

LOKMANYA TILAK JANKALYAN SHIKSHAN SANSTHA'S **PRIYADARSHINI J. L. COLLEGE OF PHARMACY** (Formerly known as J. L. Chaturvedi College of Pharmacy) Electronics Zone Building, MIDC, Hingna Road, Nagpur-440016 (M.S.) India Tel. No.: +91-7104 – 299510 E-mail: principal@pjlcp.edu.in, ilccpngp@gmail.com • Website: www. pjlcp.edu.in Accredited with Grade A+ by NAAC Institute Code: DTE 4265 & RTMNU 265



## Key Indicator 3.5- Collaboration

*3.5.2* - Number of functional MoUs with institutions, other universities, industries, corporate houses etc. during the year

3.5.2.1 - Number of functional MoUs with Institutions of national, international importance, other universities, industries, corporate houses etc. year wise during the year No of MOU = 18

Organisation with which MoU is signed	Name of the institution/ industry/ corporate house	Year of signing MoU	Duration	List the actual activities under each MOU year wise	Number of students/teache r participated under MoUs
Snehal Pharma and Surgicals Pvt Ltd, Nagpur	Snehal Pharma and Surgicals Pvt Ltd, Nagpur	2022	5 years	M Pharm students carried Project work for six months duration in Industry	3 teacher and 4 students
GTT Foundation, Pune	GTT Foundation, Pune	2022	1 year	Life skill training programmes organised for UG students in collaboration with GTT	5 teachers and 72 students
Kusum Life Sciences, Hingoli District	Kusum Life Sciences, Hingoli District	2022	5 years	Animal purchase for Research projects	2 teachers and 15 students
Swargiya Dadasaheb Kalmegh Smruti Dental College and Hospital	Swargiya Dadasaheb Kalmegh Smruti Dental College and Hospital	2020	5 years	<ol> <li>Formulation of</li> <li>Triphala and Aloe vera gel</li> <li>Formulation of</li> <li>Murayya Koenigii gel</li> </ol>	3 Teacher and 2 students
Gurunanak College of Pharmacy, Nagpur	Gurunanak College of Pharmacy, Nagpur	2019	5 years	<ol> <li>Collaborative</li> <li>Research and paper publication</li> <li>Participation of</li> <li>PJLCP faculty (S.K Shah) in one week</li> <li>hand on training</li> <li>program on</li> <li>Computational</li> <li>techniques in GNCP</li> </ol>	2 teachers and 4 students
Deepti Pharmaceuticals Nagpur	Deepti Pharmaceuticals Nagpur	2019	5 years	Industrial training provided to UG students	1 teacher and 2 students
Paryavaran Pratham	Paryavaran Pratham	2018 and renewe d in 2021	3 years	Guest lecture entitled "World Paper Bag Day and Ban on Plastic Carry Bags:	4 teachers and 78 students



#### LOKMANYA TILAK JANKALYAN SHIKSHAN SANSTHA'S PRIYADARSHINI J. L. COLLEGE OF PHARMACY

(Formerly known as J. L. Chaturvedi College of Pharmacy)

Electronics Zone Building, MIDC, Hingna Road, Nagpur-440016 (M.S.) India Tel. No.: +91-7104 – 299510 E-mail: principal@pjlcp.edu.in, ilccpngp@gmail.com • Website: www. pjlcp.edu.in Accredited with Grade A+ by NAAC



Accredited with Grade A+ by NAAC Institute Code: DTE 4265 & RTMNU 265

		1		Opportunities and	
				••	
				Challenges"	
Pharmaregtech	Pharmaregtech	2021	4 years	-	-
Pvt. Ltd.	Pvt. Ltd. (Educare				
(Educare	Globus)				
Globus)					
Minonim Life	Minonim Life	2021	5 years	-	-
Sciences Pvt.	Sciences Pvt. Ltd,				
Ltd, Thane	Thane				
Shri. Ayurved	Shri. Ayurved	2021	5 years	-	-
Mahavidyalaya,	Mahavidyalaya,		-		
Nagpur	Nagpur				
Government	Government	2015	5 years	-	-
College of	College of	and			
Pharmacy,	Pharmacy,	renewe			
Amravati	Amravati				
		d in			
		2020			
Datta Meghe	Datta Meghe	2019	3 years	-	-
Institute of	Institute of Medical				
Medical	Sciences (DU),				
Sciences (DU),	Wardha				
Wardha					
Mayon's	Mayon's	2019	5 years	-	-
Pharmaceutical	Pharmaceutical				
ltd, Nagpur	ltd, Nagpur				
NM Phama,	NM Phama,	2019	5 years	-	-
Murtizapur, Akola	Murtizapur, Akola				
Maharashtra	Maharashtra	2019	5 years	-	-
Centre for	Centre for				
Enterpreneurship	Enterpreneurship				
Development,	Development,				
Aurangabad	Aurangabad				
Bhausaheb	Bhausaheb Mulak	2019	5 years	-	-
Mulak Ayurved	Ayurved		- /		
mahavidhyala	mahavidhyala and				
and Medical	Medical Science				
Science and	and Research				
Research	Hospital, Nagpur				
Hospital, Nagpur					
ZIM Laboratory	ZIM Laboratory Itd,	2017	5 years	-	-
Itd, Nagpur	Nagpur				
The Indian navy	The Indian navy	2016	Continuity	-	-
and	and				
Lokmanya Tilak	Lokmanya Tilak				
Jankalyan	Jankalyan				
Shikshan	Shikshan Santha,				
Santha, Nagpur	Nagpur				
Cantila, Naypul	паури		1	1	



Priyadarshini J. l. College of Pharmacy, Nagpur, Maharashtra, India Certified Document from page No.1 to 45

# MEMORANDUMOFUNDERSTANDING

BETWEEN



Priyadarshini J.L College of Pharmacy Electronic Zone Building, MIDC, HingnaRoad, Nagpur-440016, Maharashtra, India

AND



103, Renuka Enclave, Keshav Niwara, Renuka Layout,Yashoda Nagar, Hingna Road, Nagpur-441108,Maharashtra,India

1

#### PREAMBLE

Whereas, PRIYADARSHINI J.L COLLEGE OF PHARMACY situated at Electronic Zone Building, MIDC, Hingna Road, Nagpur -440016 is a premier institute in the Nagpur region offering UG, PG and Doctoral Programs. The college is recognized by the AICTE, PCI, DTE and affiliated to RTM Nagpur University, Nagpur. The College was established in 1996 and is a part of Lokmanya Tilak Jankalyan Shikshan Sanstha.

WHEREAS, SNEHAL PHARMA is an established WHO GMP certified Pharmaceutical manufacturing organisation involves in manufacturing, distribution and marketing of various pharmaceuticals formulations with the state of the art high tech manufacturing plant in industrial area located at MIDC, Butibori, Nagpur in Maharashtra, India.

WHEREAS, both PRIYADARSHINI J.L COLLEGE OF PHARMACY and SNEHAL PHARMA & SURGICALS, now

Recognizing the importance of Manufacturing of wide range of pharmaceuticals products, which includes various dosage forms under the high tech manufacturing plant viz., Tablets, Capsules, Liquid Orals, Oral Powders (ORS), External Preparations (Spirits), External Preparations (Ointment, cream, gel) & External Powders for Institutional supply, Ethical markets, Tender Supply, Rate training to the Contracts and Exports, well as imparting as Pharmacy/technology/sciences students, etc.

Desiring to club their efforts by pooling their expertise and resources,

INTEND to form a nucleus for getting conversant with the skills and expertise employed in the manufacturing of various dosage forms with special emphasis to the CGMP guidelines used and also the marketing skills involved in terms of the advance empirical knowledge amongst the Pharmacy, technology and sciences students.

NOW, THEREFORE, in consideration of the mutual promises made herein and of good and valuable consideration, the receipt and sufficiency of which both PRIYADARSHINI J.L COLLEGE OF PHARMACY and SNEHAL PHARMA & SURGICALS hereby acknowledge, PRIYADARSHINI J.L COLLEGE OF PHARMACY and SNEHAL PHARMA & SURGICALS hereby agree to sign a memorandum of understanding (MOU).

Priyadarshini J.L College of Pharmacy

Then

Page 2

2

# ARTICLE-I: SCOPE OF THE MOU

This MOU details the modalities and general conditions regarding collaboration between PRIYADARSHINI J.L COLLEGE OF PHARMACY and SNEHAL PHARMA & SURGICALS for enhancing, within the country, the availability of highly qualified manpower in the areas of pharmacy practice without any prejudice to prevailing rules and regulations in PRIYADARSHINI J.L COLLEGE OF PHARMACY and SNEHAL PHARMA & SURGICALS without any disregard to any mechanism evolved and approved by the competent authorities under Govt. of India in so far as such mechanism applies to PRIYADARSHINI J.L COLLEGE OF PHARMACY and SNEHAL PHARMA & SURGICALS. The areas of cooperation can be extended through mutual consent.

# ARTICLE-II: SCOPE AND TERMS OF INTERACTIONS

Both PRIYADARSHINI J.L COLLEGE OF PHARMACY and SNEHAL PHARMA & SURGICALS shall encourage interactions between the pharmacist, Scientists, Research fellows, faculty members and students of both the organizations through the following arrangements:

- a) Exchange of personnel through deputation as per the rules of the respective institute, for limited periods as mutually agreed upon;
- b) Organization of joint conferences and seminars;
- c) Practical training of PRIYADARSHINI J.L COLLEGE OF PHARMACY and SNEHAL PHARMA & SURGICALS;
- d) Joint guidance of student projects/thesis in pharmacy and other areas of national interest at PRIYADARSHINI J.L COLLEGE OF PHARMACY and SNEHAL PHARMA & SURGICALS on mutually agreeable terms.
- e) PRIYADARSHINI J.L COLLEGE OF PHARMACY may depute its personnel as visiting guest faculty at PRIYADARSHINI J.L COLLEGE OF PHARMACY to teach any of the regular Course or specialized topics.
- f) SNEHAL PHARMA & SURGICALS personnel, as well as research scholars, may also be allowed to enroll for their Ph.D./M. Pharm. (Research) at PRIYADARSHINI J.L COLLEGE OF PHARMACY subject to availabilityof seats, research facilities and subject to their fulfilling eligibility criteriaand all other academic regulations of PRIYADARSHINI J.L COLLEGE OF PHARMACY. Further, SNEHAL PHARMA & SURGICALS may request to design and teach a Course or Courses, which it deems fit to enhance quality and performance of its employees. Such Courses mayber at any mutually convenient premises.
- g) SNEHAL PHARMA & SURGICALS may seek assistance/guidance of PRIYADARSHINI J.L COLLEGE OF PHARMACY faculty member/s in product/process modification, modernization, trouble shooting, etc.
- h) Would allow the co-working of students for half/full day with the marketing executives of company.

Priyadarshini J.L College of Pharmacy

Page 3

Sheep

- i) SNEHAL PHARMA & SURGICALS may showcase its business activities at the PHARMACY.
   j) SNEHAL PHARMA a
- j) SNEHAL PHARMA & SURGICALS may avail library, Internet, computational facilities at PRIYADARSHINI J.L COLLEGE OF PHARMACY.
   k) The students will are supported by the students will be students will be supported by the students will be supported
- k) The students will carry out part of their Ph.D. research work or M. Pharm project at PRIYADARSHINI J.L COLLEGE OF PHARMACY and SNEHAL PHARMA & SURGICALS depending on the nature of the work as per rules of the respective institute depending on facilities and requirements.
   b) Both PRIYADARSHINI H. COLLEGE OF PHARMACY and SNEHAL PHARMA (Pharmace)
- Both PRIYADARSHINI J.L COLLEGE OF PHARMACY and SNEHALPHARMA & SURGICALS will be free to independently carry out follow-up research on the thesis work conducted under this scheme

# ARTICLE-III: SHARING OF FACILITIES

- a) PRIYADARSHINI J.L COLLEGE OF PHARMACY and SNEHAL PHARMA & SURGICALS shall make provisions to share their respective important R&D facilities in order to promote academic and research interaction in the areas of cooperation.
- b) PRIYADARSHINI J.L COLLEGE OF PHARMACY and SNEHAL PHARMA & SURGICALS shall provide access to the library facilities to scientists, members of faculty and students as per the prevailing rules and norms in the respective institutes.

## ARTICLE-IV:CO-ORDINATION OF THE PROGRAMME INCLUDING FINANCIAL ARRANGEMENTS

- a) The collaborative programme between PRIYADARSHINI J.L COLLEGE OF PHARMACY and SNEHAL PHARMA & SURGICALS shall be coordinated by a coordination committee appointed by Directors of both the Institutes.
- b) Financial arrangements for each specific collaboration will be decided on a case-to-case basis and brought on record in each case after due approval from heads of both the Institutions.

# ARTICLE-V: EFFECTIVE DATE AND DURATION OF MOU

- a) This MOU shall be effective from the date of its approval by competent authorities at both ends.
- b) The duration of the MOU shall be for a period of 5 years from the effective date.
- c) During its tenancy, the MOU may be extended or terminated by a prior notice of not less than six months by either party. However, termination of the MOU will not in any manner affect the interests of the students/faculty/scientists who have been admitted to pursue a programme under the MOU.

Priyadarshini J.L College of Pharmacy

Page 4

Then

4

d)

agreement of PRIYADARSHINI J.L COLLEGE OF PHARMACY and SNEHAL

# ARTICLE-VI: IPR

Rights regarding software/design/product developed etc. under the scope of this MOU, shall be publications, decided by the two parties by mutual consent.

# ARTICLE-VII: CONFIDENTIALITY

During the tenure of the MOU both PRIYADARSHINI J.L COLLEGE OF PHARMACY and SNEHAL PHARMA & SURGICALS will maintain strict confidentiality and prevent disclosure of all the information and data exchanged under the scope of this MOU for any purpose other than in accordance with this MOU.

Both PRIYADARSHINI J.L COLLEGE OF PHARMACY and SNEHAL PHARMA & SURGICALS shall bind their respective personnel who come into possession or knowledge of any confidential information not to disclose the same to third parties without written approval of the disclosing party or use such confidential information for any use other than intended under this agreement or PROJECTS.

Further both PRIYADARSHINI J.L COLLEGE OF PHARMACY and SNEHAL PHARMA & SURGICALS shall put in place adequate and reasonable measures to keep and store confidential information secure so as to prevent any unauthorizeduse.

CONFIDENTIAL INFORMATION shall mean any proprietary information, data or facts belonging to PARTIES collectively or severally, disclosed by the disclosing party under this agreement or any subsequent agreement, whether in writing, verbal or electronically, irrespective of the medium in which such information is stored, which is marked confidential or with any other words having similar meaning by the disclosing party, or specifically agreed to be kept confidential by the parties, or declared or identified so by the disclosing party before such disclosure or during the discussions. However confidential information shall not include any data or information which:

- is or becomes publicly available through no fault of the receiving party, a)
- is already in the rightful possession of the receiving party prior to its b) receipt of such data or information;
- is independently developed by the receiving party without reference to the c) confidential information of the disclosing party

Page 5

- d) is rightfully obtained by the receiving party from a third party or is in the public domain
- e) is disclosed with the written consent of the party whose information it is, or
- f) is disclosed pursuant to court order or other legal compulsion, after providing prior notice to the disclosing party.

## ARTICLE-VIII: AMENDMENTS

Any amendment and/or addendum to the AGREEMENT shall be in writing and signed by the PARTIES here to and shall only after such execution be deemed to form part of the AGREEMENT and have the effect of modifying the AGREEMENT to the extent required by such amendment or addendum.

### ARTICLE-X: MISCELLANEOUS

- a) The headings and sub-headings are inserted for convenience only and shall not affect the construction of this Agreement.
- b) Both PRIYADARSHINI J.L COLLEGE OF PHARMACY and SNEHALPHARMA & SURGICALS shall not, during the term of this Agreement directly or indirectly, solicit or offer employment or engagement to any of the personnel of other party without the prior consent in writing of that other party.
- c) No failure to exercise and no delay in exercising, on the part of a Party, and right, remedy, power or privilege hereunder shall operate as a waiver thereof, nor shall any single or partial exercise of any right, remedy, power or privilege hereunder preclude any other or further exercise thereof or the exercise of any other right, remedy, power or privilege. The rights, remedies, power and privileges herein provided are cumulative and not exclusive of any right, remedies, powers and privileges provided by law.
- d) After this Agreement has been signed, all preceding understandings/negotiations and correspondence pertaining to it shall become null and void.

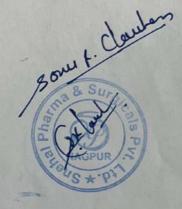
IN WITNESS WHEREOF PARTIES HERE TO HAVE ENTERED INTO THIS AGREEMENT EFFECTIVE AS ON THE DATE AND YEAR FIRST WRITTEN ABOVE.

AGREED AND ACCEPTED

For SNEHAL PHARMA & SURGICALS

Mr. Santosh Hore Director(tech.)

SNEHAL PHARMA & SURGICALS PVT. LTD. 103, Renuka Enclave, Keshav Niwara, Renuka Layout, Yashoda Nagar, Hingna Road, Nagpur-441108, Maharashtra Email:-<u>Snehal.techdirector@gmail.com</u> Email:-<u>Snehalsurgical@gmail.com</u>



FOR PRIYADARSHINI J.L COLLEGE OF PHARMACY

PRINCIPAL Dr. D. R Chaple Privadarshini J. L. College of Principal Pharmacy, Nagpur. PRIYADARSHINI J.L COLLEGE OF PHARMACY Electronic Zone Building, MIDC, Hingna Road, Nagpur-440016 (MS) Email :-d.chaple55@gmail.com

7



### LOKMANYA TILAK JANKALYAN SHIKSHAN SANSTHA'S PRIYADARSHINI J. L. COLLEGE OF PHARMACY

(Formerly known as J.L. Chaturvedi College of Pharmacy) Electronic Zone Building, MIDC, Hingna Road, Nagpur - 440 016 (M.S.) India Tel. No.: +91 - 7104 - 299510 E-mail : principal@pjlcp.edu.in, jlccpngp@gmail.com • Website: www.pjlcp.edu.in Accredited with Grade B++by NAAC Institute Code - DTE 4265 & RTMNU 265



2

2

Ref. No : PJLCP / 2022-23/ 4093

Date : 15/10/2022

To, The Manager (HR) Snehal Pharma & Surgical Pvt. Ltd., Butibori, Nagpur

Sub. : Regarding dessertation work

Dear Sir / Madam,

Following bonafide student of our college studying in M. Pharm III Sem in academic session 2022-23. They wishes to complete their M.Pharm. dessertation work in your company for a duration of six months. The institute permits them to pursue their project work in your company.

Sr. No.	Name of student	Торіс
01	Aniruddha Upadhyay	Formulation and Evaluation of Fast dissolving
		tablets of an oral Hypoglycemic agent
02	Suraj Kakde	Formulation and Evaluation of Montelukast
		and Livocetrizine tablets and establishing its
		extinct parameter as per official monograph
03	Manish Kinkar	Formulation and Evaluation of Trimetazidine
		HCL modified release tablets
04	Vaishnavi Chitmulwar	Formulation and Evaluation of Povidone
		iodine solution and establishing its stability

Hoping for your grand co-operation.

Thanking You,

10 Pad 10/10/22

(Dr. Mrs. K.P. Upadhyay) HoD, Pharmaceutics Dept.

Associates Prof. / Assit. Prof. Priyadarshini J. L. College of Pharmacy, Nagpur. Yours faithfully,

(Dr. D. R. Chaple) Principal PRINCIPAL Privadarshini J. L. Collogo of Pharmacy, Negpur

LOKMANYA TILAK JANKALYAN SHIKSHAN SANSTHA Tilak Bhavan, Laxmi Nagar, Nagpur - 440 022. Maharashtra, INDIA. Tel : +91-712-2230665, 2245121. Fax No. : + 91-712 2221430. Website : www.ltjss.net



#### Letter of Understanding

This Letter of Understanding is made at Pune on 23<sup>rd</sup> March, 2022 between **Priyadarshini J. L. College of Pharmacy (Degree)**, is an Institute having its office at Electronic Zone Building, MIDC, Hingna Road, Nagpur-440 016, Nagpur. Hereinafter referred to as **"Institute**" (Which term shall so far as the context admits be deemed to mean and include its successors and assigns) of the **First Part**, AND **GTT Foundation** a Non-Profit Organization having its registered office at 10, Talera Park, Kalyani Nagar, Pune-411014 hereinafter referred to as **"GTTF"** (which expression shall, unless it be repugnant to the subject or context thereof, include its successors and permitted assigns) of the **Second Part**.

#### WHEREAS:

- Priyadarshini J. L. College of Pharmacy (Degree), Formerly J. L. Chaturvedi College of Pharmacy (Degree) is one of the most renowned colleges of central India imparting quality education in Pharmaceutical Sciences. Established in the year 1997, the college offers undergraduate as well as post graduate courses in Pharmaceutics, Pharmaceutical Chemistry, Pharmacology, and Pharmacognosy
- 2. Ph.D. research centre for developing excellent research facilities for the benefit of the students and faculty.
- 3. GTT Foundation is engaged in the field of education & employability domain that provides training to the students as part of their CSR activity.
- 4. The Institute is willing to enter into a Letter of Understanding (LOU) with GTTF for the skills enhancement training program through the technology platform or other face to face initiatives.

### NOW IT IS HEREBY AGREED BY AND BETWEEN THE PARTIES HERETO AS UNDER:

- 1. The objective of this LOU is to enhance the skills of the candidates of healthcare sector.
- 2. This LOU shall come into force and effect from the date of execution and shall remain valid for a period of **1 year** from such date after which the same may be reviewed by either party. However, if the same is not renewed this arrangement will be deemed terminated on the expiry of the said duration period.

#### **Roles & Responsibilities of the Institute:**

- 1. The Institute shall be responsible to nominate single point of contact (SPOC) for the proposed initiative.
- 2. The Institute shall provide the classroom or online access to train the students.

GTT Foundation 10, Talera Park, Kalyani Nagar, Pune-411014



- 3. The Institute shall share in their letterhead the details of the students who will attend the aforesaid training program with GTTF like name, email ID, aadhar card, contact details, Name of the Company in which Candidate is currently placed, designation and placement proof (current Company), qualification (along with the year of completion/pursuing) and other documents as per GTTF training requirements.
- 4. Minimum Fifty (50) Students are expected to undergo the training program between Mar-2022 to Apr-2022
- 5. The Institute shall use the logos /names of GTTF only for the purpose of the training as agreed in this LOU. The Institute shall keep GTTF aware about the usage of GTTF's logo and name.

#### **Roles & Responsibilities of GTTF:**

- GTTF shall provide the handholding of the trained candidates through mentoring process.
- GTTF will arrange for assessment of its own and also arrange external assessment as required.
- 3. This life skills enhancement training program is free of cost. GTTF shall not charge any fees on whatsoever account/name from the students or the Institute for conducting the aforesaid training program. Certificates shall be awarded by GTTF to the students on successful completion of the training and clearing of the assessment held post completion of the training program.
- **4.** Any alteration / modification to this letter shall be mutually discussed and agreed upon in writing.
- 5. All intellectual or proprietary property and information, supplied or developed by either Party shall be and remain the sole and exclusive property of the Party who supplied or developed same. Upon termination of this LOU and upon written request, the Party in receipt of the requesting Party's intellectual or proprietary property and/or information pursuant to this LOU shall return such information to the requesting Party.
- 6. Both parties undertake to each other to keep confidential all information (written or oral) concerning the business and affairs of the other, which has been obtained or received during the course(s) of performance hereunder, save that which is inconsequential or obvious;
- 7. The Institute agrees that during the term of this Agreement and for a period of two (2) years after the termination or expiry thereof, it shall not, directly or indirectly, employ, contract, solicit, hire or otherwise utilize the services of an existing employee of GTTF.

10

2



3

8. Any dispute arising out of, in relation to or in respect to this LOU shall be settled through mutual consultation and agreement, by the Parties to this LOU. In case a settlement is not arrived at within fifteen (15) days of reference, the dispute/s shall be referred to a sole arbitrator to be appointed in accordance to the Arbitration and Conciliation Act, 1996 as amended from time to time. The place of arbitration shall be Pune, India.

**IN WITNESS WHEREOF**, the Parties hereto have duly executed this LOU as on the day, month and year first hereinabove written.

For Priyadarshini J. L. College

of Pharmacy (Degree), Nagpur.

new

(Authorized Signatory) Name: Dr. Dinesh R. chaple Designation: Printipal Place: Nagpur Date: 25/03/2022 Stamp: For GTT Foundation

Nehatharny

(Authorized Signatory) Name: Neha Sharma Designation: Company Secretary Place: Pune Date: 23.03.2022 Stamp:



L College of Phan

GTT Foundation 10, Talera Park, Kalyani Nagar, Pune-411014



LOKMANYA TILAK JANKALYAN SHIKSHAN SANSTHA'S **PRIYADARSHINI J. L. COLLEGE OF PHARMACY** (Formerly called J. L. Chaturvedi College of Pharmacy) Electronics Zone Building, MIDC, Hingna Road, Nagpur-440016 (M.S.) Tel. & Fax No. +91-7104-299510, E-mail: principal@pilc.edu.in, Website : https://pilcp.edu.in (Approved By AICTE & DTE, New Delhi; Affiliated to R.T.M. Nagpur University Nagpur) NAAC Accredited



#### Report on Training Program (Health Care) as part of a CSR program supported by ATOS SYNTEL between 30<sup>th</sup> Jan-15<sup>th</sup> Feb 2023

GTT Foundation in association with Training and Placement Department, PJLCP recently conducted an extensive training program for B. Pharm Semester VIII students on Personality Development, Mock Interviews & Pharma Domain (Pharmacovigilance, Medical Coding, and Medical Transcription) Skills. The training program was as part of a CSR program supported by ATOS-Syntel. The aim of the program was to equip the participants with the skills and knowledge in these areas and to provide them with an opportunity to gain hands-on experience in the field. This report provides a detailed overview of the program, the objectives, the participants, the activities and the results.

The program was divided into two sections.

- The first part was a 10-day focused on Pharma Domain Skills. During this session, the participants were provided with an overview of the topics, including the basic concepts and theories of pharmacovigilance, medical coding and medical transcription. They were then taught the practical aspects of each topic through lectures, case studies, and hands-on activities.
- The second part was of 5-days program focused on Mock Interviews and Personality Development. Durting this section, the students were taught to equip with the necessary skills, develop their personality, were taught how to present themselves in an effective manner, how to develop their personality, how to create a positive impression and knowledge to face an interview. This also includes developing skills in communication, public speaking, problemsolving, and self-confidence the Practical work.

#### **Objectives:**

The main objective of the program are-

- 1. To equip the students with the knowledge and skills required for mock interviews.
- 2. To help the students understand the importance of personality development.
- 3. To develop skills in communication, public speaking, problem-solving, and self-confidence.
- 4. To enhance their knowledge of Pharma Domain Skills and its features

#### **Participants:**

The program was attended by 58 students from B. Pharm Semester VIII. The students were from different backgrounds and had different levels of knowledge and experience.

#### **Activities Conducted:**

The program consisted of several activities to enhance the students' skills in the relevant areas. These activities included:

Activity 1: Personality Development-The students were trained on effective communication skills, body language, confidence building, and personality development. The session also focused on developing a positive attitude and developing the ability to handle stress

- Group Discussion on traits to develop a positive personality
- Role-play by students to showcase positive personality traits
- Group Exercise on developing communication skills
- Lecture by an expert on tips for improving interpersonal relationships

Activity 2: Mock Interviews-The students were given the opportunity to practice their interviewing skills in a mock interview setting.

- Student pairs conducted mock interview sessions
- Expert feedback on body language, communication, and preparation
- Role-playing to practice answering difficult questions
- Group Exercise to practice responding to typical interview questions

#### **Activity 3: Pharma Domain Skills**

• Lecture on Pharma Domain Skills (pharmacovigilance, medical coding and medical transcription)

• Group Projects: Students were assigned group projects to complete which focused on the different skills in each domain

• Case Studies & Group Discussions to discuss the different approaches and solutions to the problems presented

• Role-play by students to practice discussing various topics in the industry

• Job-Oriented Training: Students were provided with job-oriented training to help them prepare for the job market.

#### **Outcomes of the Training Program:**

#### **1. Personality Development:**

-Students were able to understand the importance of a positive attitude and the power of selfconfidence in achieving personal and professional goals.

-They gained knowledge about different communication styles and the ability to demonstrate effective communication in different situations.

-They developed a better understanding of the importance of developing personal integrity and the ability to work in teams.

#### 2. Mock Interviews:

-Students were able to prepare for interviews by practicing with a panel of interviewers and getting feedback on their performance.

-They learned how to prepare a resume, articulate their qualifications in an interview, and handle challenging questions.

-They were able to demonstrate the ability to stay positive and remain professional throughout the interview.

#### **3. Pharma Domain Skills:**

-Students were exposed to the different aspects of the pharma industry, the different roles and the dynamics of the industry.

-They were able to understand the different regulatory and compliance requirements of the pharma industry.

-They gained knowledge about the different marketing, sales, and distribution strategies in the pharma industry.



# Training Program (Health Care) as part of a CSR program supported by Atos Syntel

# Personality Development, Mock Interviews & Pharma Domain Skills

Eligibility: B.Pharm Graduates (Currently pursuing their final year degree)

Organised by

## Added Benefits:

- All the participating student would get an e-Certificate once the validation is done.
- Trained and eligible candidate will get 100%
   Placement Assistance.



# Training & Placement Department

Lokmanya Tilak Jankalyan Shikshan Sanstha's **Priyadarshini J. L. College of Pharmacy** Electronic Zone, MIDC, Hingna Road, Nagpur-440016

# **Training & Placement Team**







Mr. Sapan K. Shah (Training and Placement Incharge) Dr. D. R. Chaple (**Principal**)

TPO- Priyadarshini J. L. College of Pharmacy, MIDC, Hingna Road, Nagpur-440016 https://pjlcp.edu.in

# MEMORANDUM OF UNDERSTANDING

On Collaborative Research BETWEEN



Kusum Life Sciences A13, MIDC, Wasmat, District: Hingoli – 431512

AND



PRIYADARSHINI J. L. COLLEGE OF PHARMACY Electronic Zone Building, M. I. D. C., Hingna Road, Nagpur- 4420016, Maharashtra, India On

19<sup>th</sup> May 2022

#### MEMORANDUM OF UNDERSTANDING

# THIS MEMORANDUM OF UNDERSTANDING IS MADE AT NAGPUR ON THIS 19<sup>th</sup> DAY OF MAY IN THE YEAR 2022

#### BETWEEN

Kusum Life Sciences A13, MIDC, Wasmat, District: Hingoli - 431512

and

Lokmanya Tilak Jankalyan Shikshan Sanstha's

Priyadarshini J. L. College of Pharmacy,

Electronic Zone Building, MIDC, Hingna Road, Nagpur- 440016 (M. S)

#### MEMORANDUM OF UNDERSTANDING

**Kusum Life Science,** being reputed company hereinafter referred as the **FIRST PARTY** (which term unless the context otherwise requires shall include its representative, successors or assignees of first party)

And

Lokmanya Tilak Jankalyan Shikshan Sanstha's, Priyadarshini J. L. College of Pharmacy, Nagpur- 440016 (M. S.) hereinafter referred as the SECOND PARTY (which term unless the context otherwise requires shall include its representative successors or assignees of second party).

#### **PREAMBLE:**

a) **Kusum Lifescience**, Sahyog Chamber, shri Nagar Naded 431602, Maharashtra, A Kusum Life science is a Preclinical Contract Research Organization established in the year 2020 to provide quality Preclinical, Pharmacology, Analytical and Animal Supply services along with HBEL

Page 2 of 5

(Health Based Exposure Limits/PDE/ADE/OEL) Estimation. Kusum life science is having its state of the art test facility led with highly experienced scientific team and has been providing toxicology, pharmacology, pharmacopoeia testing, nutraceutical, food and FMCG companies along with (health based exposure limits) PDE/ADE/OEL Estimation services. Kusum life science also provides research and development work with a well- equipped laboratory to meet the requirements of academics for basic science students, Ph.D. students and medical professionals along with oriented various certificate courses.

#### b) Priyadarshini J. L. College of Pharmacy, Nagpur- 440016

It is a premium Pharmacy institute imparting quality education in the sector of Pharmaceutical Sciences as well as carrying out research in the field of Pharmaceutical Sciences. It is affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur, recognized by the Pharmacy Council of India (PCI) and All India Council for Technical Education (AICTE), New Delhi. It offers Undergraduate (B.Pharm), Postgraduate (M.Pharm). and Ph.D. programmes. With the relentless efforts of dedicated and competent faculty, up-dated curriculum, innovative methods of instructions, modern infrastructure and strong support of management it has emerged as a center of academic excellence and attracting students from all over India.

#### GOALS AND OBJECTIVES:

Where the **FIRST PARTY** is engaged in quality Preclinical, Pharmacological, Analytical and Animal Supply services along with HBEL (Health Based Exposure Limits/PDE/ADE/OEL) and research and development work with well- equipped laboratory to meet requirement of academics m basic science students, Ph.D. Students and medical professionals

Whereas the **SECOND PARTY** is engaged in Academic Teaching and Research in Pharmaceutical Sciences

The **FIRST PARTY** and **SECOND PARTY** have agreed to take up joint projects in the areas of mutual interest such as *in-vitro* and preclinical studies along with training to the students of **SECOND PARTY**.

Page 3 of 5

Now this deed of MOU is agreed by and between the parties under following terms and conditions. **TERMS AND CONDITIONS:** 

- 1. The **FIRST PARTY** shall provide animals (mice, rats etc) to the **SECOND PARTY** at economical rates as and when required.
- 2. **BOTH PARTIES** will share faculty expertise and instrumental facilities to each other as per mutual understanding.
- The SECOND PARTY will provide laboratories and library facilities to FIRST PARTY by mutual understanding.
- 4. Both the parties have mutually agreed upon the usage of required instruments devoid of any charges and by following the norms, terms and conditions led herein, at their premises.
- The workshop on preclinical studies and training to the interested students of the SECOND PARTY shall be conducted by FIRST PARTY at the premises of both the parties as per the schedule mutually agreed upon.
- 6. The visit of interested students of the **SECOND PARTY** to premises of the **FIRST PARTY** shall be taken up as per the schedule mutually agreed upon.
- Both the parties shall initiate and exchange research facilities and other relevant things required to carry out research projects. The research project interchange and finalization will be done as per mutual understanding of **BOTH PARTIES**.
- 8. **BOTH PARTIES** may apply for joint research projects to the concerned research organizations. The workload, expenses & profit share in such instances shall be decided upon mutually.
- 9. If the results of the joint projects are liable to attract commercial benefits, then the financial profits shall be shared between the two parties as per the mutually agreed arrangements.
- 10. Any dispute arising shall be settled through mutual negotiations only without recourse to resolving the dispute by legal means.
- 11. This MOU shall take effect from the date of its signing by **BOTH PARTIES** and shall be valid for the period of 5 (Five) years from the date on which it came into force.

Signed on 19 May 2022 Valid upto 18 May 2027

A) Dr. Balaji Madrewar
 Director
 Kusum Life Sciences,
 A13, MIDC, Wasmat,
 District: Hingoli-431512

an

 B) Dr. Dinesh R. Chaple Principal,
 Priyadarshini J. L. College of Pharmacy, Nagpur- 440016.

> PRINCIPAL Prlyadarshini J. L. College of Pharmacy, Nagpur.

(P 19/05/2022

D) Dr. Mrs. Shilpa Deshpande Associate Professor & Head, Department of Pharmacology Priyadarshini J. L. College of Pharmacy, Nagpur- 440016.

> Associates Prof. / Asstt. Prof. Privadairshim J. L. College of Privadarshim J. L. College of Pharmacy, Nagour.

Witnesses:

Wagne 2022

C) Dr. Gajanan Nagre Veterinarian, Animal Facility, Kusum Life Sciences, A13, MIDC, Wasmat, District: Hingoli-431512

## Lokmanya Tilak Jankalyan Shikshan Sanshtha Central Office

Priyadarshini College of Engineering Campus, Faculty -1, Mechanical Building, Hingna Road, Nagpur-440 019 Tel. 07104-244463, 244470, FAX : 244470

#### GST No. 27AAATL3003C1ZB

P.O. No.: LTJSS/A&P&D/PJLCP/CON/2022-23/1298

DATE: 08/12/2022

#### PURCHASE ORDER

For:- Supply of "ANIMALS" to Priyadarshini J. L. College of Pharmacy, Electronic Zone Building, Hingna Road, Nagpur.

#### TO,

#### M/s Kusum Life Sciences

A-3, MIDC Wasmat, Hingoli - 431 512

#### Kind Atten :- Dr. Balaji Madrewar : 7995791646, 7719888111

Contact Person :- Shri P. K. Bais : 8446724342

Sir,

With reference to your revised quotation No. KLS/QUOT/232/22 dated 08/12/2022 and subsequent negotiation, you are hereby requested to kindly supply the Animals to Priyadarshini J. L. College of Pharmacy, Electronic Zone Building, Hingna Road, Nagpur, as mentioned below, subject to the following terms & Conditions.

Kindly note that the animals have to be delivered to the concerned college, within the period mentioned in your quotation. Delay in the supply beyond the stipulated delivery period, without permission for extension (in special case), will be liable for penalty or cancellation of order.

Sr. No.	Name of the Animal	Rate	Qty	Total Costs
1	Sprague Dawley RAT	300.00	300	90000.00
		Transportatio	n Charges	8000.00
		Tot	al Costs	98000.00

#### **TERMS & CONDITIONS**

- Rates are inclusive of GST (CGST+SGST) and F.O.R. the Institute. However, the amount of GST (50% CGST & 50% SGST) should be shown separately in the bill of payment.
- Bill against supply should be in the name of Lokmanya Tilak Jankalyan Shikshan Sanstha, Nagpur mentioning Sansth's GST No & submitted to the office of the LTJSS, PCE Campus, Hingna Road Nagpur and Principal, Priyadarshini J. L. College of Pharmacy, Nagpur, as consigne, along with photocopy of P.O. issued, and delivery acknowledgment.
- 3. Delivery of the animals : within 10 days after confirmation of the P.O.
- 4. Payment shall be released immediately after satisfactory receipt of the animals and certification of the same by the concerned college.
- 5. The Principal/Head of the Institute shall have the right to reject any or all the items, if the quality is not acceptable.

Thanking You. For, LTJSS.

mpsing

Authorized Signatory. C.C: Director/CAFO, LTJSS/ Principal, PJLCP, Nagpur.





### INVOICE

### KUSUM LIFE SCIENCES

## A-13, MIDC Wasmat, District: Hingoli, 431512

## Maharashtra, India (GST: 27EINPS4867N1Z1)

Email:sales@kusumlifesciences.com, Mobile:7995791646, 9011550111

To, Priyadarshini J Hingna Road,	. L. College of Phari Nagpur	macy,	nvoice No O Numbe			NO.248 /04/2023
Date	Particulars	Rate Per Animal	Qua	antity	Total No. of Animals	Total Amount
			Male	Female		
25/04/2023	Wistar rat	300	50	50	100	30,000/-
		Transpor	rtation			8,000/-
Total						38,000/-

Total Amount in Words: Thirty Eight Thousand Only.

Bank Details.

Name: Kusum Life Sciences

Bank: Bank of Maharashtra Branch: Chikalwadi Nanded (Maharashtra)

Account number 60384658307

IFSC Code MAHB0000035

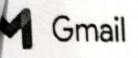
Best Regards

Dr. Balaji Madrewar Director Mobile: 7995791646, 9226799315

Office :- Sahyog Chambers, Shri Nagar, Nanded 431602, Maharashtra, India ty Office :- A-3, MIDC Wasmat, Hingoli 431512, Maharashtra, India.

Call - 7995791646 07.198881

info@kusumlifesciences.com sales@kusumlifesciences.com



Prashant Amale <p.amale@pjlcp.edu.in>

### Fwd: Animal requirement

1 message

Shilpa Deshpande <s.deshpande@pjlcp.edu.in> To: Prashant Amale <p.amale@pjlcp.edu.in>

Fri, Apr 29, 2022 at 10:18 AM

- Forwarded message -From: Shilpa Deshpande <s.deshpande@pjlcp.edu.in> Date: Fri, 29 Apr 2022, 10:18 Subject: Animal requirement To: drdevyani.awari@dmimsu.edu.in <drdevyani.awari@dmimsu.edu.in>

Dear Dr. Devyani,

As per our telephonic discussion, please replace 50 mice with 25 rats that need to be delivered as per the

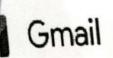
Payment has been already done by online mode.

Ľ	Rat (SD)	M/F	180-220 g	25	

Please find the attached documents regarding the same

(Dr. s.A. Deshpande)

Associates Prof. / Asstt. Prof. Priyadarshini J. L. College of Pharmacy, Nacour



# Fwd: regarding remaining consignment

1 message

Shubhada Mangrulkar <s.mangrulkar@pjlcp.edu.in> To: Shilpa Deshpande <s.deshpande@pjlcp.edu.in>, Prashant Amale <p.amale@pjlcp.edu.in>

Fri, Apr 29, 2022 at 10:08 AM

-- Forwarded message --From: Shubhada Mangrulkar <s.mangrulkar@pjlcp.edu.in> Date: Tue, Dec 28, 2021 at 1:08 PM Subject: regarding remaining consignment To: dr. devyani awari <drdevyani.awari@dmimsu.edu.in>

Dear Dr. Devyani,

I am Dr. Shubhada Mangrulkar, Assistant professor, Department of Pharmacology and animal house in-charge, Priyadarshini J.L.College of pharmacy, Nagpur. As per our telephonic discussion, please replace 50 mice with 25 rats that need to be delivered as per the consignment. Payment has been already done by online mode.

1	Rat (SD)	M/F	180-220 g	25	
---	----------	-----	-----------	----	--

Please find the attached documents regarding the same.

Thanking You. Regards. Dr. Shubhada V. Mangrulkar Assistant Professor, Department of Pharmacology, Priyadarshini J.L.College of pharmacy, Nagpur

Minutes of IAEC meeting Nov 2020 (1).pdf 835K

(Dr. SA Deolponde)

Associates Prof. / Asstt. Prof. Priyadarshini J. L. College ~ ' Pharmary Nann

#### MEMORANDUM OF UNDERSTANDING





is entered on 16 01 202 Between

Swargiya Dadasaheb Kalmegh Smruti Dental College & Hospital, Wanadongari Wadhamna Road, Hingna, Nagpur, Maharashtra 441 110 (M.S)

&

PRIYADARSHINI J. L. COLLEGE OF PHARMACY Electronics Zone Building, MIDC, Hingna Road, Nagpur, 440016 (M.S.)

Swargiya Dadasaheb Kalmegh Smruti Dental College & Hospital, Nagpur (Hereinafter referred to as SDKSDCH) is the premier Institute of Central India. Since its very Inception In 2006. It has untiringly toiled amongst the most backward regions and the least privileged to provide them the opportunity to become self-reliant It is located at Wanadongri on Hingna road situated in the outskirts of the Nagpur city.

PRIYADARSHINI J. L. COLLEGE OF PHARMACY, Nagpur (Herein after referred to as PJLCP) is a pioneer Pharmaceutical Institution recognized for imparting high quality education since its establishment in 1997. The college has proved itself in producing graduates, post graduates and conducting doctoral research in the field of Pharmacy with sound scientific and technical background. The college is NAAC accredited, recognized by AICTE, PCI and affiliated to RTM Nagpur University, Nagpur.

This MoU shall commence from the date of its signing and shall continue for a period of Five years from date of its signing, unless either party notify in writing to the other party of its intension to terminate. PJLCP and SDKSDCH recognize that they share common goals and are desirous to establish a cooperative agreement for mutual benefit.

The said agreement between PJLCP and SDKSDCH will be in the following areas:

1. Technical Training Programs (TTPs): TTPS helps to improve the knowledge & the skills of the individuals. An individual undergoing TTPS can benefit in multiple ways. He will be in a position to improve his productivity. This MoU's also envisages series of Technical Training Programs for the employees of SDKSDCH.

2. Industrial Testing & Use of Laboratories: It is an important area to collaborate for both PJLCP and SDKSDCH members and shall utilize the various Laboratories that are available with PJLCP. The equipment & faculty expertise could be used by the SDKSDCH for varied purpose on chargeable basis as on decided by PJLCP.

graaklike

Kapcan



**3. Undertaking Need based Projects:** The problems faced by an Institute/ Hospital undertaking are many viz. technical, biomedical, human, system & procedures. In this collaboration, the PJLCP will undertake Consultancy activities which will be need based. The activity will involve Problem Identification, Problem Definition, Data collection, Data Analysis, Problem solving by taking corrective actions. These projects would be undertaken in joint consultation and benefits will be shared suitably.

4. Institute Visit: It is an activity, where student community would like to experience the real life work situations. This MoU's will provide an opportunity to the students of PJLCP of different branches to visit the hospital research activities and vice versa.

