



MEMORANDUM OF UNDERSTANDING
BETWEEN
THE INSTITUTE OF LIVER AND BILIARY SCIENCES, NEW DELHI
AND
AMITY UNIVERSITY UTTAR PRADESH

This Memorandum of Understanding (hereinafter referred to as "MoU") is made on this 26th day of July, 2021 by and
Between

The Institute of Liver and Biliary Sciences (ILBS), established and incorporated under Societies Registration Act, 1860 situated at D-1, Vasant kunj, New Delhi-110070 (herein after referred to as "ILBS" which expression shall unless excluded by or repugnant to the context, be deemed to mean and include its successors and assignees) through its authorized signatory, Dr. Nirupma Trehanpati, Professor of the
FIRST PART.

And

Amity University Uttar Pradesh, a University established and incorporated under Amity University Uttar Pradesh Act, 2005 (UP ACT No.11 of 2005) having its campus at Sector-125, Noida-201313, Uttar Pradesh, India (hereinafter referred to as "AUUP", which expression, unless repugnant to the context thereof, shall mean and include its successors and assignees) through its authorized signatory, Dr. B.L.Arya, Registrar,
Amity University Uttar Pradesh of the SECOND PART

AND WHEREAS, Institute of Liver and Biliary Sciences in New Delhi, INDIA a clinical and research centre and Amity University, UP, intend to collaborate closely for academic and research activities in the area of biomedical sciences.

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Both parties will be collectively referred as parties and individually as party.

Whereas

Background

- i. Both the Institutes share interests in academic and research activities leading to award of degrees in specialized areas of Biomedical Sciences.
- ii. Both the institutes (ILBS & AUUP) share interests in joint research projects in areas of Biomedical Sciences.
- iii. The two Parties have identified that a stronger relationship between them is mutually beneficial and wish to establish a more formal relationship with each other.

1. Commencement and Duration

- 1.1. This Memorandum of Understanding ("MOU") shall take effect on the date of signing and shall continue for a period of 5 years unless terminated earlier in accordance with the provisions Article VII.

2. Force of this MOU

- 2.1. The areas of agreement outlined in this MOU are described to facilitate more detailed and specific negotiations between the parties which may lead to the preparation and signing of one or more formal agreements between AUUP and ILBS.
- 2.2. The parties agree and understand that this MOU shall not create or give rise to any legally binding obligations upon either of the parties.

3. Broad Areas for Cooperation

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Article I

To these ends, the parties shall;

- Hold talks to identify key joint and collaborative activities.
- Promote the implementation and execution of joint and collaborative scientific, Clinical and research projects.
- Organize joint scientific workshops, conferences and working meetings at bilateral or multilateral level, and
- Exchange the scientists, clinicians and researchers scholars, student trainees etc and facilitate the mutual sharing of Techno- Scientific knowledge and know how.

Article II

Joint Projects should be written by both parties in collaboration. Both the parties will provide information on collaborating principal investigator for the joint proposals together with the list of research scholars, project participants etc.

If any, written individual agreements on joint and collaborative scientific research projects shall be drawn up in line with the following principles:

Parties to the individual agreement shall advise each other of the projects carried out and the findings produced within the scope of the present Agreement and especially as part of the joint and collaborative research projects so that they can jointly decide how to protect these findings.

The MOU does not imply any financial obligations on either party.

Both parties shall respect the confidentiality and intellectual ownership of information shared between them.

Each party shall respect the image and reputation of other party and consult other party before any publicity or external reference to this MOU.

Article III

Exchange of clinicians, researchers and scholars

Exchange of various participants shall be undertaken for the purpose of carrying out joint and collaborative scientific research projects and for training of scientist, researchers, clinicians and scholars to the individual agreement

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A handwritten signature in blue ink, appearing to be 'MSS'.



Article IV

Implementation

Arrangements to implement and execute scientific collaborations shall be defined by the parties or by their respective scientific research institutions in writing and on an individual basis for each project, shall be drawn up in line of the following principles:

- (a) Both parties will define objectives to be carried out at either of institute.
- (b) Both parties will jointly consult and decide on protection of the findings for application of the Intellectual property rights.
- (c) The project coordination from both parties will mutually decide on submission of manuscript to peer reviewed journal with mutual agreement on joint authorships, order of the authors participating in study and identifying the corresponding author.

Article V

Disputes& Indemnification

In the event of disagreements on the interpretation and implementation of this MoU, the parties shall make every effort and endeavour to resolve these disputes amicably by mutual agreement.

Article VI

Supplements to the MoU

The provisions of the present MoU may be supplemented or amended by mutual consent. Supplements and amendments must be agreed in writing in order to become a constituent part of the present MoU.

Article VII

Term of the MoU

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The present MoU shall come into force at the time of its signing and shall remain in force for a term of 5 years. The parties shall, in good time before its expiry, agree on a possible extension of this MoU.

This MOU may be revised in writing with the approval of both parties.

This MoU may be terminated by either party by the provision of written notice of termination not less than three months prior to the desired termination date to the other party.

