordinators of the BID Hub are Prof. G D Puri [Dean (Academic) and HoD, Department of Anesthesia & Intensive Care, PGIMER Chandigarh], and Prof. Joseph L. Mathew (Professor, Department of Pediatrics, PGIMER Chandigarh). The Hub is involved in a wide variety of activities like executing projects for developing innovative /novel devices, Lab testing/calibration of medical equipment, and clinical validation of indigenously produced devices. The Hub is also involved in teaching and training of professionals and students from diverse disciplines including healthcare, engineering, technology development, industry, and policy-making in the above domains. The hub infrastructure includes state-of-art testing & calibration facility which is being used for testing of various medical devices, as well as a clinical simulator.

Sant Longowal Institute of Engineering and Technology (abbreviated **SLIET**) is a Govt. of India established (1989) deemed university under Section 3 of the UGC Act 1956 for higher education and research in India. The UG Program of SLIET is accredited as TIER 1 by the NBA (National Board of Accreditation). It is well known as the "Modern Gurukul" of Tech Education due to lush green campus of 451 acres (183 ha) in Longowal, Sangrur, Punjab, India. SLIET is fully funded by the Ministry of Human Resource Development, and is an autonomous body controlled by the SLIET Society.

ARTICLE I

The agreement between the parties involves collaboration between the Biomedical Instruments and Devices Hub (BID Hub), located at PGIMER, Chandigarh and the Sant Longowal Institute of Engineering & technology located at Longowal, Sangrur in related disciplines.

The two parties shall seek to promote:

1. The academic and research activities for the mutual benefit of both parties, notably in the areas of indigenous development of healthcare technologies (such as devices, instruments, equipment etc.) to address healthcare problems in India; laboratory testing of such devices, clinical validation of such devices, and laboratory testing/calibration of medical equipment/ devices for use in healthcare.



2. The exchange of expertise of faculty and staff of the two parties, especially in the above-mentioned areas, through academic discussions, scientific interactions, seminars, workshops, and similar academic activities.
3. The collaboration in research activity (including projects / dissertations) of staff/students of SLIET (B.Tech. / M.Tech. / MSc/Ph.D.) in Biomedical Engineering and related areas for mutual benefit of both parties.
4. The collaboration in teaching, research and development, and consultancy activities.
5. The exchange of academic and research material and publications/IPs, through joint research projects.
6. The cooperation in development of project proposals and research activities of mutual interest.
7. The provision or enhancement of intellectual enrichment opportunities for the staff and students of both parties.
8. The publication of research papers in international scientific journals and in the conferences.
9. The publication of Intellectual properties (IPs) developed jointly through project/research collaboration. Such IP would acknowledge joint inventorship of personnel/students belonging to both the parties, as applicable.
10. The writing of books/booklets/ public education materials jointly in the areas of mutual interest.

ARTICLE II

The activities under this linkage will include:

1. Staff Exchange

Staff exchange activities including visits to either institution for any of the following purposes:

- (i) Undertaking joint research
- (ii) Curriculum development and review, attendance in courses, and the upgrading of teaching and research skills
- (iii) Participation in seminars, colloquia, and other types of academic discussions
- (iv) Contributions to teaching programme
- (v) Conduct of study tours
- (vi) Research and joint consultancy research work

2. Student Exchange:

Student exchange activities (e.g. B.Tech /MSc/ M.Tech. /Ph.D/Medical stream students) cover visits to either institution for any of the following purposes:

- (i) Participation in research under joint research projects.

(ii) Internships of students at Bio-Medical Hub.

3. Exchange of Academic Materials

The exchange of relevant academic materials will be carried out subject to the mutual agreement of the parties.

ARTICLE III

The implementation of cooperation based on this Agreement shall be dealt with between the relevant faculties and departments of both the institutions. Where necessary, a specific plan shall be worked out for each activity setting forth detailed arrangements for collaboration. Such plans shall be subject to the approval of the appropriate authorities of each institution. To facilitate the development of such plans, each institution shall nominate a member of its staff to coordinate activities arising under this agreement.

Such plans are described in the annexes of this agreement of Understanding and would be the responsibility of the Faculty/Employee concerned.

ARTICLE IV

Both parties agree and undertake to always keep confidential any information and/or data that may be exchanged, acquired and/or shared in connection with the area of cooperation as mentioned above in ARTICLE I (3) unless otherwise the same information already exists in the public domain.

ARTICLE V

Ownership of any research findings shall be vested in both parties to this Memorandum and any publications regarding the same shall only be possible after prior approval from both parties. The precise details regarding ownership of specific intellectual property arising from this Agreement, will be determined on a case-by-case basis, through mutual discussion between the parties.

ARTICLE VI

The Memorandum shall remain in force for a period of 5 (Five) years commencing from the date of signing and may be reviewed by mutual consent by serving 3 (Three) months written notice to the other party. Upon renewal, both parties shall choose either to proceed with the existing or new terms of understanding.

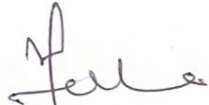


ARTICLE VII

Both the Biomedical Instruments and Devices Hub, PGIMER, Chandigarh and the SLIET, Longowal reserve the right to terminate this Memorandum by either party giving 3 (Three) months written notice to the other. Where such termination occurs, the provisions of this Memorandum shall continue to apply to ongoing activities until their completion.

ARTICLE VIII

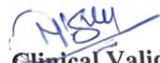
Participating staff and students involved in any activities under this Memorandum must adhere to the law of the country and the rules and regulations of the host institutions.



Prof HS Jattana
Administrator
Biomedical Instruments and Devices Hub
PGIMER, Chandigarh

Witness

Prof. H S Jattana
Hub Administrator
Biomedical Instrument and Devices Hub
PGIMER, Chandigarh



Clinical Validation Coordinator
Biomedical Instruments and Devices Hub
PGIMER, Chandigarh

Date:

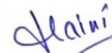
Place: Sant Longowal Institute of Engineering & technology (SLIET), Longowal Sangrur



Prof. Shailendra Jain
Director

Director/SLIET
Sant Longowal Institute of Engg. & Tech
मंत्र लोंगोवाल अभियांत्रिकी एवं प्रौद्योगिकी मंत्रालय
Longowal - 148106, Punjab (India)
लोंगोवाल, मंगल, पंजाब - १४८१०६

Witness



Prof Surita Maini
Head of Department
Dept of Electrical &
Instrumentation Engg.
SLIET

Date: