

भारतीय गैर न्यायिक

पचास
रुपये
रु.50



FIFTY
RUPEES
Rs.50

INDIA NON JUDICIAL

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CH 581185

MEMORANDUM OF UNDERSTANDING

This MEMORANDUM OF UNDERSTANDING (hereinafter referred to as the "MOU") is made and entered into as of 17/06/2022 by and between:-

"AVENIDA INNOVATIONS", SPS Vamsi Nivas, Plot no 4, KPHB colony Phase V, Hyderabad, [Contact: Dr. Karthik Rakam (7569692853), Email: karthik@avidapro.com henceforth referred to as the "Party A";

AND

"St. James' College of Pharmaceutical Sciences, St. James' Medical Academy, Chalakudy, Kerala, India-680307" [Dr. K. Krishna Kumar, 9846714021 Email: stjamespharmacycollegeky@gmail.com henceforth referred to as the "Party B".

The parties shall individually be referred to as a "Party" and collectively as "Parties".

WHEREAS, in consideration of the mutual understandings contained therein and for other good and valuable consideration, the receipt and sufficiency of which hereby are acknowledged, it is mutually agreed between the Parties to this MOU, as follows:

Krishna Kumar
Dr.K. KRISHNAKUMAR Bsc., M.Pharm., Ph.D

Principal
St. James College of Pharmaceutical Sciences
St. James Medical Academy, GH Road
River Bank, Chalakudy - 680 307



NO 7629 / 15 06 2022 350
DR. KARTHIK RAKAM, CONFUNDOR &
CEO, AVENIDA INNOVATIONS
124 DURROB 100.

Alphonsa Varghese
ALPHONSA VARGHESE
VENDOR NO : 7
CHALAKUDY



Avenida Innovations is a global organization focused on establishing benchmarks of excellence in training for the pharmacy, healthcare and life sciences industries. With offices in the United States and India, Avenida offers excellent support to the individuals and companies it serves. Avenida has highly experienced experts from the health sector in its network and also a base of approximately 10000 pharma graduates, 100s of college and universities in direct contact as on date.

The St. James' College of Pharmaceutical Sciences (SJCOPS), St. James' Medical Academy, River Bank, Chalakudy, Thrissur District, Kerala-680307, has expertise in the areas of pharmaceutical education and research. SJCOPS has been actively engaged in nurturing and fostering quality human resources to meet the needs of the community and industry since its establishment year 2004, where a competent team of specialists and super-specialists join together with the support of sophisticated technology to deliver high-quality medical & health care professionals.

All Parties hereby form themselves into this MOU for the benefits of each other in the future and ultimately the wider population (hereinafter jointly referred to as the "Purpose") or for upcoming projects as both have a synergy in their space of work and engagements. The objective of this MOU is to bridge this skill gap through collaboration and partnership between both parties. Under this MOU all the parties shall complete projects on the agreed conditions of this MOU which shall be followed during this MOU.

ENGAGEMENT & SCOPE

This MOU contemplates the proposed engagement of the Parties. All Parties accept such engagement and agree that they shall during the term of their engagement hereunder conscientiously provide their resources and perform the required services to full limit of their ability, and further agree that they shall promptly and faithfully comply with all requirements, directions, requests, rules, and regulations.

All Parties do hereby agree as under:

1. Party A agrees to collaborate and support in organizational development, pedagogy, patent, research, innovation, incubator, startup, mentoring, industry partnership, internship, and starting new healthcare programs with party B.
2. Party A agrees to collaborate to conduct workshops/seminars/conferences at least once every year at the campus of party B.
3. Party A agrees to provide training to the B.Pharm/PharmD/PharmD (P.B)/M.Pharm students of party B in the fields of:
 - Clinical Pharmacy
 - Clinical Research
 - Clinical Data Management, Data Analytics
 - Pharmacovigilance
 - Career Abroad
 - Medical Writing and Communication
 - Ideas to IPR
 - Artificial Intelligence



Karthik
Dr. K. KRISHNAKUMAR Bsc., M.Pharm., Ph.D.