The Institute of Liver and Biliary Sciences, D-1, Vasant Kunj, New Delhi

**Amity University, Uttar Pradesh
Sector 125, Noida**

[Signature]

**Dr. NIRUPMA TREHANPATI
Professor**

**Dept. of Molecular & Cellular Medicine
Institute of Liver and Biliary Sciences (ILBS)
D-1, Vasant Kunj, New Delhi-110070, India**

Signature of authorised person

Signature of authorised person

Name: *Dr. Nirupma Trehanpati*

Name: Dr. B.L.Arya

Designation: *Professor, MCM*

Designation Registrar AUUP

Date

28/7/2021

Date *28/7/2021*

Witness:

28/7/2021
**Dr. AMIL AGARWAL
Head (Administration)**

**Institute of Liver and Biliary Sciences
(An Autonomous Institute under GNCTD)
D-1, Vasant Kunj, New Delhi-110 070**

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2.

[Signature]
**Dr. ANUPAM KUMAR
Associate Professor, Molecular & Cellular Medicine
Institute of Liver and Biliary Sciences
Sector D-1, Vasant Kunj
New Delhi-110 070**



Nav Kumar
**Dr. Navkiran Kumar
Assistant Professor
Amity Institute of
Biotech.
AUUP, NOIDA**

Name of Collaboration	Development in university collaboration during the following calendar years			
	2018	2019	2020	2021
ILBS (Institute of Liver & Biliary Studies)	This collaboration facilitated research and in exchange of students for summer training and organizing joint workshops and seminars with mutual consent. two Ph.D students (details given below) working in ILBS are registered from Amity University. RASHI SEHGAL, Amity Institute of Biotechnology PART TIME Student, Enrollment No. = A0530716006, Guide = Dr Navkiran Kaur, Assistant Professor, AIB. UMA KANAL, Amity Institute of Food Technology PART TIME Student, Enrollment No. = A4353816002. RASHI SEHGAL, Amity Institute of Biotechnology PART TIME Student, Enrollment No. = A0530716006, Guide = Dr Navkiran Kaur, Assistant Professor, AIB and Co-guide Dr Nirupama Trehan (Professor) had applied for the ICMR fellowship program for SRF. our student Rashi Sehgal has been shortlisted for the award of independent SRF (ICMR), two days	two Ph.D students (details given below) working in ILBS are registered from Amity University. RASHI SEHGAL, Amity Institute of Biotechnology PART TIME Student, Enrollment No. = A0530716006 Guide = Dr Navkiran Kaur, Assistant Professor, AIB. Padamsambhav, Amity Institute of Biotechnology, full time (guide: Dr Navkiran Kaur, Assistant Professor, AIB.). Both the students have external guide from ILBS, Dr Trehan and Dr Gyatri emphasized on the need to increase the duration of the summer training programs in the present course curriculum of Biotechnology which will be beneficial to deliver thorough knowledge regarding the specialized	Immune surveillance by Myeloid derived suppressor cells (MDSCs) in liver diseases Rashi Sehgal1, 2, Navkiran Kaur2, Gayatri Ramakrishna1, Nirupama Trehanpati1* has been communicated to Digestive Diseases journal and received positive responses from reviewers and they suggested few changes and asked for resubmission Flow cytometry analysis: What does it tell us and where can we use it. Lecture was delivered by Dr Trehan on 16 th October, 2020 at 3:15 PM on Microsoft team under the Aegis of webinars and lecture series Amity institute of biotechnology and Amity-ILBS MoU initiatives 'Human Genome and Epigenome: Relevance to health and disease' Lecture was delivered by Dr. Gayatri Ramakrishna Professor, Dept of Molecular and Cellular Medicine Institute of Liver & Biliary Sciences, Vasant Kunj, New Delhi on 23rd October, 2020 at 3:15 PM on Microsoft	Article published in Immune surveillance by Myeloid derived suppressor cells (MDSCs) in liver Diseases Rashi Sehgal, Navkiran kaur, Gayatri Rama Krishna , Nirupama Trehanpati has been accepted in Digestive diseases (Scopus and web of science indexed, impact factor 2.5), PMID: 34157708. Dr Trehan has joined Area advisory Board member of Amity Institute of Biotechnology (Research expertise in 2021)

	workshop on "Hands on training in Mammalian Cell Culture" was held in the Institute of Liver and Biliary Sciences, Vasant Kunj, on 2nd and 3rd March, 2017. Our students participated and The workshop was designed to provide practical knowledge about cell culture and immunofluorescence/cytochemistry and their applications. It involved theory sessions that were followed by practical classes so that student could learn about the advanced techniques as well as their underlying principles. Amity suggested One day interactive workshop /session on "Mind Body Medicine" or "Enhancing Human excellence" by Dr. Rick Levy in ILBS. Dr Navkiran kaur requested Dr Trehan for the same. Dr Trehan appreciated Dr. Rick Levy's talk and interactive session on "Mind Body Medicine" or "Enhancing Human excellence and lecture was scheduled at ILBS, Department of Molecular and Cellular Medicine, on 19th Jan , 2017 11 a.m (Phase 1, MPH).	area. During the meeting members agreed to work on it. Our B.Sc Medical biotechnology students go there for summer training programs and develops skill in the field of Biomedical sciences	team under the Aegis of webinars and lecture series Amity institute of biotechnology and Amity-ILBS MoU initiatives Myeloid derived suppressor cells enhance regulatory T cell suppressive activity via IL-10, iNOS and PDL-2 in cirrhotic patients with sepsis. August 2020, <u>Journal of Hepatology</u> 73:S567 .DOI:10.1016/S0168-8278(20)31608-1 faculty and students from Amity Institute of Biotechnology have gone to ILBS to attend work shops and hands on training on Flow cytometry and tissue culture techniques	
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