5. Guest Faculty/Visiting Faculty: PJLCP will invite SDKSDCH experts to share their experience with students of PJLCP through Entrepreneurship Development Cell of various departments and vice-versa. These lectures would be organized on a mutually agreeable time & date. It is expected that SDKSDCH will depute the senior professors /doctors who are ready to share their experience with students of PJLCP.

6. Confidentiality: As part of this MoU's, either party will acquire or develop confidential and proprietary information concerning its dealings and methods of dealings. Both parties agree that such Confidential Matter is for the other party's exclusive benefit and that, either party will not directly or indirectly use or disclose any Confidential Matter, except for specified purpose. Receiving party shall use the Confidential Matter of the other party only to its employees, directors and advisors on a 'need to know' basis. Disclosing party does not give any warranty for accuracy or completeness of confidential matter. Upon the termination of this MoU's, either party will promptly return all confidential matters to the other party. The confidentiality obligations stated herein shall survive for two (2) years after termination of this MoU's. The obligations contained in this Clause shall not apply to information in the public domain or is received from a third party without restrictions or is developed independently or is in possession of the receiving party.

7. Presentation/Dissertation Evaluation: As a part of curriculum the students of PJLCP prepare dissertation/Presentation. SDKSDCH will support this activity of PJLCP by sharing technical data, Clinical Data and the necessary guidance to the students to make their dissertation/presentation technically perfect and unique.

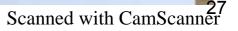
8. Agreements for Research Collaboration: Each research collaboration undertaken by the parties hereunder shall be initiated by the signing of a separate research agreement between the parties, which will describe in detail:

- The nature, scope and schedule of the research collaboration.
- b. In the form of the research collaboration.
- c. The estimated cost of the research collaboration together with the amount of funding, if any, to be received from third parties.
- d. The treatment of intellectual property and data rights, including Patents, industrial design registration, copyrights and all other proprietary information (including innovations not patented designs, not registered etc.) which result from the research collaboration or



& salchle

Kabaga



property shall survive the termination of the agreement.

(c) Termination shall not affect the projects/assignments agreed to be undertaken by both the parties before such termination and both the parties should complete such projects/assignments as if this MoU's is in operation.

(d) On termination, the Partner Institute shall handover the data which were used for processing to Counterpart.

BY SIGNING BELOW, the parties, acting by their duly authorized officers, have caused this memorandum of Understanding to be executed, effective as of the day and year first above written.

On behalf of On behalf of Swargiya Dadasaheb Kalmegh Smruti Dental PRIYADARSHINI J. L. COLLEGE OF PHARMACY Nagpur College & Hospital, Nagpur Then D. S. Sarfrede By: By: Name: Dr. Dinesh R. chaple Dr. Digest Barfurde Degn Name: Title: Title: Principal Witness: 1. - Ohgen (Dr. Achish Lengeh) 2. A. (Dr. Arun Sajjanar) Witness: 1. SS Jalchle (Dr. S.S. Bakhle) 2. Kppaly (Dr. Nen Kp. upadly)





Scanned with CamScanner<sup>28</sup>



# Swargiya Dadasaheb Kalmegh Smruti Dental College & Hospital

Wanadongri Road, Hingna, Nagpur - 441 110 Mob. No. : 7620221782 Fax No. : (07104) 280099 E-mail : dadasahebkalmeghdental@yahoo.com

To

The Principal,

Priyadarshani College Of Pharmacy, Nagpur.

Subject: Permission regarding pharmacological preparation of triphala and aloe vera gel in Department Of Pharmaceutics under the supervision of Dr. Suparna Bakhale.

#### Respected Sir/Mam,

I Dr. Komal Ravindra Deotale, Post Graduate student in Department Of Oral Medicine and Radiology of Swargiya Dadasaheb Kalmegh Smruti Dental College and Hospital, Nagpur have been allotted with aforesaid topics "Comparative Evaluation Of Efficacy Of Triphala With Lycopene In Patients With Oral Submucous Fibrosis: A Randomized Controlled Trial" & "Comparative Evaluation Of Efficacy Of Triphala and Aloe Vera With Lycopene In Patients With Oral Submucous Fibrosis: A Randomized Controlled Trial." for which I require triphala gel and aloe vera gel and wanted your permission for pharmacological preparation of the same in Department Of Pharmaceutics Of Priyadarshani College Of Pharmacy, Nagpur under the supervision of Dr. Suparna Bakhale. Kindly grant me permission for the same and oblige.

Thanking you.

Yours Sincerely,

Dr. Komal Ravindra Deotale

Dr. Ashish Lanjekar

Dr. Hansn Danjena

(Reader & Guide)

Seen Inited

Dr. Ramhari Sathav

(H.O.D.)

Dr. P Mahesh

(Dean) DEAN Dental College & Hospital Hingan, Bin, Nagpur,

29

## Swargiya Dadasaheb Kalmegh Smruti Dental College & Hospital

Wanadongri Road, Hingna, Nagpur - 441 110 Mob. No.: 7620221782 Fax No.: (07104) 280099 E-mail: dadasahebkalmeghdental@yahoo.com

To,

The Head

Priyadarshani College of Pharmacy, Nagpur

Subject: Request for making the Murraya Koenigii gel formulation for my post-graduate student

Respected Madam/Sir

Myself Dr. Salman Ansari, Professor and Head of the Department of Periodontology, Swargiya Dadasaheb Kalmegh Smruti Dental College and Hospital, Nagpur. Dr. Prajakta Heda is a post-graduate student (MDS II) guided by Dr. Grishmi Niswade. She is undertaking her thesis with the title 'COMPARATIVE EVALUATION OF LOCAL DRUG DELIVERY GEL CONTAING EXTRACTS OF MURRAYA KOENIGII WITH THAT OF CHLORHEXIDINE GEL AS AN ADJUNCT TO SCALING AND ROOT PLANING IN MANAGEMENT OF MODERATE CHRONIC PERIODONTITIS: A RANDOMIZED CONTROLLED TRIAL.' For which she will require Murraya Koenigii Gel formulation, so requesting Mrs. Suparna Bakhle madam of Priyadarshani College of Pharmacy to help her make the preparation for conducting the study.

Kindly support us in smooth conduct and completion of the thesis work.

Thank You.

nAed 2000

102/2023

Signature of Guide

Signature Of HOP

PROFESSOR & MOD Devertment of Postedontokogy Swarging Dedsetinob Ksknogh Smrud Dentel Gollogo & Hospital Nagpur

स्व. दादासाहेब काळमेघ स्मृती प्रतिष्ठान अमरावती SWARGIYA DADASAHEB KALMEGH SMRUTI DENTAL COLLEGE & HOSPITAL

# MEMORANDUM OF UNDERSTANDING (MOU) FOR RESEARCH PARTNERSHIP AND COLLABORATION

Between

# GURUNANAK COLLEGE OF PHARMACY,

Nagpur, Maharashtra, India

### And

## PRIYADARSHINI J L COLLEGE OF PHARMACY,

Nagpur, Maharashtra, India

### Brief introduction of both parties:

Under the aegis of **The Sikh Education Society**, Gurunanak Technical Institute (Diploma in Pharmacy) was established in the year of 1983. Gurunanak College of Pharmacy (GNCP) was established in 2004, in the subsequent year's postgraduate courses (2009) and PhD (2014) in the pharmaceutical sciences was introduced. The college is situated on 10 acres of land away from the hustle & bustle of busy city traffic, in the peaceful area of Nari which is very well within the Nagpur city limits. A spacious, well planned, well lit, well ventilated building surrounded by the lush green campus is many neighbors' envy. The college has been successful in imparting quality education in pharmacy at all levels throughout these years and it is also providing a well equipped platform to carry out the research activities that are recognized at both national and international levels.

The institute has robust infrastructure that caters to the needs of the students. This covers aspects of teaching-learning, extra-curricular activities, social outreach, sports, gender equality, cultural involvement and research accomplishments. The success stories of the institute highlight hard work by enriched faculty members and obviously our beloved students including strong alumni. There are about 23 full time teachers in the institute and most of them are PhDs. We are trying to carry out quality research work both in the basic research as well as in industry oriented research. The quality of our research can be judged by the quality of our publications and by the fact that our research is actively utilized in the industry.

#### AND

Priyadarshini J. L. College of Pharmacy (Degree), Formerly J. L. Chaturvedi College of Pharmacy (Degree) (JLCCOP) is one of the most renowned colleges of central India imparting quality education in Pharmaceutical Sciences. Established in the year 1997, the college offers undergraduate as well as post graduate courses in Pharmaceutics, Pharmaceutical Chemistry, Pharmacology, and Pharmacognosy. Ph.D. research centre for developing excellent research facilities for the benefit of the students and faculty. The institute has track record of research and development as evident from recent publications.

Both the institutes have agreed to enter into a Memorandum of Understanding (MOU) considering the long-term benefits of sharing the knowledge between the Institutes and establish a vibrant academic collaboration, by undertaking joint activities in their respective field of research,

## 2. Objectives and scope:

- This agreement ensures the collaborative research between GNCPand PLJCP in the field of Pharmaceutical Sciences.
- Both institutes will provide the required facilities to carry out the joint research activities without any financial expectations.
- In case of funded projects, government and non-government, sharing of financial resources will be decided based on the nature of activities to be performed in the project.
- Intellectual property of the product and the process through collaborative research will be equally held by both institutions and confidentiality of the research will be respected.
- In case of commercialization and patent filing of the product obtained out of this collaboration, both parties will consult before taking any financial decisions.
- Promotion of scientific aptitude in student through organization of joint scientific workshops and conferences.
- Student and faculty exchange programs where faculty or student of one institute will be invited to teach or share knowledge with the students and faculty of the other institute.