Principal
St. James College of Pharmaceutical Sciences
St. James Medical Academy, GH Road
River Bank, Chalakudy - 680 307

- Informatics
 - Any other fields as needed
4. Party A agrees to provide career guidance and placement to interested students of party B
 5. Both the parties agree to use each other promotional materials (Logo, Pamphlets, Name & Address, Contact details) in any event organized by both the parties only for promotional activities.
 6. All parties have full capacities for the responsibilities above and will execute as described. Except this, all the parties will share responsibilities on a mutually agreed basis and hence share the expense, profit and any other credits depending on agreed terms and conditions as mutually agreed.

1. INDEMNIFICATIONS

All Parties shall indemnify and hold harmless each other, their affiliates and respective officers, directors, agents, students and employees from any claims, demands, losses, causes of action, damage, lawsuits, judgments, including attorneys' fees and costs, arising out of, or relating to, the services of Parties under this MOU.

2. LIABILITY

All partners, sponsors, and volunteers are absorbed in any liability resulting from any services provided during the mutually agreed events.

3. NON-DISCLOSURE

All partners are working together in this endeavor. Neither Party will use, copy, adapt, alter or part with possession of any information of the others which is disclosed or otherwise comes into its possession under or about this MOU and which is confidential.

4. FINANCIAL IMPLICATIONS

Once both the parties agree and decide on the priority areas of implementation, financials will be mutually communicated priory discussed and decided

5. GENERAL

1. The parties to this MOU shall not be deemed to be in breach of this understanding or otherwise liable to any other party in any manner whatsoever for any failure or delay in performing or initiating the activities proposed in this MOU.
2. This MOU records the understanding between the parties and is not intended to be a legally binding document and shall not be enforceable in any Court of Law.
3. The parties to this MOU shall be permitted to use the other's name, crest, logo or branding after obtaining the other's prior consent to such use and fully complying with the user guidelines.

6. NOTICES & COMMUNICATION

The communication necessary for the performance of this MOU shall be made through the contact details provided in this MOU.

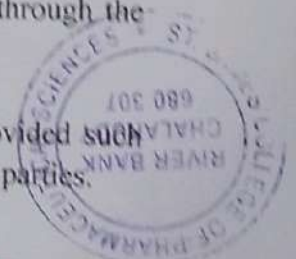
7. ADDENDUM

A party to this MOU may request an amendment to this MoU at any time, provided such amendment is with the prior written consent of the authorized representatives of all parties.



[Handwritten Signature]
Dr.K. KRISHNAKUMAR Bsc., M.Pharm., Ph.D

Principal
St. James College of Pharmaceutical Sciences
St. James Medical Academy, GH Road,
Divya Bank, Chakkudy - 680 307



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8. TERMINATION

Termination of this MOU by each Party before the execution and delivery of the definitive agreements shall be without liability and no Party hereto shall be entitled to any form of relief whatsoever, including without limitation, injunctive relief or damages. The MoU is valid upto 5 years from the date of signing.

SIGNATURES:

This MOU is executed on behalf of the parties by their respective duly authorized signatory as set out below:

For AVENIDA INNOVATIONS (Party "B")

For St. James' College of Pharmaceutical Sciences (Party "A")

Karthik

Name: Dr. Karthik Rakam Pharm.D



Designation: CEO and Co-founder Avenida Innovations

Email: karthik@avenidapro.com

Krishna Kumar

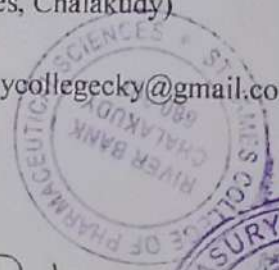
Name: Dr. K.Krishna Kumar

Dr.K. KRISHNAKUMAR Bsc., M.Pharm., Ph.D

Principal
St. James College of Pharmaceutical Sciences
St. James Medical Academy, GH Road
River Bank Chalakudy - 680 307

Designation: Principal (St. James' College of Pharmaceutical Sciences, Chalakudy)

Email: stjamespharmacycollegecky@gmail.com



NO 7628 / 15 U G. 2022 B50 -

DR. KARTHIK RAKAM, COFOUNDER

& CEO, AVENIDA INNOVATIONS

44000003100

Alphonsa Varghese

ALPHONSA VARGHESE
VENDOR NO : 7
CHALAKUDY

**MoU signing Ceremony, St. James' College of Pharmaceutical Sciences, Chalakudy
AVENIDA INNOVATIONS, Hyderabad at AUDITORIUM, -SJCOPS on 17-06-2022**



WORKSHOP ON THE TOPIC “PHARMACEUTICAL CARE” & “Role of PharmD in Indian Health Care” On 17-06-2022

A case study seen by the Internal Medicine, Neurology, Intensive care and Infectious diseases team, analyse it in detail and explain to students practically how to analyse a case study, identify and resolve Medication Errors/ Drug Related Problems. I worked on this case and made 8 significant interventions. It involves all the categories of DRPs seen in clinical practice and clearly shows the crucial role of Pharm.D/Clinical Pharmacist.

Participants: 4,5,6-PharmD and PharmD (P.B), 1 & 4th Sem M.Pharm, Staff of Departments Pharmacy Practice and Pharmacology- 120 Participants









Dr. Karthik Rakam Pharm. D (<https://www.avenidapro.com/>)

Dr. Karthik Rakam is a Pharm. D graduate from the first batch of Pharm. D in India (2008 -2014). He has co-founded **Avenida Innovations** with two verticals: Avenida Academy and Avenida Practice. **Avenida Academy** partners with individuals and institutions and help them in their pursuit of professional excellence. **Avenida Practice** offers clinical pharmacy services, continuum of care and provides chronic diseases management solutions. As CEO of Avenida Innovations, Dr. Karthik was instrumental in creating opportunities for students by making MOUs with industry partners. In 2022 Dr. Karthik has co-founded **Kairos R and D solutions** as an SMO with a vision to scale it to a CRO. He previously founded Pharm.Doctors and Pharmacon Society for Pharmacy Practice. He also works as **Medical Advisor** for **Arintra. Inc**, a Y Combinator backed start-up in the USA. In May 2020 he was inducted into the core group of Punjab Telemedicine Expert committee. He is also an Advisor – Clinical Pharmacy at Jiyyo. Dr. Karthik provides Clinical Pharmacy Services at various clinics.

He is trained to work as a **Clinical Pharmacist** in a tertiary care centre. He has designed optimal therapeutic regimens in complicated cases of TB, HIV. He has expertise in individualization of dose in renal and hepatic impairment. He has the ability to provide Drug Information to healthcare professionals. He can analyse patient case sheets and make interventions. He made 85 interventions during the internship. He can check the prescription for clinically significant Drug Interactions, ADRs and make adjustments. He has the ability to counsel patients about the disease, drug therapy and prevention. He is experienced in providing clinical pharmacy services like Prescription audit, IV admixtures preparation, ADR prevention and management.

He is a Resource person for **Pharmacy Academia**, an educational initiative by **PFIZER** to impart training to practising pharmacists. He is Resource person for CPE programs for Community and Hospital Pharmacists, Faculty Development Programs and Refresher Courses for Faculty. He won the **FIP Global Symposium 2021** on AMR, attended by 479 participants from 71 countries. He is the **Winner of National level case study competition** conducted by IPA on the occasion of World Pharmacist Day 2015. Subsequently he went on to become the **judge** of the same competition in 2018. He is the evaluator of various events conducted by IPA. He is **Author of Drug Watch**; a column dedicated to Adverse Drug Reactions in IPA-CPD E times. As a member of IPA CPD Special Interest Group, he is involved in initiatives like TB Jan Andolan, AMR, **FIP – India Vaccination Project** etc.

Dr. Karthik conducts various skill development courses like Evidence Based Pharmacotherapy, CR/PV/CDM/Medical Writing, Informatics etc. He also provides Clinical Pharmacy Internships targeted at implementing Clinical Pharmacy Services in various hospitals. He works with the University of Findlay, USA to provide Indian Pharm.D students an opportunity to visit the USA as a part of an exchange program. Dr. Karthik has organised 10 International and 25 National conferences; he has been Resource Person for over 50 Conferences and conducted Workshops in over 100 colleges of Pharm. D across India. He has mentored hundreds of students and helped them craft successful careers.

He is a founder of an NGO, Havens of Humanity and volunteers with Isha Foundation. His professional objective is to use his knowledge and skills to change the way pharmacy is practised in India.

Offices in Hyderabad, Chandigarh, California-USA

Phone: +91-7569692853 | **Email:** info@avenidapro.com | **Website:** www.avenidapro.com

Brief Description:

A complicated case of AIDS with multiple opportunistic infections, seen by around 12 doctors including a Critical Care specialist, Neurology team, ICU team and Infectious Disease team will be analyzed in this session. Dr. Karthik Rakam worked on this case during his ward rounds and made 8 clinically significant interventions as a clinical pharmacist. The session imparts the practical ways to analyze a case, identify errors and make interventions. All the aspects of Drug Therapy Problems that can be encountered in clinical practice will be discussed in depth, which include the following:



- **Treatment without indication**
- **Untreated indication**
- **Inappropriate drug selection**
- **Subtherapeutic dose**
- **Overdose**
- **Adverse drug reactions**
- **Drug interactions**
- **Drug duplication**
- **Patient compliance**



The health care team has a Doctor who makes diagnosis and prescribes the drugs, the pharmacist who dispenses the drugs, nurse who administers the drug, a physiotherapist who advises the patients on exercise and a dietician who takes care of diet related issues. In spite of the existing health care team taking care of all the aspects of patient care, is there a place for Pharm. D graduate in health care team? This is a very fundamental question which every student of Pharm. D is struggling to get an answer for. The workshop will give a comprehensive answer to this fundamental question, in the most relevant and practical way.

Expected Outcome:

At the end of the session, students will be able to learn how to analyze a case, identify drug therapy problems which compromise the patient care and resolve them to meet the desired outcome. Practically understand the true meaning of Pharm. D and practice of pharmacy. Understand and appreciate the role of clinical pharmacist in health care team.

Brief Description:

The core objective of the Clinical Pharmacist is to provide Pharmaceutical Care which is defined as the direct, responsible provision of medication-related care for the purpose of achieving definite outcomes that improve a patient's quality of life. The workshop will provide a deep insight into the role of Clinical Pharmacist in providing Pharmaceutical Care by taking HIV/AIDS case study as an example. Participants will be oriented to understand the logic behind designing HAART regimens, manage opportunistic infections (OIs), other comorbid conditions, understand how management of OIs and comorbidity can affect HIV therapy, learn strategies to improve patient outcome, enhance adherence, reduce pill burden and decrease medication errors.



Salient features

Designing Antiretroviral Regimen in Therapy-Naïve Patients

Regimens in Tuberculosis/HIV Coinfection

Prevention and Treatment of opportunistic infections (OIs) in HIV infected Adults

- PCP
- *Toxoplasma gondii* encephalitis
- *Mycobacterium tuberculosis*
- MAC



Strategies to prevent Bone marrow suppression, peripheral neuropathy, indications for use of adjunctive corticosteroids, anticonvulsants, avoiding clinically significant drug interactions which interfere with HIV therapy while managing above OIs.

- Aspergillosis in AIDS
- IV admixture preparation (Choice of diluting fluid, ratio of dilution, rate of infusion)
- Proactive vs Reactive Therapy
- Participants will be asked to calculate the doses, find drug of choice, check for drug interactions, do role play etc.

Expected outcome: Understand and apply the principles of Pharmaceutical Care during ward rounds to optimize the patient's health-related quality of life, and achieve positive clinical outcomes, within realistic economic expenditures. Demonstrate the value of Clinical Pharmacist to all other health care professionals.