#### 2.0 Executive responsibilities:

 Faculty of PJLCP will be performing research and administration through Principal.

- Faculty of GNCP will be responsible for taking decisions and execution of research activities through Principal.
- Responsible individuals of respective institutes will be joint investigators of the research projects.
- Due scientific weightage will be given to research involved in the research work for patents, publications, and commentaries.
- ٠

## 3.0 Confidentiality clause:

It is hereby agreed that both the Institutes shall keep information and data collected completely confidential, not to reveal without knowledge of both parties, for further development.

# 4.0 Publication policy:

With mutual consent of both institutions and due acknowledgement of contribution from individuals involved in scientific outcomes, research can be published.

### 5.0 Duration:

The MOU is valid for a period of five years from the date of signing. It can be extended with mutual consent of both the organization.

## 6.0 Termination:

- Either Institute is free to terminate the agreement by having mutual understanding and providing prior notice of 1 month.
- Any dispute, if arises must be resolved with mutual consultations
   between both institutes. Court of law shall be involved as a last resort
- to find solution for the cause of dispute.
  The legal arbitration must be performed at a place of mutual
  - understanding.

For,

Priyadarshini J L College of Pharmacy, Gurunanak College of Pharmacy,

Nagpur

12/03/2019

Principal,

Nagpur

Principal,

Priyadarshini J L College of Pharmacy, Gurunanak College of Pharmacy,

Nagpur, India R chaple PRINCIPAL Priyadarshini J. L. College u Pharmacy, Nagpur. Date of Sign and Acceptance:



Nagpur, India

Dr. A. M. Ittadwar Principal Gurunanak College of Pharmacy Nari, Near Dicit Nagar, Behind C. P. Found Kamptee Road, Nagpur-440 026

# **2D-QSAR Modeling of Chalcone Analogues as Angiotensin Converting Enzyme Inhibitor**

Sapan Shah <sup>1,\*</sup>, Dinesh Chaple <sup>1</sup>, Puja Badne <sup>1</sup>, Samruddhi Khonde <sup>1</sup>, Shivani Deshmukh <sup>1</sup>, Sumit Arora <sup>2</sup>, Subhash Yende <sup>3</sup>

- <sup>1</sup> Department of Pharmaceutical Chemistry, Priyadarshini J. L. College of Pharmacy, Hingna Road, Nagpur-440016, Maharashtra, India; shah.sapan@rediffmail.com; (S.S.); d.chaple@rediffmail.com (D.C.); pujabadne5@gmail.com (P.B.); samruddhikhonde97@gmail.com (S.K.); deshmukhshivani38@gmail.com (S.D.);
- <sup>2</sup> Department of Pharmacognosy and Phytochemistry, Gurunanak College of Pharmacy, Nari, Nagpur 440026, Maharashtra, India; sumitkishanarora@gmail.com (S.A.);
- <sup>3</sup> Department of Pharmacology, Gurunanak College of Pharmacy, Nari, Nagpur 440026, Maharashtra, India; subhashyende@gmail.com (S.Y.);
- \* Correspondence: shah.sapan@rediffmail.com (S.S.);

#### Scopus Author ID 55574193515

### Received: 27.05.2022; Accepted: 27.06.2022; Published: 7.10.2022

**Abstract:** Targeting angiotensin-converting enzyme (ACE) comes out to be an effective mechanism for controlling hypertension. Two-dimensional quantitative structural activity relationship models were generated to predict the ACE inhibitory activity of chalcone analogs. The genetic algorithm- multiple linear regression models (GA-MLR) approach was used to generate highly predictive models using straightforwardly interpretable Py, Estate, Alvadesc, and Padel descriptors. Application of Intelligent consensus modeling confirms that model-2 is statistically robust ( $R^{2}_{tr} = 0.66$ ,  $Q^{2}_{LOO} = 0.5621$ ) with good external predictivity (Concordance Correlation Coefficient,  $CCC_{ex} = 0.9109$ ,  $Q^{2}$ -F<sup>1</sup> = 0.85818,  $Q^{2}$ -F<sup>2</sup> = 0.85782 and  $Q^{2}$ -F<sup>3</sup> = 0.88489). Novel analogs designed according to the synthetic route considering structural requirements indicated by the model were found to be satisfactory and could be considered for synthesis and subsequent screening.

### Keywords: angiotensin-converting enzyme; chalcone; 2D-QSAR; consensus modeling; validation.

© 2022 by the authors. This article is an open-access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https://creativecommons.org/licenses/by/4.0/).

### **1. Introduction**

Hypertension is a widespread illness in adults all over the world, and it is one of the leading causes of cardiovascular and renal disorders [1,2] Angiotensin-converting enzyme (ACE) inhibition has come out to be an effective mechanism in controlling hypertension [3]. Angiotensin-converting enzyme inhibitors (ACEIs) regulate the biosynthesis of a vital chemical known as angiotensin II thereby decreasing salts concentration, dilating arteries, and controlling hypertension. ACE and Angiotensin II are considered essential points of regulation in the Renin-Angiotensin-Aldosterone System (RAAS); deregulation of any of them is accountable for cardiovascular and renal diseases [4–7]. The RAAS is widely known for its importance in cardiovascular physiology, water-electrolyte balance, and cell function. Excessive activation of this system is a major contributor to hypertension. ACE is the essential regulation locus of RAAS to combat hypertension. ACE is a dipeptidyl carboxypeptidase that removes the carboxy-terminal dipeptide of angiotensin I, inactivating the vasodepressor bradykinin and activating the strong vasoconstrictor. Growth-promoting chemical angiotensin

Contents lists available at ScienceDirect



**Digital Chinese Medicine** 



journal homepage: http://www.keaipublishing.com/dcmed

# Exploring the phytoconstituents targeting TNF- $\alpha$ as potential lead compounds to treat inflammatory diseases: an *in-silico* approach

Sumit Arora<sup>a\*</sup>, Pallavi Rushiya<sup>b</sup>, Kalpana Tirpude<sup>b</sup>, Nidhi Sapkal<sup>b</sup>, Subhash Yende<sup>c</sup>, Abhay Ittadwar<sup>a</sup>, Sapan Shah<sup>d</sup>

a. Department of Pharmacognosy and Phytochemistry, Gurunanak College of Pharmacy, Nagpur, Maharashtra 440026, India

b. Department of Pharmaceutical Chemistry, Gurunanak College of Pharmacy, Nagpur, Maharashtra 440026, India

c. Department of Pharmacology, Gurunanak College of Pharmacy, Nagpur, Maharashtra 440026, India

d. Department of Pharmaceutical Chemistry, Priyadarshini J. L. College of Pharmacy, Nagpur, Maharashtra 440016, India

### A R T I C L E I N F O A B S T R A C T

Article history Received 12 August 2022 Accepted 07 September 2022 Available online 25 September 2022

*Keywords* Inflammation Tumour necrosis factor-*α* (TNF-*α*) Medicinal plants Phytoconstituents Molecular docking Absorption, distribution, metabolism, excretion, and toxicology (ADMET) studies **Objective** To explore the anti-inflammatory phytoconstituents from various plant sources as tumour necrosis factor- $\alpha$  (TNF- $\alpha$ )-inhibitor, a mediator involved in the inflammatory disorder, by *in silico* molecular docking.

**Methods** Based on previous findings, we performed the *in silico* assessment of anti-inflammatory phytoconstituents from different medicinal plants to understand their binding patterns against TNF- $\alpha$  (PDB ID: 6OP0) using AutoDock Vina. Molecular docking was performed by setting a grid box (25 × 25 × 25) Å centered at [- 12.817 × (- 1.618) × 19.009] Å with 0.375 Å of grid spacing. Furthermore, Discovery Studio Client 2020 program was utilized to assess two- and three-dimensional (2D and 3D) hydrogen-bond interactions concerning an amino acid of target and ligand. Physicochemical properties were reported using the Lipinski's rule and SwissADME database to support the *in silico* findings.

**Results** From the selected medicinal plants, more than 200 phytocompounds were screened against TNF- $\alpha$  protein with binding scores in the range of – 12.3 to – 2.5 kcal/mol. Amongst them, emodin, aloe-emodin, pongamol, purpuritenin, semiglabrin, ellagic acid, imperatorin,  $\alpha$ -tocopherol, and octanorcucurbitacin A showed good binding affinity as – 10.6, – 10.0, – 10.5, – 10.1, – 11.2, – 10.3, – 10.1, – 10.1, and – 10.0 kcal/mol, respectively. Also, the absorption, distribution, metabolism, excretion, and toxicology (ADMET) profiles were well within acceptable limits.

**Conclusion** Based on our preliminary findings, we conclude that the selected phytoconstituents have the potential to be good anti-inflammatory candidates by inhibiting the TNF- $\alpha$  target. These compounds can be further optimized and validated as new therapeutic components to develop more effective and safe anti-inflammatory drugs.

#### DOI: 10.1016/j.dcmed.2022.10.003

<sup>\*</sup>Corresponding author: Sumit Arora, Assistant Professor, E-mail: sumitkishanarora@gmail.com.

Peer review under the responsibility of Hunan University of Chinese Medicine.

**Citation:** ARORA S, RUSHIYA P, TIRPUDE K, et al. Exploring the phytoconstituents targeting TNF-*α* as potential lead compounds to treat inflammatory diseases: an *in-silico* approach. Digital Chinese Medicine, 2022, 5(3): 264–275.

Copyright © 2022 The Authors. Production and hosting by Elsevier B.V. This is an open access article under the Creative Commons Attribution License, which permits unrestricted use and redistribution provided that the original author and source are credited.



The Sikh Education Society's Gurunanak College of Pharmacy, Nagpur

Five days hands on training program on

Application of Computational Techniques in Drug Design and Development

# Certificate of Appreciation

This certificate is proudly presented to Sapan Kamleshkumar Shah

in recognition of your contribution for conducting one week hands on training program on "Application of Computational Techniques in Drug Design and Development" as a Resource Person & Trainer from 16<sup>th</sup> to 20<sup>th</sup> October 2022.

Convener Dr. A. M. Ittadwar Principal

Dr. Nidhi P. Sapkal Professor

Memorandum of Understanding

Between



# DEEPTI PHARMACEUTICAL W-3 MIDC INDUSTRIAL AREA NAGPUR -440028

AND



Lokmanya Tilak JankalyanShikshanSanstha's,

Priyadarshini J. L. College of Pharmacy

Electronic zone Building, MIDC, Hingna Road, Nagpur-440016(M.S.)

Out No.:- Date: 14/02/2019 Proposal for the Joint Collaborative Research Venture between PRIYADARSHANI J.L. College of Pharmacy, Nagpur & DEEPTI PHARMACEUTIALS, W-3 M.I.D.C Industrial Estate Area, Amravati Road, Nagpur - 440028

We will be referred to as The Institute and you as The Company in the MoU.

### Proposed Objectives of Collaborative Research under MoU.

- To carry out collaborative applied research in the areas of Pharmaceuticals, Neutraceuticals, Biochemicals, Phytochemicals, Cosmeteuticals on regular basis in an ongoing manner. The company essentially being a commercial organization is interested in applied Research and <u>NOT</u> in Basic Research.
- The company will provide the required raw inputs for the proposed research work like plant characteristics etc to the Institute to enable individual selected students to carry out the experimental works on the collaborative research.
- The company will have the first right of refusal to shortlist the Pre Final / Final year Graduate / Post Graduate students for such collaborative research works.
- The decision of the company in terms of selection of a particular student for a particular topic / subject will be final.
- Students for short term training for 4 to 6 weeks as part of their curriculum will receive a suitable certificate on completion of the training program
- Students desirous of working on their projects on a medium long term basis for 6 to 18 months will be required to visit the company facilities often.
- The Institute will guide the company and ensure that the selected student has not been awarded any assignment by any other organization / institute for any research work.
- The institute will further ensure that uninterruptive focused approach is exercised by the student, while working on all such collaborative research works.
- All students will be required to sign a non disclosure agreement with the company prior to taking up the assignment on the collaborative research work.
- The Institute will not engage with any other commercial organization for such work that will imply competition with the product range of the company.
- 11. The students will have freedom to use the existing facilities of the company including instruments at the premises of the group companies and / or other Institutes / Business associates with whom the company may enter allied research arrangements. As a matter of bilateral reciprocation, the Company will have freedom to utilize the facilities of the Institute.

1

- The company has authorized its Technical Officer of the group to take all decisions as deemed appropriate to make this MOU a success.
- 13. Both parties either through the students and / or their respective supervisors / Research Guides, or in any manner will not disclose to a third party without proper authorization, any matter pertaining to the collaborative research work.
- 14. The company will nominate a suitable co author for technical papers if any published in journals of repute on the success of the collaborative research work. The decision of the company on the contents of the technical paper will be final.
- The company will bear all reasonable expenses as required ONLY for the student to attend such seminars / conferences as deemed appropriate.
- 16. The company will have the first right of refusal to recruit such students from the institute, whether they have worked on such collaborative research with the company or not. The Institute will ensure priority selection in the campus for the company.
- 17. The company will have all the right to file any patent on the work as a result of any such collaborative research works. However the concerned student will be in the list of innovators / inventors in the patents.
- 18. As mutual benefits the company will depute its authorized representative The Technical Officer to guide and mentor all such final year students for effective campus interviews, as a reciprocation the Institute will extend all support to certify and validate the company products on efficacies etc as may be deemed appropriate and fit.

For, PRIYADARSHANI J.L. College of Pharmacy Nagpur.

hero 110212019

Dr. D.R.Chaple Principal PRINCIPAL Prlyadarshini J.L. College of Pharmacy, Nacpur, Dr.Mrs.Suparna.S.Bakhle Associate Professor,

Associates Prof. / Asstt. Prof. Priyadarshini J. L. College of Pharmacy, Nagpur.

Dr.Mrs.kanchan Upadhye Associate Professor,

Associates Prof. / Asstt. Brot. Priyadarshini J. L. College of Pharmacy, Nagpur.



For, Deepti Pharmaceuticals W-3 M.I.D.C Industrial Estate Area, Amravati Road, Nagpur - 440028

S.Q. linturkar

Mr. Suresh Jinturkar Partner

miling

Mr. Nikhil Jinturkar Partner



# **DEEPTI PHARMACEUTICALS** W-3 MIDC, INDUSTRIAL AREA NAGPUR-16

Date: 25/07/2023

## TRAINING CERTIFICATE

### **TO WHOM SO EVER IT MAY CONCERN**

This is to Certify That Ms. ASHWINI MADHUKAR SHENDE student of B. Pharm Third year from PRIYADARSHINI J.L. COLLEGE OF PHARMACY, NAGPUR, 440016.

Has undergone plant training at our factory.

From Date 22/06/2023 to 25/07/2023 (196 Hrs)

During the period of training he/she had been exposed to following important operations.

- 1) Quality Control Department.
- 2) Quality Assurance Department .
- 3) Liquid Manufacturing Department (External).
- 4) Liquid Manufacturing Department (Internal).
- 5) Packing Department.
- 6) And all other allied field.

His/her working is satisfactory during training period We wish all the best in future.

S.O. Jinturker

Deepti Pharmaceuticals Nagpur



# DEEPTI PHARMACEUTICALS W-3 MIDC, INDUSTRIAL AREA NAGPUR-28

Date: 14/07/2023

### TRAINING CERTIFICATE

# TO WHOM SO EVER IT MAY CONCERN

This is to Certify That Ms. SIMRAN P. SHEDAME student of B.Pharm Third year from PRIYADARSHINI J.L. COLLEGE OF PHARMACY, NAGPUR, 440016. Has undergone plant training at our factory. From Date 27/06/2023 to 14/07/2023 (105 Hrs.) During the period of training he/she had been exposed to following important

operations.

- 1) Quality Control Department.
- 2) Quality Assurance Department .
- 3) Liquid Manufacturing Department (External).
- 4) Liquid Manufacturing Department (Internal).
- 5) Packing Department.
- 6) And all other allied field.

His/her working is satisfactory during training period We wish all the best in future.

Man. S.O. Jinturka Deepti Pharmaceuticals Nagpur





LOKMANYA TILAK JANKALYAN SHIKSHAN SANSTHA'S PRIYADARSHINI J. L. COLLEGE OF PHARMACY Electronics Zone Building, MIDC, Hingna Road, Nagpur-440016 (M.S.) Tel & Fax No. +91.7104.290510. E-mail principal/applcp.edu.in. Website...www.pilcp.edu.in (Approved By AICTE & DTE, New Delhi: Attiliated to R.T.M. Nagpur University Nagpur)

### Abstract of the Event

Arogya Parigyan Club of Priyadarshini J.L College of Pharmacy, Nagpur organized an expert talk on World Paper Bag Day 2022 entitled "World Paper Bag Day and Ban on Plastic carry Bags: Opportunities and Challenges" on 21/07/2022 for the UG/PG students and the faculty. Dr Aprup Adwadkar, President, Pary avaran Pratham an NGO was the guest speakers on the occasion. He spoke about the hazards of plastics and how it has created a mess for the environment. He also talked about use of paper bags vis a vis plastic bags and the challenges faced in terms of environment sustainability. Further he motivated the adoption of 3 R's Reduce, Recycle and Resuse for environmental conservation. The event was coordinated by the student coordinators (Ms. Prapti Rai, Rohit Shingane and Neha Narange) faculty in charges (Dr. Mrs. S.S Bakhle and Mr. S.K Shah) and other members of the Club under the guidance of Dr. D.R Chaple, Principal, PJLCP.

Stallhe 2117/22

Associates Prof. / Asstt. Prof. Priyadarshini J. L. College of Pharmacy, Nagpur.

rincipal

PRINCIPAL Priyadarshini J. L. College of Pharmacy, Nagpur.



Expert talk -World Paper Bag Day and Ban on Plastic Carry Bags: Opportunities and Challenges